KU LEUVEN CAMPUS BRUSSELS
FACULTY OF LAW
Academic year 2018-2019

Exercising GDPR data subjects' rights

Empirical research on the right to explanation of news recommender systems

Promoter: A. VEDDER

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Word count: 15.424

Master's thesis, submitted by

Maria MITJANS SERVETO

as part of the final examination for the degree of MASTER OF INTELLECTUAL PROPERTY AND ICT LAW

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I confirm that this thesis is my own work, that all ideas contained in the thesis are expressed in my own words and that I have not litterally or quasi-litterally taken anything over from other texts, except for fragments cited between quotes for which I provided full and accurate bibliographical data, and is in conformity with the anti-plagiarism rules explained at https://www.law.kuleuven.be/onderwijs/plagiaat

Maria Mitjans Serveto

Abstract

Articles 13.2(f), 14.2(g) and 15.1(h), read together with article 22 of the General Data Protection Regulation, form a set of provisions that grant data subjects a right to receive in a concise, transparent, intelligible and easily accessible form, using clear and plain language, information about the existence of automated decision-making, including profiling, referred to in article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject. This right has been named by scholars as "the right to explanation" and has sparked an important debate about its existence and scope. However, there is a lack of empirical research on what information is received when this right is exercised by data subjects and how it is interpreted by controllers. The enforcement of individual data subjects' rights raises many practical issues that clash with the compliance of the GDPR and its principles, remaining the weakest part of the chain. Furthermore, there is a growing concern about automated decisions made by algorithms, that can contain or perpetuate bias and discrimination practices and therefore, of the need to open the "black box" and make algorithms fair, accountable and transparent.

In the era of fake news, one sector that has raised specific concerns is the news recommender systems. Algorithms are used to customize news offerings to increase the audience engagement, without the users being aware of news selection criteria. Some scholars have warned about the potential negative implications for democracy and the role of the media to inform citizens and to create a diverse public forum. Here, the right to explanation is seen as a transparency mechanism to protect media pluralism enabling users to understand why certain recommendations are made and giving them more influence over the forms of personalisation. Nonetheless, the debate remains how to usefully explain those decisions and proportionate adequate safeguards to data subjects.

With that in mind, we conducted an empirical research among forty-tree (43) online service providers with the aim of testing the right to explanation of recommender's systems in the context of news curation. As data subjects, we sent requests with the purpose of obtaining further information on how the personalisation of the news recommender system worked, as well as testing the knowledge that companies have about this right and seeing if the approach is in line with the GDPR provisions and principles. To fully understand the subject of discussion, the paper is structured in three parts. This paper will first examine the state of play and scope of the right to explanation. Secondly, it will analyse the results of the empirical research with a focus on identifying the shortcomings. Thirdly, it will provide recommendations for better complying with the right to explanation with a special focus on the online media sector, the algorithm particularities of news curation and, rights and freedoms to be protected.

Keywords

Accountability; Algorithms; Automated decision-making; Data Protection; GDPR; News recommender systems; Right to explanation; Transparency

Acknowledgments

Table of Contents

List of Abbreviations

AEPD   Spanish Data Protection Authority

AI   Artificial intelligence

Article 29WP   Article 29 Working Party

DPA   Data Protection Authority

DPIA   Data Protection Impact Assessment

EC   European Commission

EDPB   European Data Protection Board

EP   European Parliament

EU   European Union

GDPR   General Data Protection Regulation

ICO   Information Commissioner's Office

ML   Machine learning

Exercising GDPR data subjects' rights: Empirical research on the right to explanation of news recommender systems

Chapter I. Introduction

Section 1. The right to explanation in the digital society

≈ *Legal framework before the GDPR*

The right to explanation of automated decisions has become recently a heated debate between scholars in order to determine their existence,[1] the scope and the safeguards provided by the GDPR. Nonetheless, the existence of the right is not new and was already contained in a similar manner in the repealed Directive 95/46/EC.[2] Recital 41 of the mentioned Directive stated, "*every data subject must also have **the right to know the logic involved in the automatic processing of data concerning him, at least in the case of the automated decisions referred to in Article 15 (1)**".*[3]

Article 12 of the repealed Directive, referring to the right of access, stated in a similar wording as the GDPR, the right to obtain "***knowledge of the logic involved*** *[4]in any automatic processing of data concerning him at least in the case of the automated decisions referred to in Article 15 (1)".*

It recognized, at least in cases of article 15(1) of the Directive, a right to know the logic involved in the automatic processing, and even if the information was protected by intellectual property or trade secrets, the recital remarked that that could not result in a refusal of all information, meaning that some explanation had to be proportionated to the data subject and that defences could not lead to an absolute rejection of this right.

Lastly, article 15 of the Directive, regarding automated individual decisions, established, similarly to article 22 GDPR, a general prohibition not to be subject to a decision which

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[1] See WACHTER, S., MITTELSTADT, B., FLORIDI, L., Why a right to explanation of automated Decision-Making does not exist in the General Data Protection Regulation. International Data Privacy Law, 2017, Vol. 7, No. 2; MALGIERI, G., COMANDÉ, G. Why a right to legibility of automated decision-making exists in the General Data Protection Regulation. International Data Privacy Law, 2017, Vol. 7, No. 4.

[2] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A31995L0046

[3] Emphasis added.

[4] Emphasis added.

produces legal effects concerning him or significantly affects him and which is based solely on automated processing of data intended to evaluate certain personal aspects relating to him, such as his performance at work, creditworthiness, reliability, conduct, etc.

In paragraph 2 provided similar exceptions to the right, as the GDPR does, when the decision *"(a) is taken in the course of the entering into or performance of a contract, provided the request for the entering into or the performance of the contract, lodged by the data subject, has been satisfied or that there are suitable measures to safeguard his legitimate interests, such as arrangements allowing him to put his point of view; or (b) is authorized by a law which also lays down measures to safeguard the data subject's legitimate interests".*

Hence, the right to explanation is not a new established right in the GDPR, but certainly it has grown in importance as the algorithms are being perfected and implemented on a large scale. The roots of this right go back to the late 1970s in the French data protection legislation enacted in 1978[5] where article 2 stipulated that, *"no judicial decision involving an appraisal of human conduct may be based on any automatic processing of data which describes the profile or personality of the citizen concerned.* ***No governmental or private decision involving an appraisal of human conduct may be based solely on any automatic processing of data*** *which describes the profile or personality of the citizen concerned. Section 3 states,* ***any person shall be entitled to know and to dispute the data and logic used in automatic processing****, the results of which are asserted against him".[6]*

It follows from the provision, that the right of explanation was understood widely, not only decisions based solely on any automatic processing but in automatic processing in

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[5]   Loi no. 78-17 du 6. Janvier 1978 relative à l'informatique, aux fichiers et aux libertés. https://www.ssi.ens.fr/textes/l78-17-text.html#art02

French original text: *Article 2. Aucune décision de justice impliquant une appréciation sur un comportement humain ne peut avoir pour fondement un traitement automatisé d'informations donnant une définition du profil ou de la personnalité de l'intéressé.*

Aucune décision administrative ou privée impliquant une appréciation sur un comportement humain ne peut avoir pour seul fondement un traitement automatisé d'informations donnant une définition du profil ou de la personnalité de l'intéressé.

Article 3. Toute personne a le droit de connaître et de contester les informations et les raisonnements utilisés dans les traitements automatisés dont les résultats lui sont opposés.

[6] Emphasis added.

general, granting a right to know and to dispute both the data and the logic used to reach that decision.

≈ Legal framework after the GDPR

Understanding the origins and the wordings that the provisions have had, helps us to understand the scope of the set of provisions currently in force by the GDPR.[7]

However, there a number of critical differences between the two pieces of legislation,[8] namely the difference between a Directive and a Regulation, the set of EU-wide maximum penalties for infringements and the wider scope of application of the GDPR.[9]

Regarding the differences with the provisions,[10] articles 13 to 15 GDPR require information on "the existence of automated decision-making and *meaningful information* about the logic involved, *as well as the significance and the envisaged consequences of such processing for the data subject*". The difference is clear, the GDPR specifically added a requirement of meaningful information, as well as information about the significance and consequences for individuals.[11]

Moreover, GDPR strengthens its principles that guide the interpretation of the norm and the processing of personal data. The principles are established in article 5 as lawfulness, fairness and transparency, purpose limitation, data minimisation, accuracy, storage limitation, integrity and confidentiality and accountability.

With these principles in mind and the set of provisions that configurates the so called right to explanation, we need to explore the effective ways to make algorithms fair, accountable and transparent.

This paper will analyse in the following Chapter the legal framework of the right to explanation in the EU, focusing on the particularities of the news recommender systems.

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[7] See Fig.1, Annex 1. The right to explanation: table with relevant provisions in the GDPR.
[8] GOODMAN, B., FLAXMAN, S., European Union regulations on algorithmic decision-making and a "right to explanation", pages 2-3.
[9] Article 3 GDPR.
[10] See Fig. 2, Annex 1. Table comparing GDPR with Directive 95/46/EC provisions.
[11] SELBST, A.D., POWLES, J., Meaningful information and the right to explanation. International Data Privacy Law, 2017, Vol. 7, No. 4, page 241.

Section 2. The empirical research on the right to explanation: Goal, Methodology and Outcome

While the discussion has been focused on the existence or nonexistence of this right, the scope, and what kind of explanation and safeguards could we be expecting, there is a lack of empirical research dedicated to the analysis of the practicality when enforcing this right in front of several online service providers.[12] Enforcement of rights as an empowerment tool of users is of utmost importance and therefore, it is crucial to critically assess the actual compliance (or not) of data subjects rights in order to propose recommendations and open the debate to measures of improvement or even whether the individual enforcement can be seen as an effective measure to tackle and challenge the decisions taken by automated decision making processes.[13]

In light of this, this paper focuses on filling this gap of lack of substantial empirical evidence on exercising data subjects' rights, in particular, in the right to explanation of news recommender systems.

As a part of the empirical research project, the objective is to analyse the practicability and the results obtained when exercising the right to explanation before several online service providers and see if it attains its goals. To do so, we conducted an empirical study among forty-tree (43) online service providers with the aim of testing the right to explanation of recommender systems in the context of news curation. The study involved four KU Leuven students within the LLM of intellectual property and ICT law and a Researcher from the CiTiP and took place from 15th November 2018 to 30th April 2019.

The empirical research was organized in different steps,[14] in order to identify the shortcomings and pitfalls when exercising the right to explanation.

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[12] Initiatives in the enforcement of GDPR data subjects' rights has been taken in the right of access, see AUSLOOS, J., DEWITTE, P., Shattering one-way mirrors – data subject access rights in practice. International Data Privacy Law, 2018, Vol. 8, No. 1.

[13] In this regard, see AUSLOOS, J., ZAMAN, B., GEERTS, D., VALCKE, P., DEWITTE, P., Algorithmic Transparency and Accountability in Practice.

[14] See Chapter III, detailed explanation of the steps followed in the empirical study.

Section 3. Research question

The research paper will be dedicated to answer the question of whether the right to explanation is fulfilled in the practical approach with the provisions of the GDPR. In other words, if the right to explanation fulfils the aim for which this set of provisions where designed.

With the purpose of providing a complete and critical answer to the main research questions, the underlying rationale of the right to explanation will be approached, from a systematic, legal-historical interpretation and theological interpretation, considering the legislative texts and the legal doctrine.

We will then critically assess the empirical research findings in order to classify in a systematic way the pitfalls and shortcomings encountered and identify good practices.

Finally, considering the observed results, recommendations and improvements will be suggested, in order to preserve the purposes of the GDPR provisions on the right to explanation, in view of the news curation sector.

Chapter II. European Union legal framework of the right to explanation

Section 1. Does the right to explanation exists?

The right to explanation has led to an in-depth legal discussion about the existence and feasibility of this right that remains open.[15] The aim of this chapter is to gather the state of the discussion and try to bring some light on what the approach in the news curation sector should be.

≈ *The rationale of the right*

The right to explanation emerges from the concern that algorithms, more and more sophisticated with the raise of ML and AI, and which input and output is more difficult to predict and understand, will lead to decisions that will have a legal or important effect to citizens and, therefore, there is the need to understand those decisions and to contest

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[15] See EDWARDS, L., VEALE, M., Slave to the Algorithm? Why a "Right to an Explanation" is probably not the remedy you are looking for, Duke Law & Technology Review 18 (2017); GOODMAN, B., FLAXMAN, S., European Union regulations on algorithmic decision-making and a "right to explanation". 31 August 2016; KAMINSKI, M.E., The right to explanation, explained. University of Colorado Law Legal Studies Research Paper No. 18-24.

them in order to prevent unfair or discriminatory decisions. Understanding the rationale of the decision will lead the data subject to understand what he/she needs to change in the input to obtain a different output.

≈ The provisions in the GDPR

The GDPR contains several provisions related to automated decision-making,[16] which in a similar manner as the Directive 95/46/EC already did, try to address those concerns by limiting and prohibiting automated decisions, excluding went exceptions are applicable, and granting data subjects safeguards in order to counteract the imbalance and the negative impact that an automated decision can cause. Complementing these provisions, we find articles 13 to 15 GDPR referred to information and data access rights in a way to facilitate that enough information will be proportionate to data subjects in order to take informed decisions and, be able to contest the decisions that have been taken.

We will now have a closer look to each of the provisions related to automated decision-making in order to have a complete representation of the legal framework that applies to automated-decision making and see if news recommender systems fall into the scope.

~ Articles 13 to 15 GDPR

Articles 13 to 15 GDPR are contained in Chapter III of the GDPR that refer to rights of the data subject, in section 2 of information and access to personal data. The wording of the provision referred to automated decisions in these three articles is the same *"the existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject".[17]*

The differences between these three articles is that article 13 refers to information that needs to be provided when personal data are collected from the data subject, and hence, this information needs to be provided at the time when personal data is

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[16] See Fig. 1, Annex I. The right to explanation: table with relevant provisions in the GDPR.
[17] See article 13.2 (f) GDPR, article 14.2 (g) GDPR and article 15.1 (h) GDPR.

obtained. It listed the information to be provided in paragraph one and in paragraph two adds additional information with the emphasis that this information is *necessary to ensure fair and transparent processing.* In this paragraph we find listed the retention period, the existence of data subjects' rights, the existence of the right to withdrawn consent, right to lodge a complaint and the existence of automated decision-making as quoted in the paragraph above.

Therefore, it is worth mentioning the emphasis that the legislator does in the need to provide the listed information in order to ensure fairness and transparency.

Article 14 refers to information where personal data have not been obtained from the data subject, therefore, data obtained from third parties. The same information needs to be proportionated unless, article 14.5 GDPR applies.

Lastly, article 15 refers to the right of access, when the data subject is the one that request to the controller specifically for confirmation as to whether or not personal data concerning him or her are being processed.

We see that this article needs to be interpreted together with article 22 GDPR, because providers will have "at least in those cases" (which do not exclude that this information could be provided in other cases)[18] to provide meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.

The first issue we must highlight is the numerous vague terms that this sentence contains and that has led to much of the discussion about the interpretability and feasibility of the right. There is no harmonized interpretation up until now of the terms "meaningful information", "logic involved" and "significance and the envisaged consequences".

Before entering into the analysis of those terms, the core issue will be to delimit the scope of article 22 GDPR.

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[18] See Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01, mentioned as good practice to provide that information.

~ Article 22 GDPR

Article 22 GDPR is placed in Chapter III in the same way as the other articles, and in section 4 named "right to object and automated individual decision-making". This section contains just two articles, article 21 about the right to object and article 22 named "automated individual decision-making, including profiling". In a relevant way we see that this article is the only one that is not named as "right", even though is placed in the Chapter that list the rights of the data subjects. In the same way, article 12.2 GDPR stated that *the controller shall facilitate the exercise of data subject rights under articles 15 to 22*. These facts combined with the wording of the article has stirred up the debate as to whether it is a right or a prohibition.[19]

The impact on that categorisation is important, as *"interpreting article 22 as establishing a right to object would make the right narrower; in practice, it would allow companies to regularly use algorithms in significant decision-making, adjusting their behaviour only if individuals actually invoke their rights. Interpreting article 22 instead as a prohibition on algorithmic decision-making would require all companies using algorithmic decision-making to assess which exception they fall under and implement safeguards to protect individuals' rights.*[20]

Article 29 WP support the view of not seeing the provisions merely as a right, stating that *the term "right" in the provision does not mean that article 22 (1) applies only when actively invoked by the data subject. Article 22(1) establishes a general prohibition for decision-making based solely on automated processing. This prohibition applies whether or not the data subject takes an action regarding the processing of their personal data.*[21]

In this case we will have a duality: a general prohibition and a right, because the data subject still has the possibility to request to the controller "***not to be subject to a***

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[19] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01.

[20] KAMINSKI, M.E., The right to explanation, explained. University of Colorado Law Legal Studies Research Paper No. 18-24, page 4.

[21] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01.

decision based solely on automated processing, including profiling, *which produces legal effects concerning him or her or similarly significantly affects him or her."*[22]

Thus, to the complexity of interpretation of what information needs to be given by articles 13-15 GDPR, we need to interpret first the terms "decision based solely on automated processing", and "similarly significantly affects him or her" in order to have a clear understanding of the scope of the right/ prohibition "not to be subject to".

On top of that, paragraph 1 shall not apply if the decision, "*(a) is necessary for entering into, or performance of, a contract between the data subject and a data controller; (b) is authorised by Union or Member State law to which the controller is subject and which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests; or (c) is based on the data subject's explicit consent".*

In case (b) suitable measures to safeguard the data subject's rights will have to be implemented and in cases (a) and (c) the wording of the articles is more explicit and mention that these suitable measures needs to consist on "*at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision".*

Therefore, article 22(3) applies only to these two specific cases mentioned in article 22.2 (a) and (c) where at least the mentioned safeguards shall be implemented. In cases of article 22 (1) and (4) then we have to look at articles 13 to 15 GDPR, that also contain some safeguards in form of explanation. The doubt remains if article 22.3 GDPR also contains a right to receive meaningful information, because to be able to express his or her point of view and to contest the decision, information is essential, but is not explicitly mentioned.

∼ Article 12.1 GDPR

To complete the legal framework that regulate automated decisions we have to mention article 12.1 GDPR that set up the way in which any information referred in articles 13 and 14 and any communications under articles 15 to 22 needs to be provided. That is in

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[22] Emphasis added.

"a concise, transparent, intelligible and easily accessible form, using clear and plain language, in particular for any information addressed specifically to a child".

~ Recital 71

And lastly, recital 71 will provide light and guidance into some of the remaining open questions, giving examples of those decisions, such as *"automatic refusal of an online credit application or e-recruitment practices without any human intervention".*

In the recital, when talking about suitable safeguards, *in any case, such processing should be subject to suitable safeguards, which* **should include specific information to the data subject** *and the right to obtain human intervention, to express his or her point of view,* **to obtain an explanation of the decision reached after such assessment** *and to challenge the decision.*[23]

Additionally, in order to ensure fair and transparent processing, the controller should implement technical and organisational measures in order to make sure that inaccuracies are corrected, the risk of errors minimised[24] and that discriminatory effects are prevented.[25]

Nevertheless, the only explicit mention to the right to obtain an explanation of the decision reached is placed in a recital. That has led to support the two positions that recognises the existence or not of the right to explanation. Recitals in EU law are an interpretative tool, helping to understand what the legislator wanted to establish. *"Recitals can help to explain the purpose and intent behind a normative instrument. They can also be taken into account to resolve ambiguities in the legislative provisions to which they relate, but they do not have any autonomous legal effect".*[26] Therefore, recitals shall not contain normative provisions but help as an interpretative tool, linked to the corresponded provision. The inclusion in the recital and not specifically in the articles seems intentional, probably a political compromise, as in early drafts of the

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[23] Emphasis added.

[24] Examples about bias and discriminatory practices of algorithms, see: COURTLAND, R., The bias detectives. Nature, 21th June 2018, vol. 558, Pag. 357-360.

[25] Recital 71, paragraph 2.

[26] See BARATTA, R., *Complexity of EU Law in the Domestic Implementing Process. EU Legislative drafting: views from those applying EU law in the Member States,* 3 July 2014. https://ec.europa.eu/dgs/legal_service/seminars/20140703_baratta_speech.pdf

GDPR it was included and removed in the final text. In the first draft, we see that the information to be provided was included in article 20 "measures based on profiling" now article 22 GDPR. In the final draft, this paragraph was removed from this article and included directly to articles 13 to 15 GDPR[27].

Recapitulating, the GDPR grants, at least in cases of article 22 (1) and (4) GDPR, the right to receive meaningful information about the logic involved in automated decisions that falls under the scope of article 22(1) and (4) GDPR and, that is the right that has been named by scholars as the right to explanation.

Certainly, information and explanation are not equivalent,[28] but due to the nature and complexity of the decisions taken by algorithms, the legislator stressed the need that this information is *meaningful* and that means useful information for the data subject. The data subject is not an expert or a data scientist and hence, the controller needs to make an extra effort in informing in a plain and clear language what is the logic involved in these automated decisions and the significance and the envisaged consequences. Being a first and important step in order to be able to express his or her point of view and to contest the decision.

≈ *The interpretation of the vague terms contained in the provisions*

∼ A decision based solely on automated processing

According to Article 29 WP guidelines, this means that *there is no human involvement in the decision process.*[29] So, if a human being reviews and takes account of other factors in making the final decision, that decision would not be "based solely" on automated processing. Nevertheless, that cannot be circumvented by mere involving a human in the loop without any actual influence on the result.

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[27] See first GDPR proposal:
 http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%205853%202012%20INIT
[28] Information defined as in Cambridge dictionary as facts about a situation, person, event, etc. Explanation defined in Cambridge dictionary as the details or reasons that someone gives to make something clear or easy to understand.
[29] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01, page 20-21.

The human involvement must be carried by someone who has authority and competence to change the decision.[30]

It seems clear that due to the transformations in the online media ecosystem and the growing abundance of online information, news recommender systems can hardly introduce human involvement with the authority and competence to change a decision, that is not just one, but thousands of decisions taken at the same time.[31]

~   Similarly significantly affects him or her

Article 29 WP tries to clarify this term, by stating that only serious impactful effects will be covered by article 22 GDPR.[32] It emphasizes that the GDPR adds the word "similarly" to the wording in article 15 Directive 95/46/EC, therefore, the threshold for significance must be similar to that of a decision producing a legal effect. In other words, the decision must have the potential to: *significantly affect the circumstances, behaviour or choices of the individuals concerned; have a prolonged or permanent impact on the data subject; or at its most extreme, lead to the exclusion or discrimination of individuals.*[33]

Article 29 WP goes then into mentioning examples were this significance could be met. It does not analyse the sector of news recommender systems specifically but gives some guidance in the case of online advertising. According to their opinion, it will be a case by case assessment depending on: *the intrusiveness of the profiling process, including the tracking of individuals across different websites, devices and services; the expectations and wishes of the individuals concerned; the way the adverts is delivered; or using knowledge of the vulnerabilities of the data subjects targeted.*[34]

Although this example present differences on the fundamental rights at stake when talking about news curation, it can give a sense of the direction of the interpretation, where an assessment will be needed in order to determine the level of intrusiveness and more elaborated profiling. It is worth mentioning the fact it states that, processing that

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[30] Idem, page 21.

[31] In this regard, see HARAMBAM, J., HELBERGER, N., VAN HOBOKEN, J., 2018. Democratizing algorithmic news recommenders: how to materialize voice in a technologically saturated media ecosystem. Phil. Trans. R. Soc. A 376: 20180088; HELBERGER, N., (2019), On the Democratic Role of News Recommenders, Digital Journalism, DOI: 10.1080/21670811.2019.1623700.

[32] Idem, page 21.

[33] Idem, page 21.

[34] Idem, page 22.

might have little impact on individuals generally may in fact have a significant effect for certain groups of society, such as minority groups or vulnerable adults.[35] Thus, opening the possibility that the same news recommender can be under article 22 GDPR for some groups and outside the scope for others.

∼ Meaningful information about the logic involved

Article 29 WP has updated the guidelines on automated individual decision-making and profiling, trying to bring some light into the interpretation of the terms contained in the GDPR. It mentions that even if its outside the scope of article 22 (1), *it is good practice to provide the information about the logic involved and the significance and envisaged consequences.*[36]

Meaningful information is referred as simple ways to tell the data subject about the rationale behind, or the criteria relied on in reaching the decision.[37]

Still, the discussion about the information to be adequate to fulfil the aim of the right in these cases, remains open.[38] On top of that, the approach will have to be necessarily sector specific, due to the particularities and the different freedoms at stake.

∼ The significance and the envisaged consequences

Here article 29 WP refers to information about intended or future processing, and how the automated decision-making might affect the data subject. In order to make this information meaningful and understandable, real and tangible examples of the type of possible effects should be given.[39]

Here the approach has to be sector specific too. Examples in the news curation should allow the person to understand the consequences of that processing and impact that

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[35] Idem, page 22.

[36] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01, page 25.

[37] Idem, page 25. *The information provided should, however, be sufficiently comprehensive for the data subject to understand the reasons for the decision.*

[38] See: EDWARDS, L., VEALE, M., Enslaving the Algorithm: From a "Right to an Explanation" to a "Right to Better Decisions"? IEEE Security & Privacy. May/June 2018, *about meaningful information as a new "transparency fallacy"- an illusion of remedy rather than anything substantively helpful.*

[39] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01, page 26.

can have in their right to receive information and ways to avoid an excessive "filter bubble" and improve the pluralism of the news received.

Section 2. Why is a right to explanation relevant in the media sector?

When talking about news curation system, people have little knowledge of what personal data is used and how such algorithmic curation comes about.[40] Profiling can perpetuate existing stereotypes and social segregation. It can also lock a person into a specific category and restrict them to their suggested preferences.[41]

The media are central in our democratic society and play important key roles. They have the "watchdog function" of raising awareness on important social and political matters, as a counterbalance of the political power, inform citizens and create a public forum discussion to enrich the democratic debate.

The right to receive information is key in a democratic society and therefore, it is necessary that we look carefully to the rise of algorithms used to customize news content, and that we take an individual and collective approach to preserve a high quality of media pluralism and right to receive information.

Article 29 WP issued revised guidelines on automated individual decision-making and profiling and stated that *given the core principle of transparency underpinning the GDPR, controllers must ensure they explain clearly and simply to individuals how the profiling or automated decision-making process works. In particular, where the processing involves profiling-based decision making (irrespective of whether it is caught by article 22 provisions).[42]*

Therefore, even leaving aside the discussion of whether which type of news curation systems can be classified as a decision similarly significantly affecting the data subject, online media sector has experimented a tremendous change in the way to inform. It went from traditional newspapers with an ideological known preference to social media

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[40] HARAMBAM, J., HELBERGER, N., VAN HOBOKEN, J., 2018. Democratizing algorithmic news recommenders: how to materialize voice in a technologically saturated media ecosystem. Phil. Trans. R. Soc. A 376: 20180088, page 1.
[41] Idem, page 5.
[42] Idem, page 16.

or customized news, relying more and more in an accurate profiling of their users in order to deliver the better experience and keep readers engaged.

Although the discussion of whether algorithms close people into a narrower selection, creating "echo chambers" and "filter bubbles" and affecting the quality of the public sphere discussion is still open and unclear,[43] it is clear however, that without enough access to information and to the functionalities of the news recommender systems, it is almost impossible to critically assess and detect bias, discrimination practices or propose improvements in the systems.

Nonetheless, the online media sector has other tensions that can lead to an undermining of data subjects' rights to receive information, for instance, corporate interests and tensions between audience preferences and editorial autonomy, that can lead to algorithm decisions unknown by the data subject.[44]

In the same way, the news domain has intrinsic particularities[45] that differs from other domains and which creates the need to analyse the right to explanation from a sector specific approach taking into account those particularities.

Consequently, it is important that the right to explanation in news recommender systems takes a functional and flexible approach, in which "*if an individual receives an*

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[43] See MÖLLER, J., TRILLING, D., HELBERGER, N., VAN ES, B. (2018), Do not blame it on the algorithm: an empirical assessment of multiple recommender systems and their impact on content diversity, Information, Communication & Society, 21:7, 957-977, *the personalized recommendations showed no reduction in diversity over the non-personalized recommendations; on the contrary, personalized collaborative filtering produced the highest amount of topic diversity in this controlled setting. In sum, we have established that conventional recommendation algorithms at least preserve the topic/ sentiment diversity of the article supply (…) it became evident that we need better metrics of diversity to gain a better understanding of the true impact of recommender systems. To better understand the impact of these recommendation engines and whether over time there is indeed a reduction of content diversity these difference recommendation engines should be tested in situ over a longer period of several month.*

[44] HARAMBAM, J., HELBERGER, N., VAN HOBOKEN, J., 2018. Democratizing algorithmic news recommenders: how to materialize voice in a technologically saturated media ecosystem. Phil. Trans. R. Soc. A 376: 20180088, page 3.

[45] See ÖZGÖBEK, Ö., ATLE GULLA, J., CENK ERDUR, R., A Survey on Challenges and Methods in News Recommendation, Department of Computer and Information Science, NTNU and Department of Computer Engineering, Ege University, page 1, *The news domain differs from other domains in many ways. For example; the popularity and recency of news articles changes so fast over time (…) Also considering the high number of new articles published every hour increases the complexity of other challenges.*

explanation of an automated decision, he/she needs to understand the decision well enough to determine whether he/she has an actionable discrimination claim".[46]

It is worth highlighting that, contrary to the fact that users do not read privacy policies that could lead to the conclusion that they do not have interest in the information they are provided, studies point out in the direction that *users do want explanations, yet do not have a very strong preference for how explanations should be shown to them.[47]* Hence, it is the industry and the public sector responsibility to explore the best ways to deliver the meaningful explanation that users are asking for.

Chapter III. The right to explanation in practice

We saw in the previous chapters that the right of explanation of automated-decision making is recently in a heated academic debate about his existence or not, its scope and the content of this right. But there is a lack of academic investigations dedicated to the analysis of its practicability and effectivity when exercised against the online service providers. Filling that gap is the main objective of the empirical research with the rational of gathering as much empirical evidence as possible within the timeframe designed for this study.

Section 1. Steps of the empirical study

The empirical research was designed and followed the subsequent steps:

≈ *Phase 1: Mapping of online service providers*

The aim of this phase was to identify a representative sample of online service providers relying on news recommender systems. We classified the providers in three categories

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[46] SELBST, A.D., POWLES, J., Meaningful information and the right to explanation. International Data Privacy Law, 2017, Vol. 7, No. 4, page 236.

[47] TER HOEVE, M., HERUER, M., ODIJK, D., SCHUTH, A., SPITTERS, M., DE RIJKE, M., Do New Consumers Want Explanation for Personalized News Rankings. 2017, page 1.

depending on whether they were first-party content providers[48], news aggregators[49] or social media providers[50].

These three categories respond to the rationale of having the complete picture of the actual landscape of the online media sector: from traditional online newspapers, to news aggregators and other platforms used for receiving information as the social media.

Taking into account the different nationalities from the members of the study, the goal was to reach to a balance mix between national, EU and international providers in order to have the most representative sample possible and select both big players but also small providers.

The result of the mapping can be found in the Annex 2, fig.1, where we can see the headquarters of the forty-three (43) providers part of the empirical study. From those, 19% belong to the category of social media, 28% belong to the category of news aggregators and 53% belong to the category of first-party content providers.[51]

≈ *Phase 2: Registering and use of the service*

Once the service providers object of the study was identified, each of the members of the study registered with the online service providers who had been assigned and start using the service at least two times a week for minimum five (5) minutes. The use consisted on browsing, clicking and reading news content, creating a normal interaction with the platform. The use of the service took place between 30th November 2018 until the initial request was send on 28th February 2019.

In this phase, the first standardised survey (survey 1) was filled out in order to gather the empirical evidence on that phase, by answering which information was necessary to create an account or what other optional categories of personal data where provided

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[48] First-party content providers defined as an organization that supplies information, that the organisation itself has created, for use on a website.
[49] News aggregators defined as client software or a web application which aggregates syndicated web content such as online newspapers, blogs, podcasts, and video blogs (vlogs) in one location for easy viewing.
[50] Social media defined as websites and applications that enable users to create and share content or to participate in social networking.
[51] Fig. 2, Annex II.

during the registration process[52] and by assessing the information provided at that stage by the controller regarding privacy and data protection.

≈ *Phase 3: Assessment of the privacy policy*

In parallel of using regularly the different online service providers, we critically assessed the privacy policy of the providers in order to identify the level of explanation already present *ex ante* and evaluate the privacy policies in order to obtain more details *ex post.*

In this phase, the second standardised survey (survey 2) was filled out in order to critically assess the content of the different privacy policies. The goal in that phase was to analyse if the conditions set in articles 12, 13 and 14 GDPR where fulfilled, if the information was provided and, in a concise, transparent, intelligible and easily accessible form, using clear and plain language.

To measure these questions, several parameters were assessed, for example, the easy to find the privacy policy within the platform, the length of the privacy policy, the information contained following the provisions of articles 13 and 14 GDPR and if the privacy policy associated each processing operation with one or more purposes and a legal basis.

≈ *Phase 4: Initial request*

In this phase a first initial request was send to the providers with the following content:

[DATE]

To the data protection officer of [ENTER COMPANY NAME],

Hi,

My name is [NAME] and I am a registered user of [COMPANY NAME] (username: *XXX*).

As I understand it, you select and present the content on your platform/website/app in different ways depending on a number of parameters. Even if only partially, the selection and presentation of content appears to be targeted to me, based on my personal profile.

With this in mind, I would like to exercise my rights under the general data protection regulation (GDPR) and obtain further clarification on your news recommender system. I have read your privacy policy and would like to obtain more concrete and specific information relevant to my situation in particular. How exactly are you personalising your content delivery/presentation to me specifically?

Thank you very much.

Best wishes,

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[52] Fig. 3, Annex II.

The aim was to confront the providers with the request of the right to explanation of their news recommender system in order to obtain more concrete information as stated in articles 13.2 (f), 14.2 (g) and 15.1 (h) GDPR.

Reminders to the providers were send every two weeks in case of non-automated answer. In this phase, the third standardised survey (survey 3) was filled out in order to register the date, medium used to send the request and assess the ease in which the initial request was filed. The outcome provided empirical evidence about the compliance of easily accessible contained in the GDPR. That is very relevant to see if the data subject´s rights are in practice easy to exercise and identify the obstacles that data subjects might encounter.

≈ Phase 5: Follow-up, interaction, assessment

The last phase of the empirical study was the follow-up of the initial request in case no answer or not satisfactory answer was received.

The follow-up lasted over a period of two (2) months in which the goal was to obtain as much information as possible regarding the right of explanation and the functioning of the news recommender system.

This phase is of utmost importance, on the one hand, provides empirical evidence of the practical information received by users when exercising the right of explanation and, on the other hand, the provider is confronted again with the GDPR provisions of providing clear, accessible and in plain language explanation, being accountable and having to demonstrate compliance.

One year after the enter into force of the GDPR, assessing the practical functioning of data subject´s rights, in this paper focused on the right to explanation, is of paramount importance in order to assess the level of compliance of the providers.

In this phase, the fourth (4) standardised survey was filled in order to gather all the empirical evidence for the future analysis in the following section. The information obtained as well as the difficulties and obstacles found in the process where collected for the purpose of having empirical information as complete and relevant as possible for the phase of analysing the obtained results and data.

The following follow-up request was sent to providers in order to obtain a more detailed explanation, containing the following content:

[DATE]

To the data protection officer of [ENTER COMPANY NAME],

Hi,

My name is [NAME] and I am a registered user of [COMPANY NAME] (username: *XXX*).

First of all, I would like to thank you for your reply.

Unfortunately, your reply does not include all the information I requested. As there seems to be some uncertainty as to the scope of my request, I have tried to specify as clearly as possible all of the information I would like you to give me. It would be particularly helpful for the both of us, if you could align the structure of your response to the list below.

Based on Article 15 GDPR (read together with Article 12 and 22), I would like to obtain:

1. A copy of all my personal data held and/or undergoing processing, in a commonly used electronic form (Article 15(3)). Please note that this might also include any audiovisual material (e.g. voice-recordings or pictures) and is not necessarily limited to the information contained in your customer database and/or the information you make available through the 'manage my profile' functionality.
2. Confirmation as to whether or not you are processing any special categories of personal data, also called 'sensitive data' about me (cf. Article 9) and if so a detailed list of that data.
3. If any data was not collected, observed or inferred from me directly, precise information about the source of that data, including the name and contact email of the data controller(s) in question ("from which source the personal data originate", Article 14(2)(f)/15(1)(g)).
4. If these data have been or will be disclosed to any third parties, please name these third parties along with contact details in accordance with Article 15(1)(c). Please note that the European data protection regulators have stated that by default, controllers should name precise recipients and not "categories" of recipients. If you do choose to only name categories, you must justify why this is fair, and be specific, i.e. naming "the type of recipient (i.e. by reference to the activities it carries out), the industry, sector and sub-sector and the location of the recipients". (Article 29 Working Party Guidelines on Transparency WP260 rev.01, p37).
5. All purposes of the processing for which each category of personal data collected are intended, as well as the lawful ground (cf Art.6(1)) for each specific purpose. For all uses of "legitimate interests", please explain what those interests are (Article 14(2)(b)) and how you consider your interests to override mine.
6. Confirmation as to whether or not you consider yourself making automated decisions (within the meaning of Article 22, GDPR). If the answer is yes, please provide meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for me in particular. (Article 15(1)(h))
7. Confirmation on how long each category of personal data is stored, or the criteria used to make this decision, in accordance with the storage limitation principle and Article 15(1)(d).
8. Confirmation on where my personal data is physically stored (including backups) and at the very least whether it has exited the EU at any stage (if so, please also detail the legal grounds and safeguards for such data transfers). If you make use of cloud-services, please provide me with detailed information about where their servers are located and the details about your data processing arrangement with these providers.
9. Details on the security measures you undertook to safeguard my personal data (including, for example, encryption, access restrictions, data minimisation strategies, storage methods, etc.).
10. Confirmation as to what data subject rights you consider I have vis-á-vis you and how you would accommodate them
11. Confirmation on whether or not at any stage, you have recommended content to me on the basis of my personal data.
12. Explain the logic behind your news-/content-recommendation system as applied to me in particular. For example:
    - What part of the content I consumed was personalised or recommended on the basis of my profile?
    - A comprehensive list of concrete (categories of) personal data involved in the recommender system (as applied to me specifically(merely giving examples of data that are being used to that end is not sufficient)
    - Why the respective (categories of) personal data were considered relevant for the recommender system
    - The weight of the different categories of personal data feeding the recommender system;
    - Details on how your recommender system was designed, without having to give trade secrets or IP protected information (i.e. background of people involved, is it an ongoing process, etc)
    - What priorities have guided the design of the recommender system?

Thank you very much.

Best wishes,

Section 2. Evaluating the results of the study: Pitfalls and shortcomings detected

While evaluating the results, all of the data gathered in the different phases of the study has been analysed, in order to offer a structured view of key findings that will help us in later steps to analyse the reasons underlying these findings and propose recommendations to improve the compliance with the right to explanation. In this sense, Annex II to V[53] will help to illustrate the results found in our empirical study.

≈ *When registering and using the service*

In this phase, while registering with the different online service providers that we had assigned and start using the service we could analyse the process of registering from the perspective of compliance of the GDPR principles, like privacy by design and by default or fairness and transparency of the processing, as well as, the basis of processing. In this phase, the first standardised survey (survey 1) was filled in order to gather the empirical evidence on that phase.

In the figure 3 of Annex II, you can see a graphic of the information required in order to register to one of this online service providers analysed. Almost all providers (98%) asked for an email address and 56% of providers asked for the full name, while 30% asked for a username and a minority of providers asked for other information, like the phone number, the birth date or gender. We can argue that some of the fields were excessive according to the data minimisation principle[54] and that some of the fields can be revised to only ask for the data strictly necessary for the purpose of making the registration process.

In this early phase, we detected some providers asking for consent in order to provide personalised news.[55] Nevertheless, the explanation provided in that moment was very limited, only stating that the recommendations will be based on "your interaction", but no further details were provided. Other providers asked to disclose the age in order to

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[53] Annex II provides different figures to illustrate the results of the empirical study.
Annex III provides examples of answers from the providers.
Annex IV provides examples of good practices detected.
Annex V provides examples of mal practices detected.
[54] Article 5.1 c) GDPR.
[55] Fig. 1, Annex IV.

influence the content that is going to be offered, without disclosing any more information.

We also detected extended practices of providers asking for consent not in a specific way as the same tick in the box was used to accept the terms and conditions, the privacy policy and the cookie policy all in once, so not fulfilling the consent requirements set in the GDPR and further developed in the Guidelines on Consent of Article 29 WP.[56] Some of them went even further and there was no clear affirmative action required, just by clicking follow you accepted all the conditions, again, in non-compliance of the GDPR conditions for consent and the mentioned Article 29 WP Guidelines.[57]

≈ *When assessing the privacy policies*

In this second phase, the goal was to critically assess the privacy policy of the providers in order to identify the level of explanation already present *ex ante* while also keeping an eye on other important parameters of compliance within the GDPR and its principles.

∼ Structured- based assessment

In first place we analysed several general facts that helped us to determine the compliance of GDPR principles of transparency and weather the information was provided in an easily accessible form, in a concise and transparent manner.

In judging the ease to find the privacy policy in the platform that we were using (website, app, etc), we specifically measure how many clicks it took to go from the homepage to the privacy policy.[58] In the graphic,[59] we can see that 56% of providers it took one click to go to the privacy policy, meaning that it was already visible from the homepage, although some ways to show it are not immediately straightforward and can be difficult to localize it (for example, to put the link in a very faint colour, almost imperceptible).[60]

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[56] Article 29 Working Party, Guidelines on consent under Regulation 2016/679, last revised on 10 April 2018, WP259 rev.01.
[57] Fig. 1, Annex V.
[58] For example, from the homepage. Click/tap 1: Terms and Conditions, Click/tap 2: Privacy Policy.
[59] Fig. 4, Annex II.
[60] Fig. 3, Annex V, where you can see an example of difficult path to get to the privacy policy and a hidden button in one of the provider's website.

In 33 % of providers it took 2 clicks to find the privacy policy and, in the rest, (11%) it took three clicks or more[61].

In assessing the ease or difficulty in describing the process of finding the privacy policy, as a first step necessary to gain knowledge of the processing of personal data, 76% of us answered that it was easy or very easy while 24% answered that was medium or very hard to find. Was very hard to find at least in 7% of providers.[62]

In assessing if the privacy policy was presented as a separate document or embedded into another document (for instance, inside the Terms of use), we found out that 16% of providers[63] had the document embedded into another document.

In determine the number of words of the privacy policies,[64] 42 % of the privacy policies contained between 2.000 and 3.999 words, being just a 9% of the policies that contained less than 2.000 words.

26% of providers had a privacy policy with more than 6.000 words, and from those, a 3% contains more than 10.000 words.

We see that the majority of providers are placed is between the range of 2.000 to 6.000 words.[65]

~ Content-based assessment

In second place, we analysed the content of the different privacy policies in order to determine the compliance of the information listed in articles 12, 13 and 14 GDPR as to be provided when personal data is collected.

It is worth noting that none of the providers complied with all the information that needs to be placed in the privacy policy. When the processing was based on legitimate interests by the controller or by a third party, 30% of controllers had not specified the legitimate interest that they were pursuing. A similar scenario was encountered when

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[61] Fig. 2, Annex V, where you can see an example of no explicit privacy policy button on the website/app.
[62] Fig. 5, Annex II.
[63] Fig. 6, Annex II.
[64] The study took the following approach: to take the most comprehensive document in case that the privacy policy was layered and add the cookies policy into the total.
[65] Fig. 7, Annex II.

the processing was based on consent, 33% of providers did not mention the right to withdrawn consent at any time.

Another important factor when it comes to data protection is the right to lodge a complaint. In that case, 30% of providers did not mention the existence of this possibility in their privacy policy.

The percentage is worst from the data that has not been obtained directly from the data subject, where only 40% of providers mentioned the categories corresponding to that data and just 53% identified the source from where the data originated.[66]

In terms of data subjects rights, we can see a significant difference between the rights already present in the Directive 95/46/EC, right to access, rectification, erasure and object, that are mentioned for almost all of the providers, compared to right to data portability or restriction of processing mentioned by 74% of providers, and from that, we see a dramatic difference when it comes to the right not to be subject to an automated decision-making, including profiling, which produces legal effects or similarly significantly affect the data subject, only mentioned in 12% of cases.[67] Even worst is the scenario when we questioned if the privacy policy mentioned the right to obtain meaningful information about the logic involved, as well as the significance and the envisaged consequences of automated decision-making for data subjects, where none of the providers mention it. The right to obtain a human intervention, to express your point of view or to contest a decision was only mentioned by one of the providers that refer to a *guichet automatique* where it was possible to state one's opinion, contest and require human intervention.

Going deeper into this element, and besides not mentioning the right not to be subject to an automated decision-making, we assessed whether the privacy policy explicitly recognises or denied the existence of automated decision-making and/or a news recommender system, for example, the fact that dynamically arranges news content on the basis of certain parameters. Here we found a completely different situation that the one found with the mention of the rights, where 74% of providers explicitly recognise

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[66] Fig. 8, Annex II.
[67] Fig. 9, Annex II.

the existence of a news recommender system.[68] An example of the formulation of this characteristic is:

> We use the information we have to deliver our Products, including to personalize features and content (including your News Feed, ████████ Feed, ████████ Stories and ads) and make suggestions for you (such as groups or events you may be interested in or topics you may want to follow) on and off our Products. To create personalized Products that are unique and relevant to you, we use your connections, preferences, interests and activities based on the data we collect and learn from you and others (including any data with special protections you choose to provide where you have given your explicit consent); how you use and interact with our Products; and the people, places, or things you're connected to and interested in on and off our Products.

Another element to analyse is if the privacy policy explicitly recognises or deny the existence of automated decision-making, and here we found that 60% of providers do not mentioned anything and, 35% of providers they explicitly recognised the existence of automated decision-making.[69] Examples of the formulation of this characteristic are:

> Computer algorithms select what you see in ████████████, except as noted. The algorithms determine which stories, images, and videos show, and in what order.

> This may include using automated systems to detect security and safety issues. We may use automated processes to help make advertising more relevant to you.

When we go specifically to the fact if the news recommender system constitutes automated decision-making, the percentage of providers that do not mention anything is even higher (86%), with only 12% of providers explicitly recognising that its news recommender system constituted automated decision-making, and just one provider denying it.[70] Examples of the formulation of this characteristic are:

> ████████ collects and stores personal data about its users to customize reading. This includes automated decision-making to promote content tailored to the preferences and interests indicated by the user, and to their browsing history and network interactions.

> (i) Right to not to be subject to automated decision-making where that would have a significant effect on you. We do not in fact engage in such activities, so this right will not, in practice, be relevant in the context of your use of our sites.

In this first privacy policy analysis, we tried to collect all the relevant information regarding the logic involved made public by the providers. Although, we already stated

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[68] Fig. 10, Annex II.
[69] Fig 11, Annex II.
[70] Fig. 12, Annex II.

that the majority of providers did not have any relevant information regarding the logic involved, from the ones that provide some information we highlight those formulations:

> That Data Subjects are sorted into different groups for the purposes of the news recommender system as well as two examples of these groups. (e.g. female 18-25, interest in travel and male 30-45, interest in tennis). These groups will receive different content and ads.

> Our Services allow you to stay informed about news, events and ideas regarding professional topics you care about, and from professionals you respect. Our Services also allow you to improve your professional skills or learn new ones. We use the data we have about you (e.g., data you provide, data we collect from your engagement with our Services and inferences we make from the data we have about you), to recommend relevant content and conversations on our Services, suggest skills you may have to add to your profile and skills that you might need to pursue your next opportunity. So, if you let us know that you are interested in a new skill (e.g., by watching a learning video), we will use this information to personalize content in your feed, suggest that you follow certain members on our site, or watch related learning content to help you towards that new skill. We use your content, activity and other data, including your name and picture, to provide notices to your network and others. For example, subject to your settings, we may notify others that you have updated your profile, posted a blog, took a social action, made new connections or were mentioned in the news.

≈ *When interacting with the online service provider*

The last part contains the actual interaction with the different providers when requesting the right to explanation.[71] In that case we also analysed different practicalities of exercising the right and the substantive explanations received from the providers in order to analyse the compliance and the quality of the responses.

~ Practicalities when interacting with the providers

From the practicalities point of view, the interactions with the providers lasted for two months, and we assessed numerous aspects from which we want to highlight some key findings in this study.

It is of utmost importance for the exercising of the right that the providers actually fulfil and respond in the adequate time framework fixed in the GDPR in order for their right to have the correct protection. From the research we found that 21% of the providers had not provided any non-automated answer by the time the study had been closed. 42% of providers responded at least with the first non-automated answer in a reasonable time framework between 0 to 19 days, and 28% of providers required from 30 to 59 days to have the very first non-automated answer.[72]

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[71] See template form in page 18.
[72] Fig. 13, Annex II.

In our study, we sent a reminder every two weeks if no response was received. We determine that in 56% of providers we had to send reminders to receive the first non-automated answer. From those, 13% of cases, we had to send more than four (4) reminders to get the first non-automated answer.[73]

If we add to this fact, the previous high percentage of providers that did not answer in the whole follow up process, the effectiveness of the exercise of data subjects' rights is called into question.

The days between the first non-automated answer and the first substantive answer and between that and the final answer they were also counted. We can highlight that in the first case, 28% of providers required from 30 to 59 days to have the first substantive answer.[74] Regarding the final answer only 16% of providers manage to issue a final substantive answer in less than 30 days. The majority of providers (58%) provided the answer in a period between 30 and 59 days.[75]

~   The obstacles raised by providers

Once the first non-automated answer was received, we evaluated if obstacles to attend our request were raised by the providers. 44% of providers raised at least one obstacle to attend the request. 10 providers request a proof of identity, 5 of them inform that they needed extra time to process the request and 3 providers refuse to act on the request.[76] The providers that refused to act, raised the following reasons: that their web did not target EU visitors and therefore, they considered that GDPR did not apply to them, and when we answered explaining the territorial scope of the GDPR and why we thought that GDPR did apply, they refuse to act stating that they were a small website and they did not have the resources to answer the question;[77] another provider stated that they did not hold our data and they referred to another entity; a last provider, after sending the ID, decided to close the inquire stating that the petition was exceeding article 15 GDPR and therefore, was not appropriate to comply with it.[78]

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[73] Fig. 14, Annex II.
[74] Fig. 17, Annex II.
[75] Fig. 18, Annex II.
[76] Fig. 15, Annex II and Fig. 3, Annex III.
[77] Fig. 4, Annex III.
[78] Fig. 7, Annex III.

~ The substantive content of explanations

Assessing the substantive content of the answers, we tried to gather as much relevant information as possible regarding the logic involved, the significance and the envisaged consequences of the news recommender system for data subjects. We found out that even upon request, 30% of controllers did not provide any information regarding that and only 56% of providers supply some data.[79][80]

Regarding the compliance with article 15,[81] none of the controllers provided all the information listed in the article. It is worth to highlight that only 16% provided some information about the purposes for which personal data is processed and the right to lodge a complaint to supervisory authorities. It is really worrying the lack of complete information available, affecting all the providers.

Examples of the answers received from the providers can be found in the Annex III, in concrete in fig. 5 and 6. Common practices among providers was to refer to the privacy policy, providing a link to access that information and providing very little meaningful information, at least for the first non-automated answer.

From the providers that tried to deliver a more complete information, some of them refer to the type of filter used (e.g. collaborative filter) and explaining that the recommendations were based on the consumption of the specific user and the consumption of the users as a whole. Apart from these two variables, they mention "a whole set of parameters that help to adjust the result", without explaining what these parameters are or they weight.

Other providers just mention two parameters, namely "contextual", meaning news related to the one you are viewing and "personal", meaning news related to the news you have already viewed, without going more in depth in the logic involved.

From the big players, we can see that the data subject can be flooded with many links, which produce the opposite effect that GDPR wants to achieve. Users are not more, but less informed ending up with no clear or understandable meaningful information. From

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[79] Fig. 16, Annex II.
[80] Fig 1, Annex III, where you can see examples of providers rejecting the fact that they do personalise the content.
[81] Fig. 19, Annex II.

them we have been able to extract some of the factors used to determine the content which are: types of videos you have viewed, the apps on your device and your use of apps, websites you visit, anonymous identifiers associated with your mobile device, previous interactions with the platform or ads, your geographic location, age range, gender and video interactions.

Another provider named factors like: your connections, preferences, interests and activities based on the data we collected and learn from you and others and location information.

However, no information is given about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.

In the follow up request, we explicitly asked for more information about the design of the news recommender system and the priorities that guide that design or the way in which the system will perform with an incomplete profile. Vague and generic answers were provided such as "we prioritize the privacy of our users and therefore we use the minimum data to offer recommendations" or defences were raised namely "we cannot give information about the criteria of prioritizing the content of our algorithms because it is part of our learning and allows us to improve the service in front of competitors".

Lastly, regarding the interpretation of article 22 GDPR, from the controllers that provide an answer and considered their news recommender system to be an automated decision-making, none of them considered that their personalised recommendations had a legal or similarly significant effect data subjects or their considered that "although our content profiling treatment involves automated decision-making, it does not in the sense of article 22 GDPR" without providing any further explanation of why they considered their news recommender out of the scope of article 22 GDPR.[82]

Section 3. What type of explanation we expected vs. what type of explanation we obtained: problems detected

From the previous section, a series of problems were identified. In this section, we will name and classify them in order to establish a list of the most common and serious

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[82] Fig. 2, Annex III.

drawbacks detected, confronting them with the GDPR requirements and goals. Some of the shortcomings have a focus on the right to explanation but others have a wider scope than the compliance of the right to explanation and affect the core of the lawfulness of the processing or privacy by design and therefore, can be extrapolated as problems that affect the whole practicability of the recognised rights of the data subjects.

≈ Lack of compliance with consent requirements

According to the GDPR consent should be a clear affirmative act, specific, informed and unambiguous. That could include ticking a box, but no silence, pre-ticked boxes or inactivity.[83] If consent is not correctly collected, then the processing would not be regarded as lawful according to article 6 GDPR.

Unfortunately, that is the case in many of the providers we assessed. We detected several mal practices that leads to an invalid consent. For example, we noticed that some providers still do not ask for a clear affirmative act while asking for consent or do not separate the different specific purposes for which consent is required but they gather in the same box consent for one or multiple purposes (it is not even specified or explained) with the agreement of terms and conditions and cookies all together.[84]

Even in the best practices detected, consent also lack on the informed requirement, where normally no information or very little information is provided.[85]

≈ Lack of implementation of privacy by design and by default principles

Recital 78 GDPR name some examples of measures that would meet the principles of data protection by design and by default. Such measures could consist of "*minimising the processing of personal data, pseudonymising personal data as soon as possible, transparency with regard to the functions and processing of personal data, enabling the data subject to monitor the data processing",* being an open example list. From the assessing of the process of registering and the dashboard of some providers (if existing) we can conclude that there is a lot of room for improvement in this regard and there are

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[83] Recital 32 GDPR.
[84] Fig. 1, Annex V.
[85] Fig. 1, Annex IV.

still some mal practices like lack of implementation of privacy by default and founding the permissions already activated without the user express consent.

≈ Lack of complete information in the privacy policies

The majority of providers had privacy policies with a range of 2.000 to 6.000 words. Nonetheless, none of the providers provided a complete list of information as listed in articles 13 to 14 GDPR. Some of this information is key to assess the lawfulness of processing and the purposes of the processing or the right that data subjects have to lodge a complaint.

≈ Lack of concise, transparent, easily accessible using clear and plain language information

As we said, the number of words used in the privacy policies is anything but concise in a relevant percentage of providers where 26% of providers had a privacy policy with more than 6.000 words, and from those, a further 3% contains more than 10.000 words.

When assessing the accessibility of privacy policies, in 33 % of providers it took 2 clicks to find the privacy policy and, in 11% of providers it took three clicks or more. And even in 76% of the cases, the members of the empirical study described the process of finding the privacy policy as easy or very easy, it was medium or very hard to find in 24% of cases.

Providers need to understand that data protection is a key element of their business and that an easy accessibility and elements that facilitate the understanding of the data processing for example, a privacy dashboard, a summary of the key elements, graphics or visuals, are of utmost importance to raise awareness and trust from data subjects.

≈ Delay in providing a response

We already see that is not easy for a data subject to find the privacy policies in some cases and that even if they find it, understand their rights and manage to send an enquiry enforcing their rights, the obstacles then follow. One of the main obstacles is the lack of response of many providers or the unjustified delay which makes that data subjects end up desisting from their petition.

≈   Lack of awareness of what information is required

Identifying shortcomings that specifically affects the right to explanation, the empirical research gave support to our intuition that the right to explanation was practically an unknown right. Providers do not know what information needs to be provided and limit it into vague and general explanations of the categories of data used to personalised content.

Moreover, if you try to push a bit further, the ones that answered the follow up request, it is clear that try to avoid the applicability of article 22 GDPR, just mentioning that it is not applicable from their point of view. Here clear guidance will be required in order to clarify the scope of the right and of the term "similarly significantly affects him or her".

≈   Unwillingness to provide information on the algorithms functioning

Although most providers simply ignored the question or not provide any answer, from those who went a bit further, the general defence was that the algorithm function is part of their knowledge that makes them to compete with other providers.

≈   Lack of meaningful information

If the aim of article 13-15 GDPR is that data subjects receive a sufficient meaningful information that allows them to challenge and contest the decision that has been made by automated decisions, that is certainly not achieved by the information received by the 43 providers part of the empirical study. There is no possibility to assess or detect bias, discrimination or lack of pluralism mere with the explanation that these controllers provided in the study.

≈   Lack of harmonized and structured response

Even though the design of the empirical study followed a structured initial request and follow up request to facilitate the response of providers, it has become clear that the diversity of responses when confronted with data subjects' rights requests is as varied and we received 43 different structured response, one for each provider. In order to raise awareness and empower data subjects' rights, the different sectors would have to work on a common approach that helped users to receive a similar structured response

that allow them to compare, become more aware of the processing and purposes of their personal data and the compliance of providers with the GDPR provisions.

Chapter IV. Improving the right to explanation: recommendations in the news recommender sector

The results of our empirical research have demonstrated that exercising data subjects' rights and asking for more information about the way news recommender systems work, it is a difficult job with many practical obstacles listed in the previous section. Moreover, problems related to the substantive content of the right to explanation and the interpretation of the GDPR are added to this right, hindering even more his practical exercising.[86]

With that in mind, the aim of this chapter is to identify possible ways of improving both the practical exercising of the right to explanation and the content that is delivered to the data subject, in order to make it more in line with the objectives of the GDPR.

Although some of these recommendations can be extended and might be useful to all the GDPR data subjects' rights and, in general to the sectors relying on automated decision-making, the recommendations are focused on the sector of news curation. Due to the particularities and different rights and freedoms at stake in each sector, it is necessary to develop tailor-made recommendations for each of them.

Section 1. Raise awareness amongst data subjects

Rising awareness of the data subject's rights is still an unfinished task[87] and is lower in the right to explanation, where only 41% of respondents according to the Eurobarometer 487a have heard about this right, contrary to other rights like right of access or erasure, where 65% of respondents have heard about them.[88] When it comes to those who had effectively exercised their rights, the percentage is even lower, only

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[86] Fig. 2, Annex III.

[87] See awareness tools in, SPAGNUELO, D., FERREIRA, A., LENZINI, G., Accomplishing Transparency within the General Data Protection Regulation, in Proceedings of the 5th International Conference on Information Systems Security and Privacy, pages 114-125.

[88] Eurobarometer Report 487a on the General Data Protection Regulation, published on June 2019, page 3, page 68. Answer provided for the question: Have you heard of each of the following rights? - The right to have a say when decisions are automated (e.g. an algorithm decides if you will be granted a loan or not).

8% of respondents have exercised their right to have a say when decisions are automated.[89]

That means that, despite the increasing importance of algorithms automated decisions, EU citizens are less aware about the existence of this right and therefore, less aware about the safeguards and how to contest a decision that is taken by automated means.

Other relevant figures in the report can be taken into account in order to develop concrete actions to increase the awareness and empowerment of EU citizens. Certainly, automated decisions making will be one of the topics to address in the following years, as shown by the European Commission communication COM (2019)374 final,[90] where AI is highlighted as a topic with strategic importance, and therefore, the EC human-centric approach will have to be develop in the coming years.[91] The OECD[92] and G20[93] have also called to promote transparency and explainability of AI as a manner of creating a trustworthy AI.

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[89] Eurobarometer Report 487a on the General Data Protection Regulation, published on June 2019, page 23.

[90] Communications from the Commission to the European Parliament and the Council COM (2019) 374 final, Data protection rules as a trust-enabler in the EU and beyond- taking stock, 24 July 2019, page 15-16.

[91] The EDPB work program 2019-2020 includes in his list of activities guidelines on targeting of social media users and possible topics like the use of new technologies, such as AI and connected assistants. https://edpb.europa.eu/sites/edpb/files/files/file1/edpb-2019-02-12plen-2.1edpb_work_program_en.pdf

[92] OECD, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449, adopted 22 May 2019. *"AI Actors should commit to transparency and responsible disclosure regarding AI systems. To this end, they should provide meaningful information, appropriate to the context, and consistent with the state of art: i. to foster a general understanding of AI systems, ii. to make stakeholders aware of their interactions with AI systems, including in the workplace, iii. to enable those affected by an AI system to understand the outcome, and, iv. to enable those adversely affected by an AI system to challenge its outcome based on plain and easy-to-understand information on the factors, and the logic that served as the basis for the prediction, recommendation or decision".*

[93] G20 Ministerial Statement on Trade and Digital Economy, on 9 June 2019 *"AI Actors should commit to transparency and responsible disclosure regarding AI systems. To this end, they should provide meaningful information, appropriate to the context, and consistent with the state of art: i. to foster a general understanding of AI systems; ii. to make stakeholders aware of their interactions with AI systems, including in the workplace; iii. to enable those affected by an AI system to understand the outcome; and, iv. to enable those adversely affected by an AI system to challenge its outcome based on plain and easy-to-understand information on the factors, and the logic that served as the basis for the prediction, recommendation or decision".*

Section 2. Facilitate the exercise of data subjects' rights

From the shortcomings identified, many are due to a poor implementation of the principles of the GDPR and with the wrong approach of seeing data protection as a bureaucratic formality or a long text that no one will read.

Instead, the GDPR provisions are aimed at changing this approach by creating an environment of privacy by default and design, by changing the burden of proof set in the Directive 95/46/EC[94] to the demonstration of compliance by the controller or the processor (accountability) established in the GDPR and, by strengthening the rights of data subjects.[95]

That creates obligations to the controllers to facilitate the exercise of data subjects' rights[96] and to proportionate the information required in articles 13 to 14 GDPR and any communication relating to processing to the data subject in a concise, transparent, intelligible and easily accessible form, using clear and plain language in particular for any information addressed specifically to a child.

In the empirical research we identified a series of malpractices that are far from implementing these provisions, they are seemingly made to prevent data subjects from exercise their rights or managing their privacy settings.

From this perspective, as a parallel step together with raising awareness of data subjects' rights, it is necessary that, when data subjects go to a platform to inform themselves about the privacy policy or want to manage their data settings, they can do so in an easily accessible form, without hidden or too extensive and incomprehensible privacy policies.

The data subject is not an expert and, in any case, must be able to understand what information is being processed, for what purposes and how to manage their privacy settings and exercise their rights.

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[94] Article 23.2 Directive 95/46/EC, "*the controller may be exempted from this liability, in whole or in part, if he proves that he is not responsible for the event giving rise to the damage*".
[95] Article 5.2 GDPR.
[96] Article 12.2 GDPR.

In this regard, we propose the following recommendations to facilitate the exercise of data subjects' rights and improve understanding about the data processing.

≈ DPAs joint strategic approach to eliminate and/or sanction identified mal practices

There is the risk for DPAs of falling into the practice of only sanctioning controllers or processors for major data breaches that come to the public knowledge, without controlling the implementation of the other equally important provisions of the GDPR.

One of the weakest parts is the information that data subjects received, the way that it is displayed and the content, often incomplete and not in line with articles 12 to 14 GDPR.

In my opinion, this is an area that deserves special attention and where the public authorities should develop a joint strategy in order to increase the quality of the information received by data subjects.

In the empirical research we have identified major issues relating to the lack of compliance of consent requirements, the lack of concise, transparent and easily accessible privacy policies and the delay in providing a response or lack of awareness of what is the required information to provide which seriously impair the exercise of the data subject's rights.

It is important that these issues receive the same attention as data breaches and are sanctioned and corrected when necessary.

≈ Encourage good practices from controllers

In the same way, controllers need to see data protection legal framework as an opportunity to build trust amongst its users and to work in a better way to handle data subject inquires, establishing clear protocols that guide users and help building a transparent and trustworthy platform. Additionally, there is a need to review the data protection processes, with the purpose of verifying compliance of privacy by design and default principles, often forgotten or that were not taken into consideration when the platform was build.

One solution could pass through the drafting of a sector-based code of conduct, encouraged in the GDPR[97] to give a specific solution to the different issues, especially when it comes to the still very unknown right to explanation of automated decision-making processes.

Another solution to assess compliance and help manage the risk that automated decision making can provoke, would be to do a DPIA. DPIAs are extremely important to demonstrate compliance and will help controllers to comply with GDPR requirements.[98]

DPIAs are only required when the processing is *"likely to result in a high risk to the rights and freedoms of natural persons"*.[99] Therefore, prior to implementing a news recommender system, whose consequences for the rights and freedoms are unknown, a DPIA will help to identify and assess the risks and propose solutions to mitigate the negative consequences that can cause.

External audits[100] and certification seals and marks may be a helpful mechanism to demonstrate compliance and correct malpractices.

Section 3. Achieve a uniform interpretation of the right to explanation

We have seen in the previous chapters that the right to explanation is far from having a uniform interpretation. Due to the rapid implementation and complexity of the news recommender systems, is of utmost importance for controllers to have clarified guidance's on the information to proportionate and of which type of news recommender systems falls into the scope of article 22 GDPR.

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[97] See article 40 GDPR.

[98] See Article 29 Working Party, Guidelines on Data Protection Impact Assessment (DPIA) and determining whether processing is "likely to result in a high risk" for the purposes of Regulation 2016/679, last revised and adopted on 4 October 2017, WP248 rev. 01.

[99] See article 35.1 GDPR.

[100] See SANDVIG, C., HAMILTON, K., KARAHALIOS, K., LANGBORT, C., Auditing Algorithms: Research Methods for Detecting Discrimination on Internet Platforms. 2014.

≈ Need for EDPB guidelines

Despite the updated guidelines of the Article 29 WP[101], several important issues remain unclear and certainly the news curation sector, due to profiling and the role that online media plays in our democratic systems, deserve special attention.

In the empirical research we have seen that from those providers that consider their news recommender system to be automated decision-making, none of them consider that their personalised recommendations had a legal or similarly significant effect on data subjects or they considered that "although our content profiling treatment involves automated decision-making, it does not in the sense of article 22 GDPR" without providing any further explanation. This might end in a way of circumventing the application of article 22 GDPR and their safeguards and therefore it is important to clarify the scope of these provisions.

≈ The important role of researchers in order to deliver a "meaningful explanation"

The complexity of algorithms made that one of the important parts of the debate is focused on what kind of explanation would be in this case meaningful to the user, so that he/she can make informed decisions or detect inaccuracies or bias.

Certainty, this is an interesting debate and there is a vast amount of room for improvement in this field.[102]

What is certainly true is that data subjects need to have access to information that at least is meaningful for them in order to understand the implications of that automated decision. In the sector of news curation, we find it important to enable users to test and see the difference between a personalised and non-personalised feed and develop user friendly tools to allow them to make decision and influence this personalisation.

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[101] Article 29 Working Party, Guidelines on Automated individual decision-making and profiling for the purposes of Regulation 2016/679, last revised and adopted on 6 February 2018, WP251 rev.01.

[102] See WACHTER, S., MITTELSTADT, B., RUSSELL, C., Counterfactual explanations without opening the black box: automated decisions and the GDPR. Harvard Journal of Law & Technology, 2018; TER HOEVE, M., SCHUTH, A., ODIJK, D., DE RIJKE, M., Faithfully Explaining Rankings in a News Recommender System, 14 May 2018; ANIL PATANKAR, A., BOSE, J., KHANNA, H., A Bias Aware News Recommendation System, Samsung R&D Institute, Bangalore, India.

However, this layer of information about the functionalities of the system probably will not allow the data subject to detect complex bias or group discriminations[103].

Section 4. Reinforce the collective monitoring of the right to explanation

Although it is true that the information that needs to be delivered to data subjects has wide room for improvement and we must work to make sure that there is development in this respect, it is no less true that the impact of the exercise of individual data subjects rights in a digital global society is an insufficient control.

As we pointed out in the last section, the information received by the data subject will probably not allow him/her to detect complex bias or group discriminations. Hence the importance of a collective approach to this right.[104]

≈ The role of NGOs/associations

Due to the potential collective discriminatory impact and the complexity of algorithms understanding, it is important to empower the role of NGOs and associations[105] to do a watching function over potential discriminatory effects and impact on fundamental rights.

Nevertheless, the role of associations or groups of users has limitations, as article 80 GDPR representation "*refers to rights granted in the GDPR and therefore the limits to the right to explanation apply to the proceedings initiated on the basis of article 80. They focus on the particular decision referring to the individual (…) As explained earlier, the source of potential discrimination in case of automated decision-making solution may not be linked to the individual and his or her personal data: it may be the result of how the particular automated decision-making system was structured".[106]*

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[103] See VEDDER.A., NAUDTS, L., (2017) Accountability for the use of algorithms in a big data environment, International Review of Law, Computers & Technology, 31:2, 206-224.

[104] See MAZUR, J., Right to Access Information as a Collective-Based Approach to the GDPR´s Right to Explanation in European Law, Erasmus Law Review December 2018, nº 3, "*there is the need to approach the automated decision-making discriminatory potential from a more collective perspective".*

[105] See initiatives like Algorithm Watch https://algorithmwatch.org/en/

[106] MAZUR, J., Right to Access Information as a Collective-Based Approach to the GDPR´s Right to Explanation in European Law, Erasmus Law Review December 2018, nº 3, page 183- 184.

≈   The importance of a strong Algorithm Watch Agency

Due to the potential implications for democracy and the rights and freedoms to protect, in this case regarding the right to receive information and with the view to protect the public forum in order to create a diverse debate, the individual requests and information delivered to individuals will be in any case insufficient to monitor the correct development of news curation and to ensure that potential discriminatory impacts are corrected with the aim to achieve a news recommender systems that far from narrowing the public debate, they increase diversity.

Following the creation of the High-Level Expert Group on AI[107], there is the need to create a technical expert group capable of analysing the complexity of Algorithms in order to detect bias and make companies aware and accountable for the implementation of those automated decision-making processes.

Chapter V. Conclusion

The research question object of this paper was to analyse whether the right to explanation, when exercised against online service providers, was in compliance with the provisions of the GDPR. The aim was to confront the providers with the request of the right to explanation of their news recommender system in order to obtain more concrete information as stated in articles 13.2 (f), 14.2 (g) and 15.1 (h) GDPR. In order to provide an accurate analysis, the paper has examined the EU legal framework applying to automated decision-making. We saw that these legal provisions are object to controversy and, we tried to clarify the scope of the right in the news curation sector, by keeping in mind the rationale of the right. Nevertheless, the theoretical framework still contains uncertainties that is important to clarify if we want to ensure a harmonized application of the GDPR.

The results of the empirical research revealed the lack of awareness and compliance with the right to explanation, the lack of implementation of privacy by design and by default solutions, the lack of meaningful information received and the lack of awareness of what information was required, as well as, general shortcomings that data subjects

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[107] The Expert Group on AI has as a general objective to support the implementation of the European Strategy on Artificial Intelligence. https://ec.europa.eu/digital-single-market/en/artificial-intelligence

will encounter when exercising their rights. That led us to identify the issues detected and expose the great differences that a user would find between the theoretical rights that the GDPR established and the reality when he/she wants to exercise these rights. If we want a solid framework that helps building trust amongst users, it is important to work to correct the malpractices detected, rising awareness amongst users and encouraging good practices from controllers.

In this regard, we proposed a series of recommendations in order to improve the exercise of data subject rights. The margin of improvement is wide and will help users to build trust with providers. Nonetheless, the solution would be incomplete if only focused on individual rights and would forget the collective implications and complexity of understanding algorithms functionalities.

In that sense, the collective monitoring of this right, understood widely with the aim of building transparent, accountable and fair automated systems, is of utmost importance and involves an interdisciplinary work among engineers, legal experts, public authorities, civils society and companies in order to protect our fundamentals rights.

Without losing sight of the benefits that innovation can bring, as a society it is important to re-open the debate of how to protect the role of the media in the online environment and establish strong safeguards to check compliance and correct and prevent bias and discriminatory practices.

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Annex I. The right to explanation: table with relevant provisions in the GDPR & table comparing GDPR with Directive 95/46/EC

Fig 1. GDPR right to explanation provisions

PROVISION	TEXT
Recital 71	The data subject should have the ***right not to be subject to a decision, which may include a measure, evaluating personal aspects relating to him or her which is based solely on automated processing*** and which produces legal effects concerning him or her ***or similarly significantly affects him or her***, such as automatic refusal of an online credit application or e-recruiting practices without any human intervention. ***Such processing includes 'profiling'*** that consists of any form of automated processing of personal data evaluating the personal aspects relating to a natural person, *in particular* to analyse or predict aspects concerning the data subject's performance at work, economic situation, health, ***personal preferences or interests, reliability or behaviour***, location or movements, where it produces legal effects concerning him or her ***or similarly significantly affects him or her***. However, decision-making based on such processing, including profiling, should be allowed where expressly authorised by Union or Member State law to which the controller is subject, including for fraud and tax-evasion monitoring and prevention purposes conducted in accordance with the regulations, standards and recommendations of Union institutions or national oversight bodies and to ensure the security and reliability of a service provided by the controller, or necessary for the entering or performance of a contract between the data subject and a controller, or when the data subject has given his or her explicit consent. ***In any case, such processing should be subject to suitable safeguards, which should include specific information to the data subject*** and the right to obtain human intervention, to express his or her point of view, ***to obtain an explanation of the decision reached after such assessment*** and to challenge the decision. Such measure should not concern a child. In order to ensure fair and transparent processing in respect of the data subject, taking into account the specific circumstances and context in which the personal data are processed, ***the controller should use appropriate mathematical or statistical procedures for the profiling, implement technical and organisational measures appropriate to ensure***, in particular, that factors which result in inaccuracies in personal data are corrected and the risk of errors is minimised, secure personal data in a manner that takes account of the potential risks involved for the interests and rights of the data subject ***and that prevents, inter alia, discriminatory effects on natural persons on the basis of racial or ethnic origin, political opinion, religion or beliefs, trade union membership, genetic or health status or sexual orientation, or that result in measures having such an effect.*** Automated decision-making and profiling based on special categories of personal data should be allowed only under specific conditions.[108]

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[108] Emphasis added.

Article 12.1	The controller shall take appropriate measures to ***provide any information referred to in Articles 13 and 14 and any communication under Articles 15 to 22*** and 34 relating to processing to the data subject in a ***concise, transparent, intelligible and easily accessible form, using clear and plain language***, in particular for any information addressed specifically to a child. The information shall be provided in writing, or by other means, including, where appropriate, by electronic means. When requested by the data subject, the information may be provided orally, provided that the identity of the data subject is proven by other means.[109]
Article 12.2	The controller shall ***facilitate the exercise of data subject rights under Articles 15 to 22.*** In the cases referred to in Article 11(2), the controller shall not refuse to act on the request of the data subject for exercising his or her rights under Articles 15 to 22, unless the controller demonstrates that it is not in a position to identify the data subject.[110]
Article 13.2 (f) – When information has been collected from the data subject	In addition to the information referred to in paragraph 1, the controller shall, ***at the time when personal data are obtained***, provide the data subject with the ***following further information necessary to ensure fair and transparent processing***: (f) the ***existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) <u>and</u>, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences*** of such processing for the data subject. [111]
Article 14.2 (g) – When information has not been obtained from the data subject	In addition to the information referred to in paragraph 1, the controller shall provide the data subject with the ***following information necessary to ensure fair and transparent processing*** in respect of the data subject: (g) the ***existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) <u>and</u>, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences*** of such processing for the data subject. [112]
Article 15.1 (h) – Right of access	The data subject shall have the right to obtain from the controller ***confirmation as to whether or not personal data concerning him or her are being processed, and, where that is the case, access to the personal data and the following information***:

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[109] Emphasis added.
[110] Emphasis added.
[111] Emphasis added.
[112] Emphasis added.

	(h) the *existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences* of such processing for the data subject.[113]
Article 22 – Automated individuals decision-making, including profiling	1.The data subject shall have the *right not to be subject to a decision based solely on automated processing, including profiling*, which produces legal effects concerning him or her *or similarly significantly affects him or her*. 2.*Paragraph 1 shall not apply if* the decision: (a) *is necessary for entering into, or performance of, a contract* between the data subject and a data controller; (b) *is authorised by Union or Member State law* to which the controller is subject and *which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests*; or (c) is *based on the data subject's explicit consent*. 3.In the cases referred to in *points (a) and (c) of paragraph 2, the data controller shall implement suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.* 4.Decisions referred to in paragraph 2 shall not be based on special categories of personal data referred to in Article 9(1), unless point (a) or (g) of Article 9(2) applies and suitable measures to safeguard the data subject's rights and freedoms and legitimate interests are in place.[114]

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[113] Emphasis added.
[114] Emphasis added.

Fig 2. Comparison GDPR with Directive 95/46/EC

ANALYSIS	DIRECTIVE 95/46/EC	GDPR
	RECITAL 41	**RECITAL 71**
Recital 71 referred to more safeguards. Not just the logic involved but an explanation of the decision reached. Also referred to measures to prevent discriminatory effects.	Whereas any person must be able to exercise the right of access to data relating to him which are being processed, in order to verify in particular the accuracy of the data and the lawfulness of the processing; whereas, for the same reasons, every data subject must also have the ***right to know the logic involved in the automatic processing of data concerning him***, at least in the case of the automated decisions referred to in Article 15 (1); Whereas this right must not adversely affect trade secrets or intellectual property and in particular the copyright protecting the software; whereas these considerations must not, however, result in the data subject being refused all information;	(…) ***In any case, such processing should be subject to suitable safeguards, which should include specific information to the data subject*** and the right to obtain human intervention, to express his or her point of view, ***to obtain an explanation of the decision reached after such assessment*** and to challenge the decision. Such measure should not concern a child. In order to ensure fair and transparent processing in respect of the data subject, taking into account the specific circumstances and context in which the personal data are processed, ***the controller should use appropriate mathematical or statistical procedures for the profiling, implement technical and organisational measures appropriate to ensure***, in particular, that factors which result in inaccuracies in personal data are corrected and the risk of errors is minimised, secure personal data in a manner that takes account of the potential risks involved for the interests and rights of the data subject ***and that prevents, inter alia, discriminatory effects on natural persons on the basis of racial or ethnic origin, political opinion, religion or beliefs, trade union membership, genetic or health status or sexual orientation, or that result in measures having such an effect.*** Automated decision-making and profiling based on special categories of personal data should be allowed only under specific conditions

GDPR provisions contain not just the knowledge of the logic involved but "meaningful information" and the significance and the envisaged consequences of such processing.

More emphasis is given to the principles of fairness and transparency.

The GDPR, ads "similarly" to significantly affects him or her.

Regarding exceptions, we find the addition of the data subject's explicit consent.

Regarding safeguards, we find not just to express his point of view, but also to obtain human intervention and to contest the decision.

We also find the addition to special categories of data.

ARTICLE 12. RIGHT OF ACCESS

Member States shall guarantee every data subject the right to obtain from the controller:
(a) without constraint at reasonable intervals and without excessive delay or expense:
knowledge of the logic involved in any automatic processing of data concerning him at least in the case of the automated decisions referred to in Article 15 (1);

ARTICLE 15. AUTOMATED INDIVIDUAL DECISIONS

1. Member States shall grant the right to every person ***not to be subject to a decision which produces legal effects concerning him or significantly affects him and which is based solely on automated processing of data*** intended to evaluate certain personal aspects relating to him, such as his performance at work**,** creditworthiness, reliability, conduct, etc**.**

2. Subject to the other articles of this directive, Member States shall provide that a person may be subjected to a decision of the kind referred to in paragraph 1 if that decision:
(a) is taken in the course of the entering into or performance of a contract, provided the request for

ARTICLES 13.2 (f), 14.2 (g) & 15.1(h)[115]

In addition to the information referred to in paragraph 1, the controller shall, ***at the time when personal data are obtained***, provide the data subject with the ***following further information necessary to ensure fair and transparent processing***:
 (f) the ***existence of automated decision-making, including profiling, referred to in Article 22(1) and (4)*** <u>***and***</u>***, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences*** of such processing for the data subject.

ARTICLE 22. AUTOMATED INDIVIDUAL DECISION-MAKING, INCLUDING PROFILING

1.The data subject shall have the ***right not to be subject to a decision based solely on automated processing, including profiling***, which produces legal effects concerning him or her or ***similarly significantly affects him or her***.

2.***Paragraph 1 shall not apply if*** the decision:
(a) ***is necessary for entering into, or performance of, a contract*** between the data subject and a data controller;
(b) ***is authorised by Union or Member State law*** to which the controller is subject and ***which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests***; or
(c) is ***based on the data subject's explicit consent***.

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[115] For better comparison, the text corresponds to article 13.2(f), knowing that the wording of letter (f) is the same for the other articles.

the entering into or the performance of the contract, lodged by the data subject, has been satisfied or that there are *suitable measures to safeguard his legitimate interests, such as arrangements allowing him to put his point of view*; or

(b) is authorized by a law which also lays down measures to safeguard the data subject's legitimate interests.

3.In the cases referred to in *points (a) and (c) of paragraph 2, the data controller shall implement suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.*

4.Decisions referred to in paragraph 2 shall not be based on special categories of personal data referred to in Article 9(1), unless point (a) or (g) of Article 9(2) applies and suitable measures to safeguard the data subject's rights and freedoms and legitimate interests are in place.[116]

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[116] Emphasis added.

Annex II. Results from the Empirical Study

Fig 1. Headquarters of the providers part of the empirical study (EU, US & Canada)
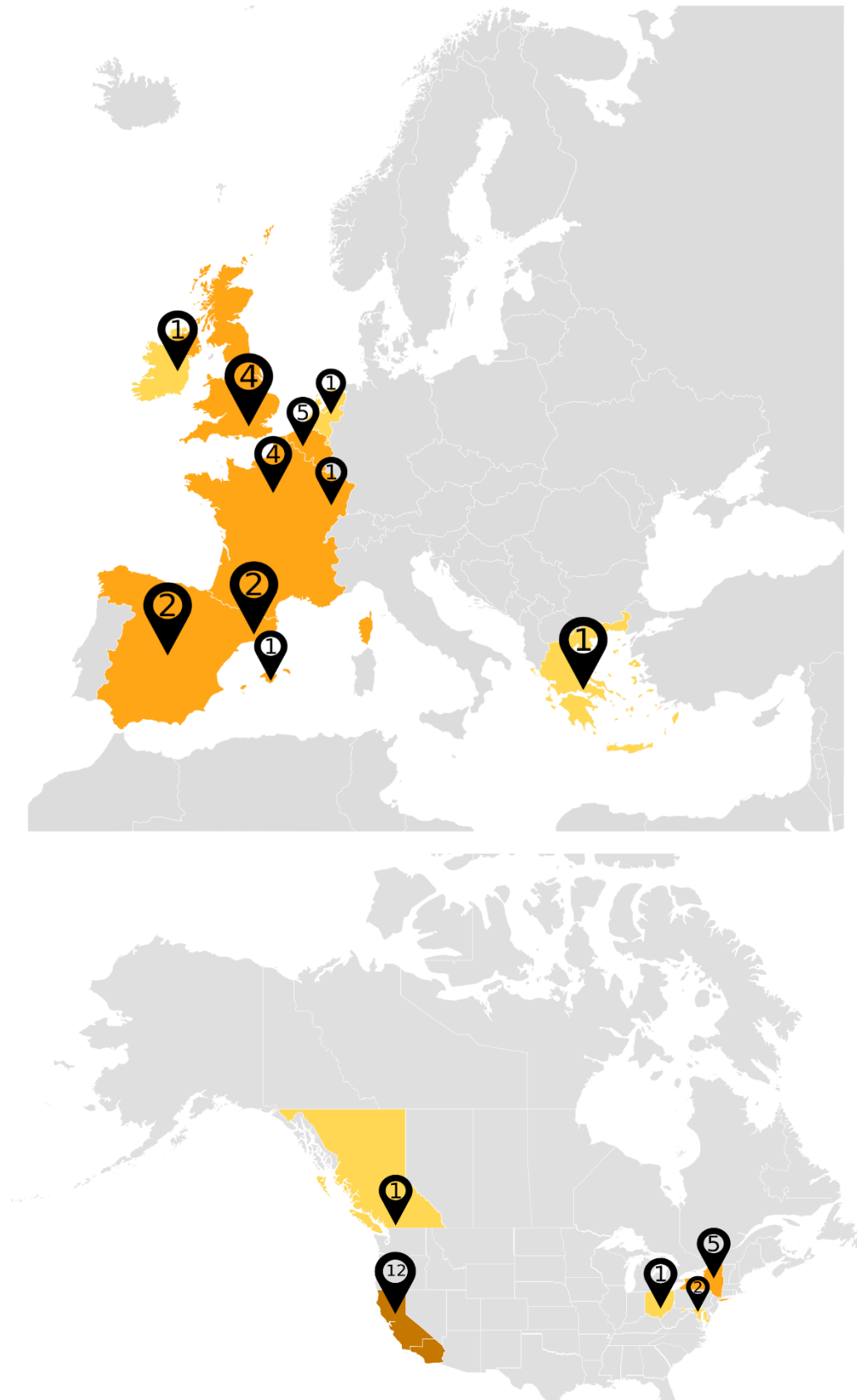
Fig 2. Sector of the online service providers part of the empirical study

Content-provider (53%)

News aggregator (28%)

Social media (19%)
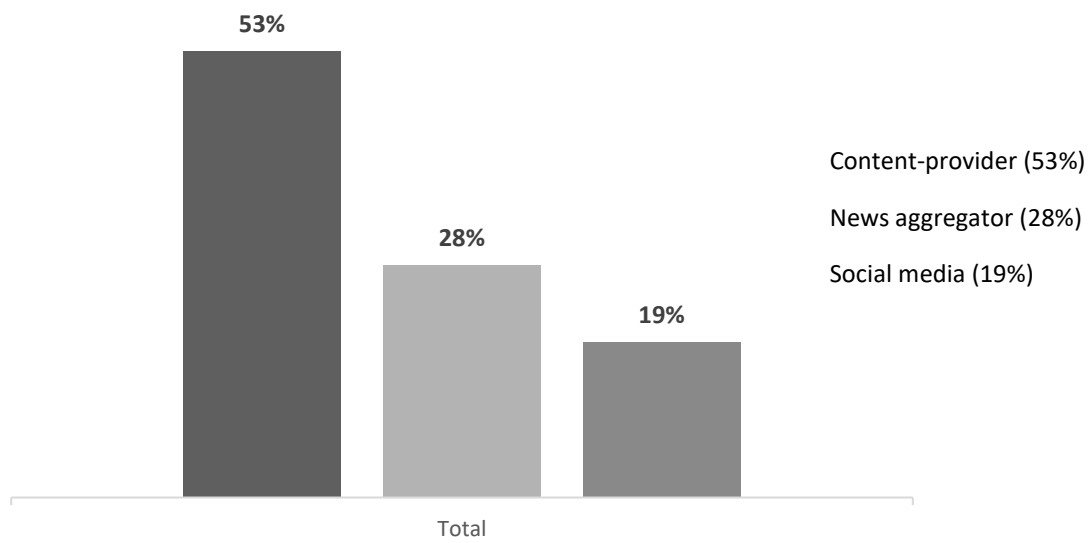
Fig 3. Information required in order to register with the service
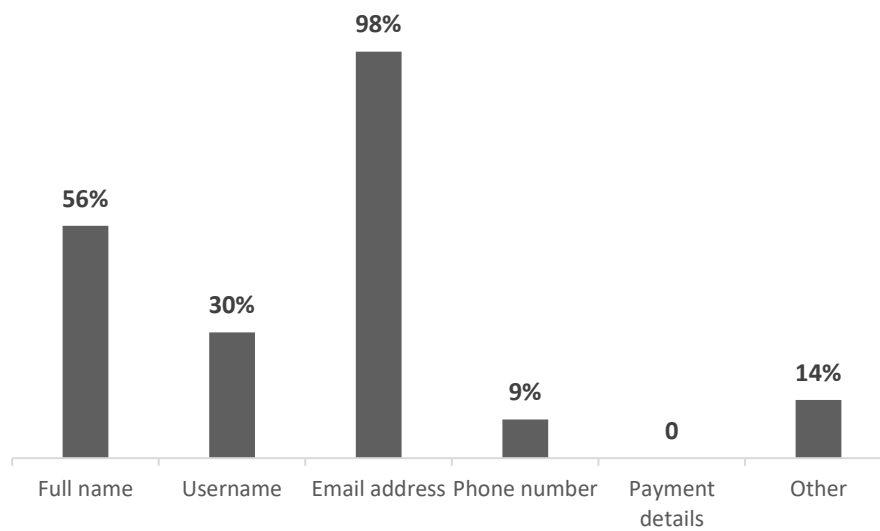
Fig 4. Number of clicks/taps that takes to go from the homepage to the privacy policy

1 click (56%)

2 clicks (33%)

3 clicks (9%)

5 clicks (2%)
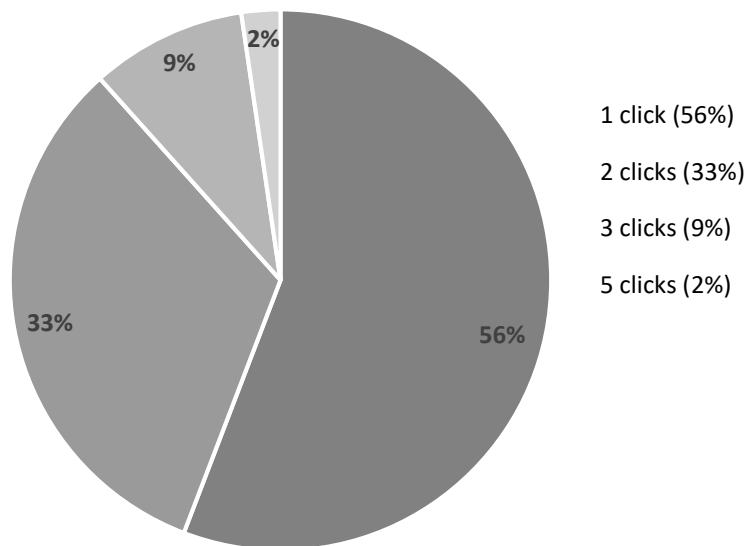
Fig 5. Easy/hard assessment of the process of finding the privacy policy

Very easy (35%)

Easy (41%)

Medium (17%)

Very hard (7%)
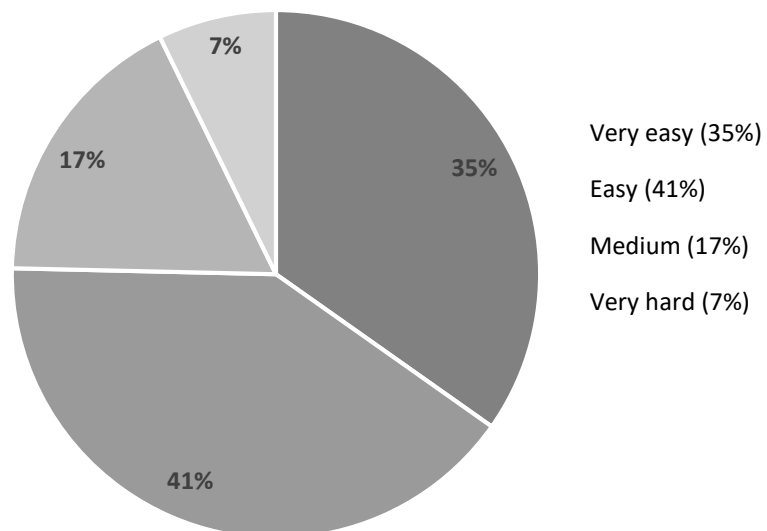
Fig 6. If the privacy policy is a separate document or part of another document

84%

16%

Embedded into another document   Separate document
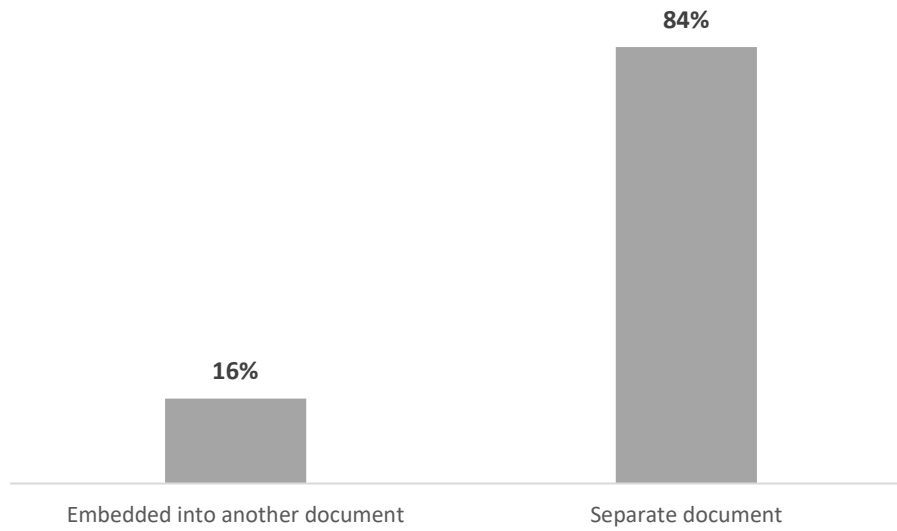
Fig 7. Number of words of the privacy policies, including cookies policy

3%

9%

7%

16%

42%

23%

0-1999 (9%)

2000-3999 (42%)

4000-5999 (23%)

6000-7999 (16%)

8000-9999 (7%)

10000-11999 (3%)
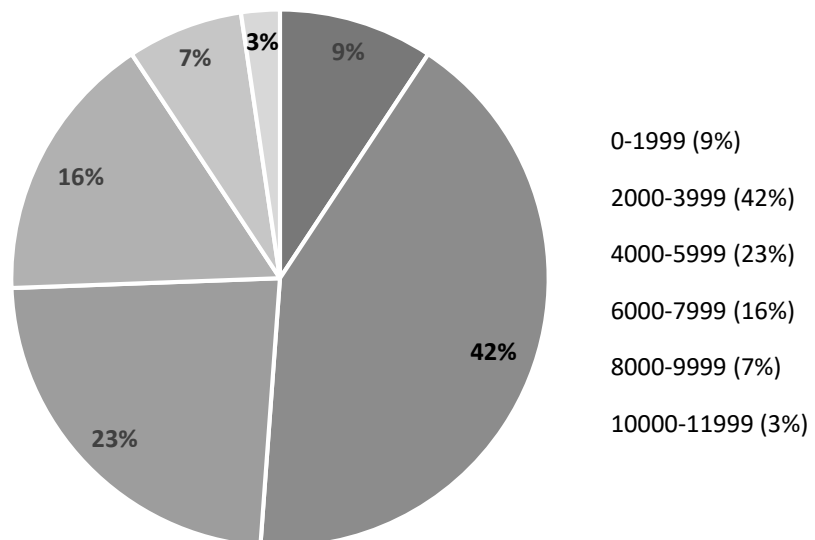
Fig 8. Assessing if the privacy policy contains the following elements
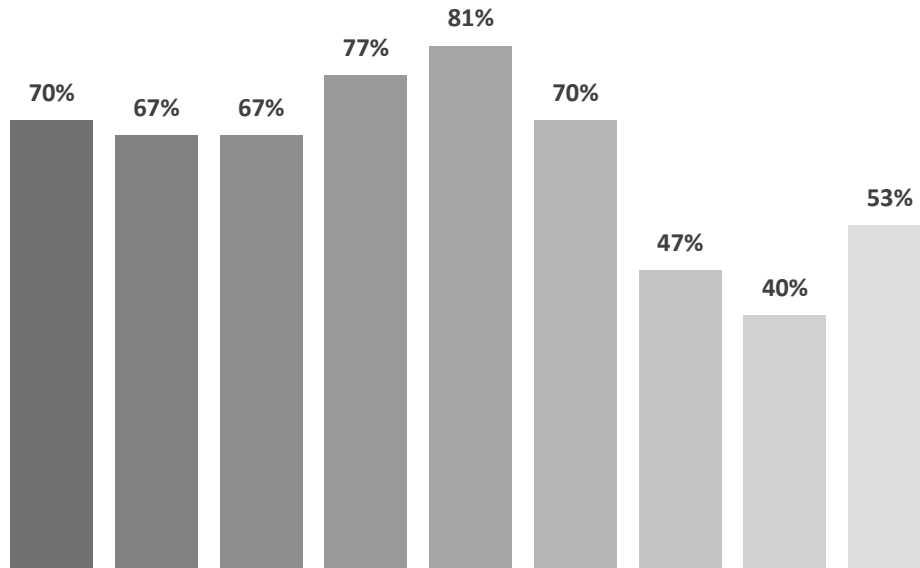
- Where the processing is based on point (f) of Article 6(1), the legitimate interests pursued by the controller or by a third party (70%)

- Where the processing is based on point (a) of Article 6 (1) or point (a) of Article 9(2), the existence of the right to withdraw consent at any time (67%)

- The recipients or categories of recipients of the personal data, if any (67%)

- Details on potential data transfers to third countries (77%)

- The retention period, or if that is not possible, the criteria used to determine that period (81%)

- The right to lodge a complaint with a supervisory authority (70%)

- Whether the provision of PD is a statutory or contractual requirement, or a requirement necessary to enter into a contract, as well as whether the DS is obliged to provide the personal data and of the possible consequences of failure to provide such data (47%)

- The categories of personal data that have not been obtained directly from the data subject (40%)

- For data that have not been obtained directly from the data subjects, the source from which they originate and, if applicable, whether it came from publicly accessible sources (53%)

Fig 9. Assessing if the data subjects' rights are mentioned in the privacy policy

- The existence of the right to access (93%)

- The existence of the right to rectification (93%)

- The existence of the right to erasure (95%)

- The existence of the right to restriction of processing (74%)

- The existence of the right to object (84%)

- The existence of the right to data portability (74%)

- The existence of the right not to be subject to an automated decision-making, including profiling, which produces legal effects or similarly significantly affect the data subject (12%)

Fig 10. If the privacy policy explicitly recognises or deny the existence of automated decision-making and/or a news recommender system (i.e. the fact that it dynamically arranges news content on the basis of certain parameters)
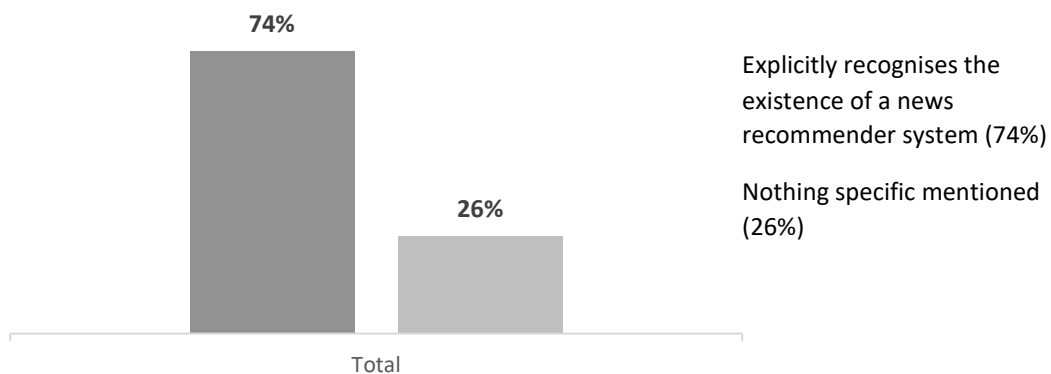
Explicitly recognises the existence of a news recommender system (74%)

Nothing specific mentioned (26%)

Fig 11. If the privacy policy explicitly recognises or deny the existence of automated decision-making

Explicitly denies the existence of automated decision-making (5%)

Explicitly recognises the existence of automated decision-making (35%)

Nothing specific mentioned (60%)
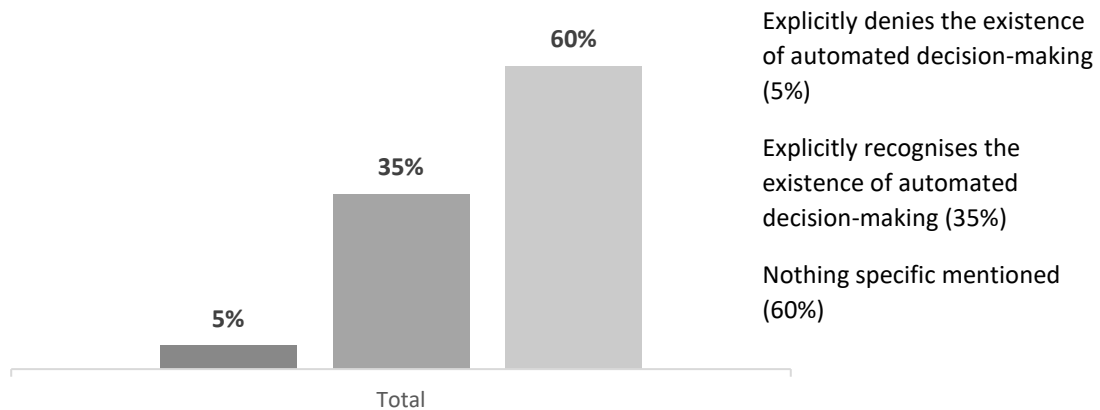
Fig 12. If the privacy policy explicitly recognises or deny its news recommender system constitutes automated decision-making

Explicitly recognises its news recommender system constitutes automated decision-making (12%)

Explicitly denies its news recommender system constitutes automated decision-making (2%)

Nothing specific mentioned (86%)
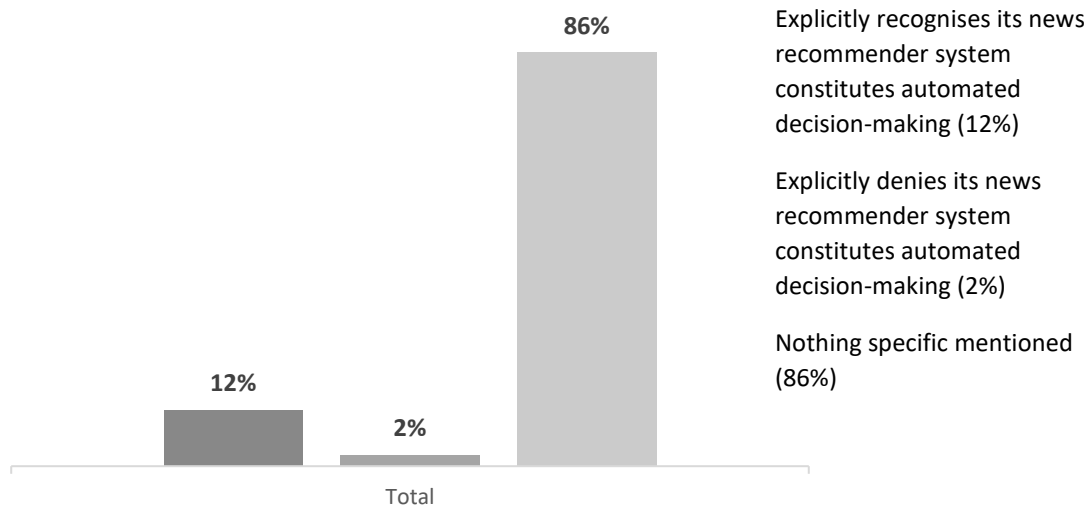
Fig 13. Days between the initial request and the first non-automated answer

0-9 (28%)

10-19 (14%)

20-29 (9%)

30-39 (9%)

40-49 (12%)

50-59 (7%)

No response (21%)
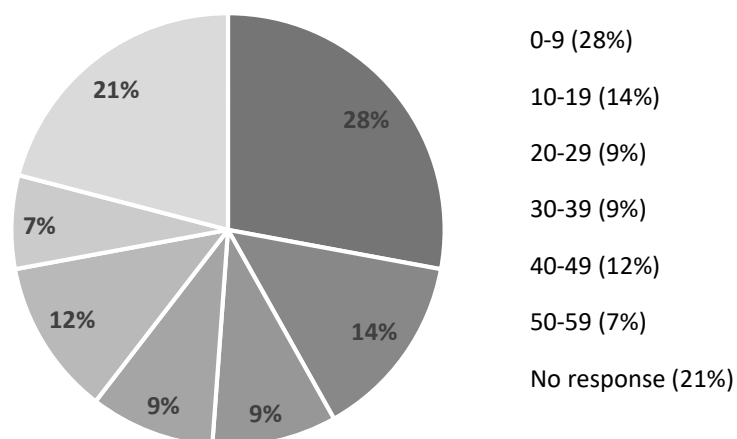
Fig 14. If we had to send reminders before receiving the first non-automated answer and how many reminders

44%   **56%**

Yes (56%)

No (44%)

Total

If yes, how many reminders:

13%

4%

25%

58%

1 reminder (58%)

2 reminders (25%)

3 reminders (4%)

4 or more reminders (13%)
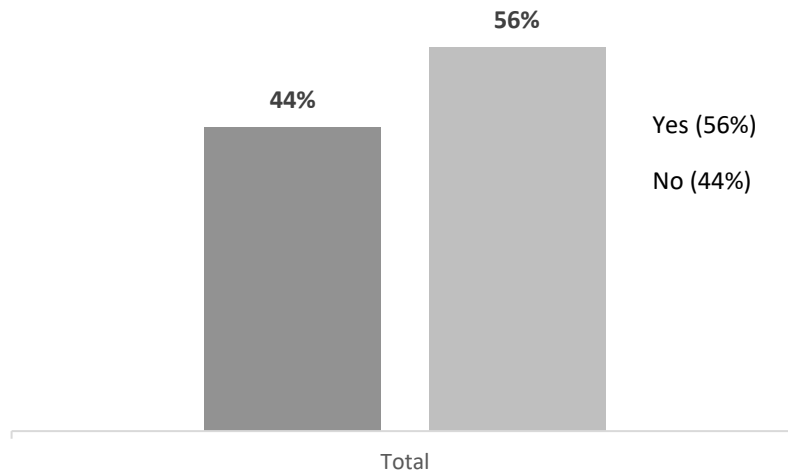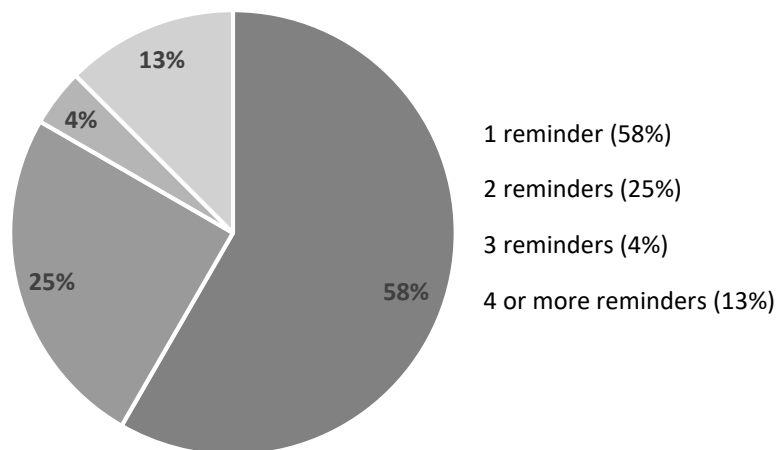
Fig 15. If after having received the first non-automated answer, the service provider raises any obstacle before addressing our request and which
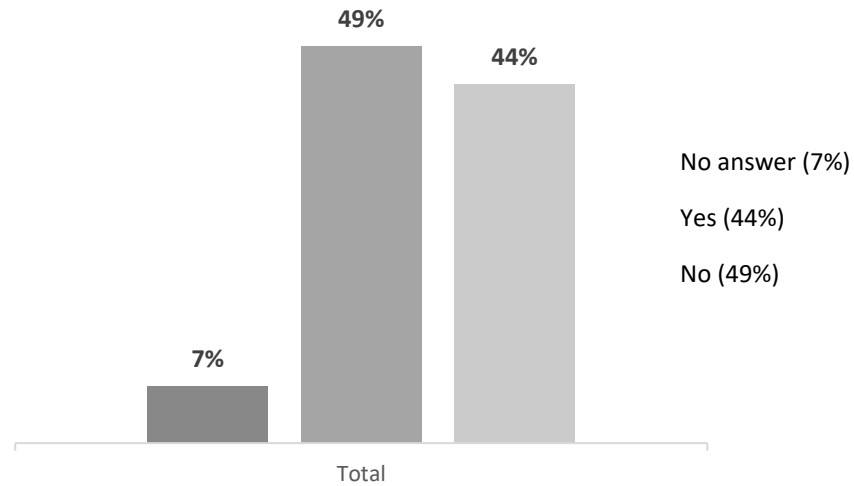
If yes, which obstacles:[117]

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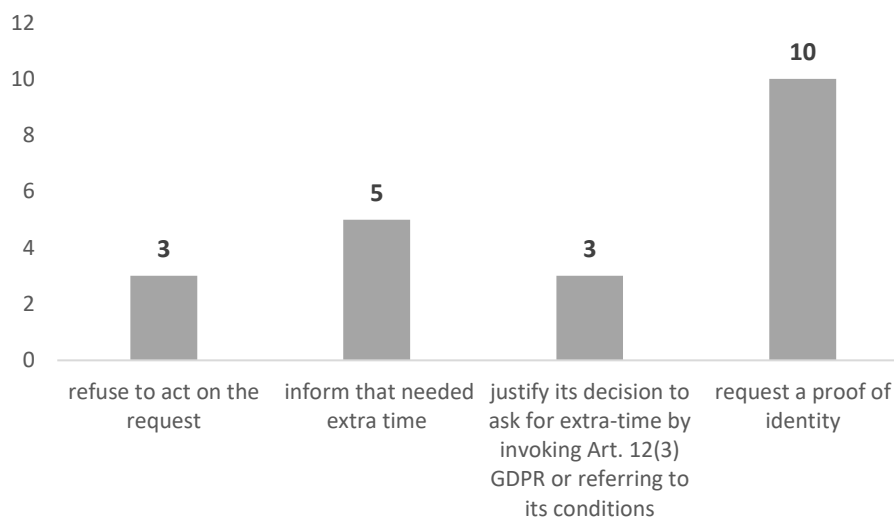
[117] Some providers raised more than one obstacle.

Fig 16. If upon request the service provider try to provide any kind of information about the logic involved, as well as the significance and the envisaged consequences of the news recommender system for data subjects

No answer (14%)

Yes (56%)

No (30%)
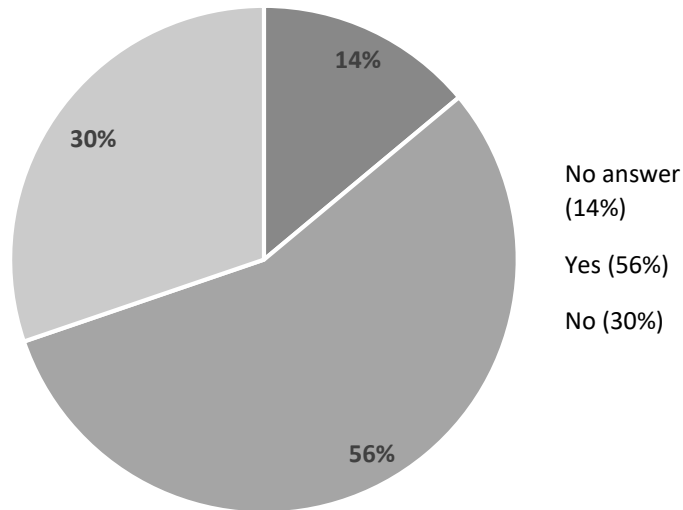
Fig 17. Days between the initial request and the first substantive answer (i.e. the first answer which actually tried to provide an explanation)

0-9 (28%)

10-19 (14%)

20-29 (9%)

30-39 (9%)

40-49 (12%)

50-59 (7%)

No response (21%)
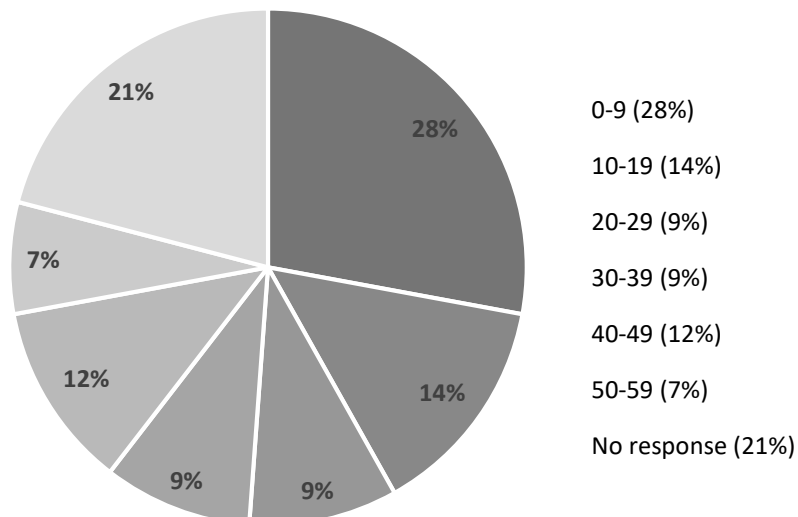
Fig 18. Days between the initial request and the final answer (i.e. the answer which was deemed the most satisfactory before the end of the study, or the last one before the end of the study)

10-19 (2%)

20-29 (14%)

30-39 (16%)

40-49 (28%)

50-59 (14%)

60-69 (5%)

No response (21%)
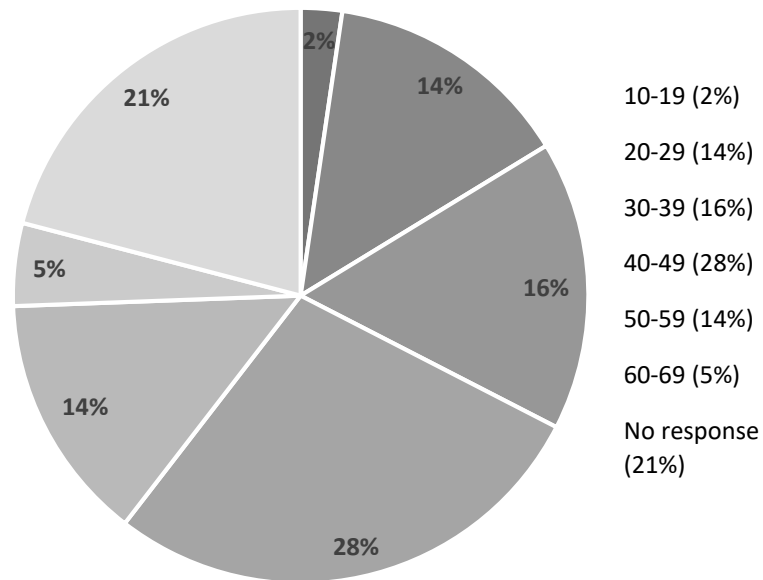
Fig 19. Compliance with article 15 GDPR
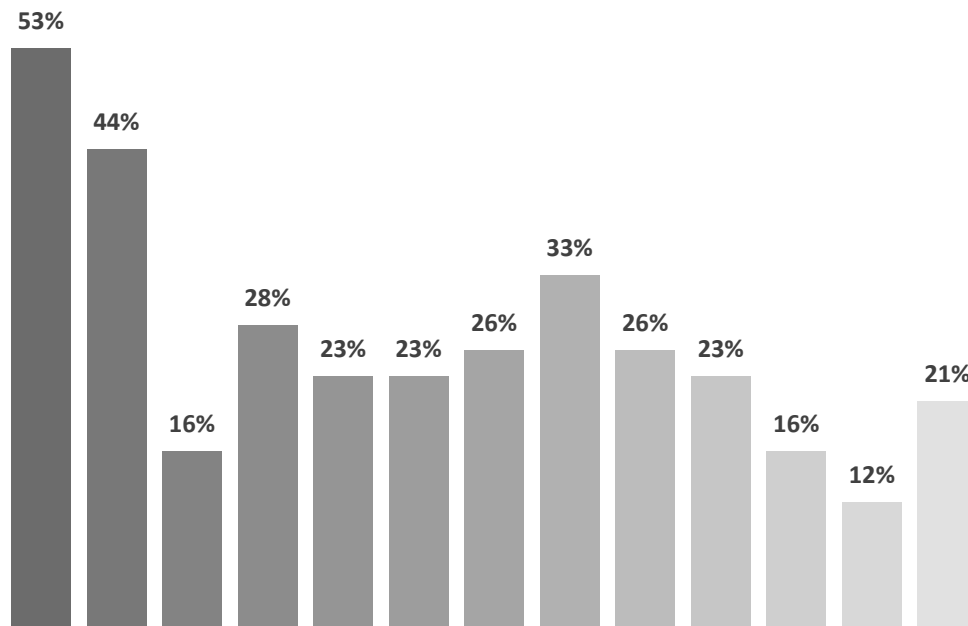
- Confirmation that your personal data is being processed (53%)

- The actual personal data that are being processed (44%)

- The purposes for which your personal data has been processed (16%)

- The categories of personal data concerned, in relation to you (28%)

- The recipients or categories of recipients to whom your personal data have been or will be disclosed, in particular recipients in third countries or international organisations (23%)

- The retention period of your personal data, or if that is not possible, the criteria used to determine that period (23%)

- The existence of your data subject's right to rectification (26%)

- The existence of your data subject's right to erasure (33%)

- The existence of your data subject's right to restriction of processing (26%)

- The existence of your data subject's right to object (23%)

- The right to lodge a complaint with a supervisory authority (16%)

- Where personal data are not collected from you, any information as to their source (12%)

- In case of transfer to a third country, information about appropriate safeguards (21%)

Annex III. Example of answers from the providers[118]

Fig 1. Providers rejecting the fact that they do personalise the content
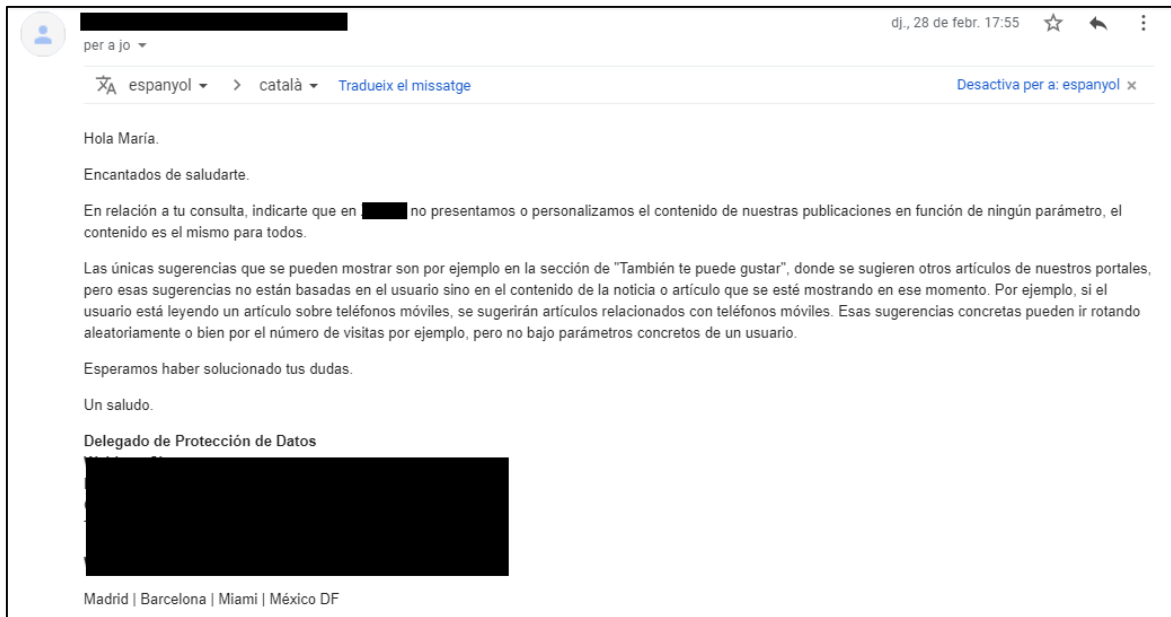
We do not present or personalise the content of our publications according to any parameter; *the content is the same for everyone.*[119]

The only suggestions that can be shown are, for example, in the "You may also like" section, where other articles from our portals are suggested, but these suggestions are not based on the user but on the content of the news or article that is being shown at that moment. For example, if the user is reading an article about mobile phones, articles related to mobile phones will be suggested. These specific suggestions can be rotated randomly or by the number of visits for example, but not under specific parameters of a user.
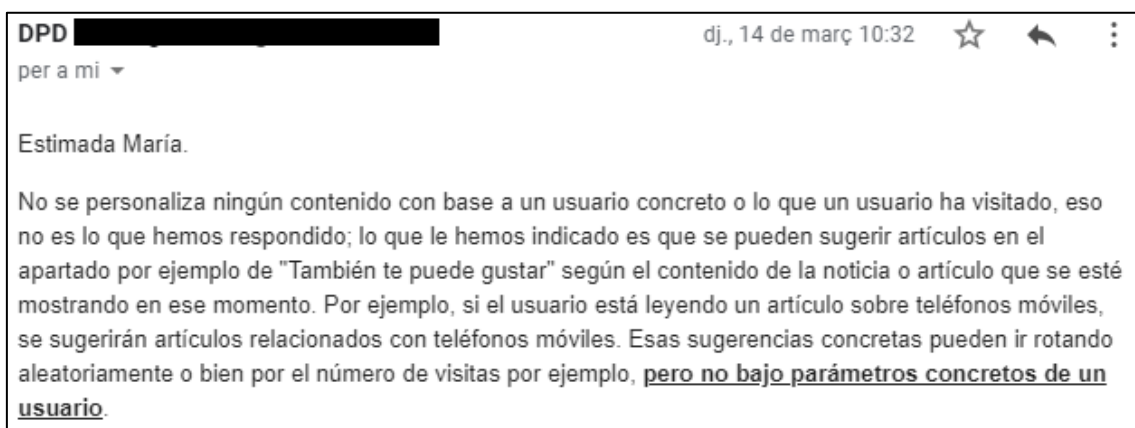
No content is customized based on a specific user or what a user has visited, that is not what we have responded, what we have indicated is that you can suggest articles in the section for

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[119] Emphasis added.

example "You may also like" depending on the content of the news or article being displayed at that time. For example, if the user is reading an article about mobile phones, articles related to mobile phones will be suggested. These specific suggestions can be rotated randomly or by the number of visits for example, but not under specific parameters of a user.
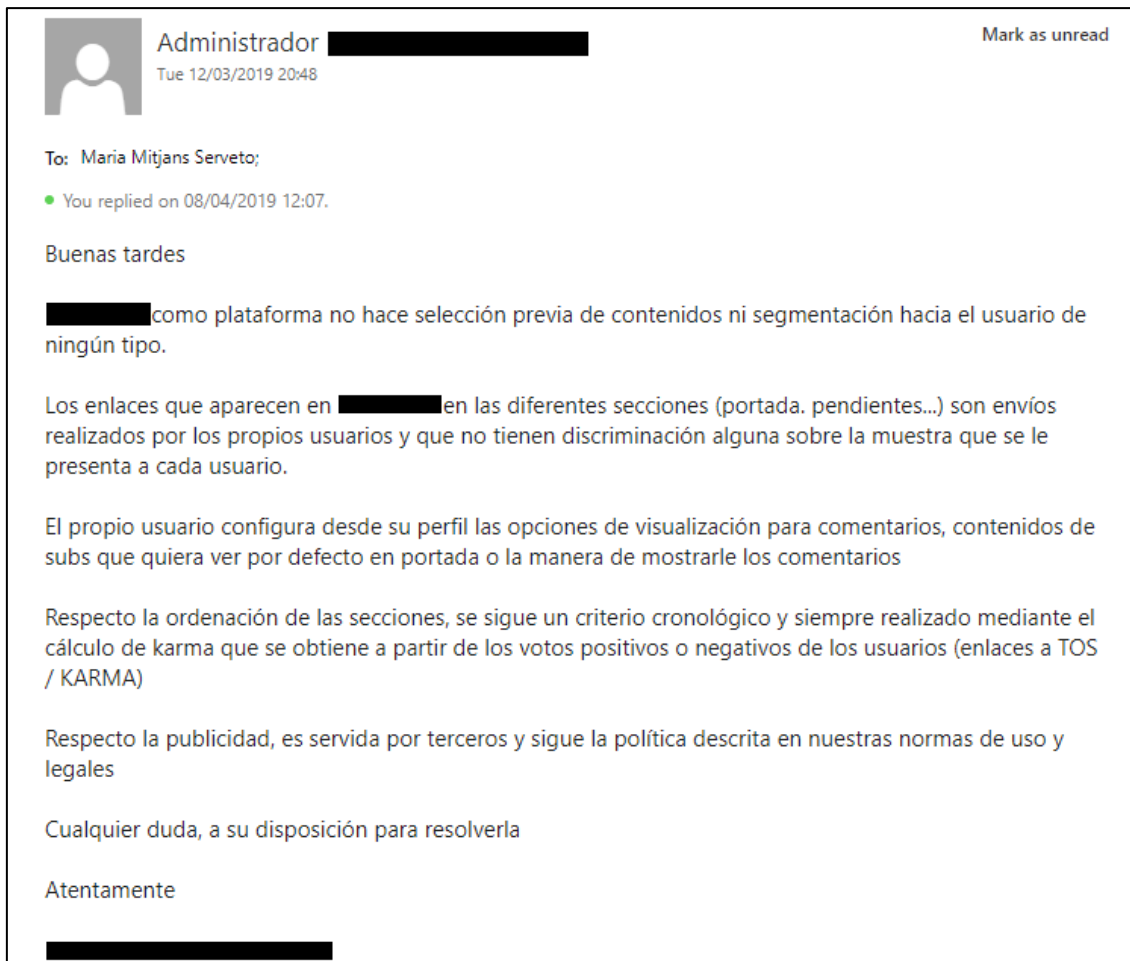
X[120] as platform does not make previous selection of contents nor segmentation towards the user of any type.

The links that appear in X in the different sections (home. pending...) are sent by the users themselves and have no discrimination whatsoever on the sample that is presented to each user.

The user himself configures from his profile the display options for comments, contents of subs that he wants to see by default on the cover or the way to show him the comments.

With regard to the order of the sections, a chronological criterion is followed and always carried out by calculating the karma obtained from the positive or negative votes of the users (links to TOS / KARMA).

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[120] X means here and in following references, one of the providers names, in order to anonymize their identity.

Regarding advertising, is served by third parties and follows the policy described in our rules of use and legal.

Fig 2. Providers acknowledging that they take automated decisions but not in the sense of article 22 GDPR

> 7. The confirmation – or refutation – as to whether you consider your news/content recommender system to be an automated decision-making within the meaning of Article 22(1) GDPR. If you consider doing so, could you also provide meaningful information about the logic involved, as well as the significance and the envisaged consequences of the news/content recommender system for me in particular. (Article 15(1)h GDPR).
>
> Article 22(1) of the GDPR states:
>
> *The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.*
>
> We don't believe making personalised recommendations to audience members has a legal or similarly significant effect on them, but it is easy to turn off personalised recommendations if you don't want them:
> ▮▮▮▮▮▮▮▮▮▮▮▮account/about-your-personalisation-settings/

Hello,

Thank you for contacting us.

Regarding your inquiry about recommended ▮▮▮▮ ads and content, as previously stated, we try to serve you relevant ads and content based on your interest, which might include your online browsing behavior and ▮▮▮▮ watch history. Regarding recommended content, please check this video to learn more about recommended content as well as this website to remove recommended content from home.

Regarding ▮▮▮▮ videos, you can also view, delete, or pause your ▮▮▮▮ watch history. Whether you are signed in or not, the ads you see are based on the content of the videos you've viewed.

Further, ▮▮▮▮ does not consider the processing conducted in the context of personalization to fall within the scope of Art 22. ▮▮▮▮ makes information available to users about its advertising services and the technology it uses in advertising on this Privacy Policy page under 'Advertising' on the left hand navigation menu. You have controls and can review your ads settings and where you can opt-out of personalized ads or adjust the interest categories for which you receive ads (see here: https://▮▮▮▮ settings/u/0/ads/authenticated). Additionally, users can see the ads that they've interacted with and delete records in MyActivity when a user selects Item View: Filter by ▮▮▮▮ product "Ads" (see: https://▮▮▮▮ item?product=27).

Decisiones automatizadas de sus datos personales:

Aunque nuestro tratamiento de perfilación de contenidos implica la toma de decisiones automatizadas, no lo hace en el sentido del artículo 22 del RGPD.

Automated decisions of your personal data: although our content profiling treatment involves automated decision-making, it does not in the sense of article 22 GDPR.

> 6. La confirmación -o refutación- de si usted se considera a sí mismo tomando una decisión automatizada en el sentido del Artículo 22(1) GDPR. Si considera hacerlo, ¿podría también detallar qué tipo de toma de decisiones automatizada y proporcionar información significativa sobre la lógica implicada, así como la importancia y las consecuencias previstas de dicho procesamiento para mí en particular? (Artículo 15(1)h del GDPR).
>
> Le informamos de que no se toman decisiones automatizadas en los términos establecidos en el artículo 22 del RGPD.
>
> 7. La confirmación -o refutación- de si considera que su sistema de recomendación de noticias/contenido es una toma de decisiones automatizada en el sentido del artículo 22(1) GDPR. Si considera hacerlo, ¿podría también proporcionarnos información significativa sobre la lógica implicada, así como sobre la importancia y las consecuencias previstas del sistema de recomendación de noticias/contenidos para mí en particular? (Artículo 15(1)h del GDPR).
>
> Tal y como le informamos en el punto anterior, no se toman decisiones automatizadas en los términos establecidos en el artículo 22 del RGPD.

6. Confirmation - or rebuttal - of whether you consider yourself making an automated decision in the sense of Article 22(1) GDPR. If you consider doing so, could you also detail what type of automated decision making and provide meaningful information about the logic involved, as well as the importance and expected consequences of such processing for me in particular? (Article 15(1)h of the GDPR).

We inform you that automated decisions are not taken under the terms set out in Article 22 of the RGPD.
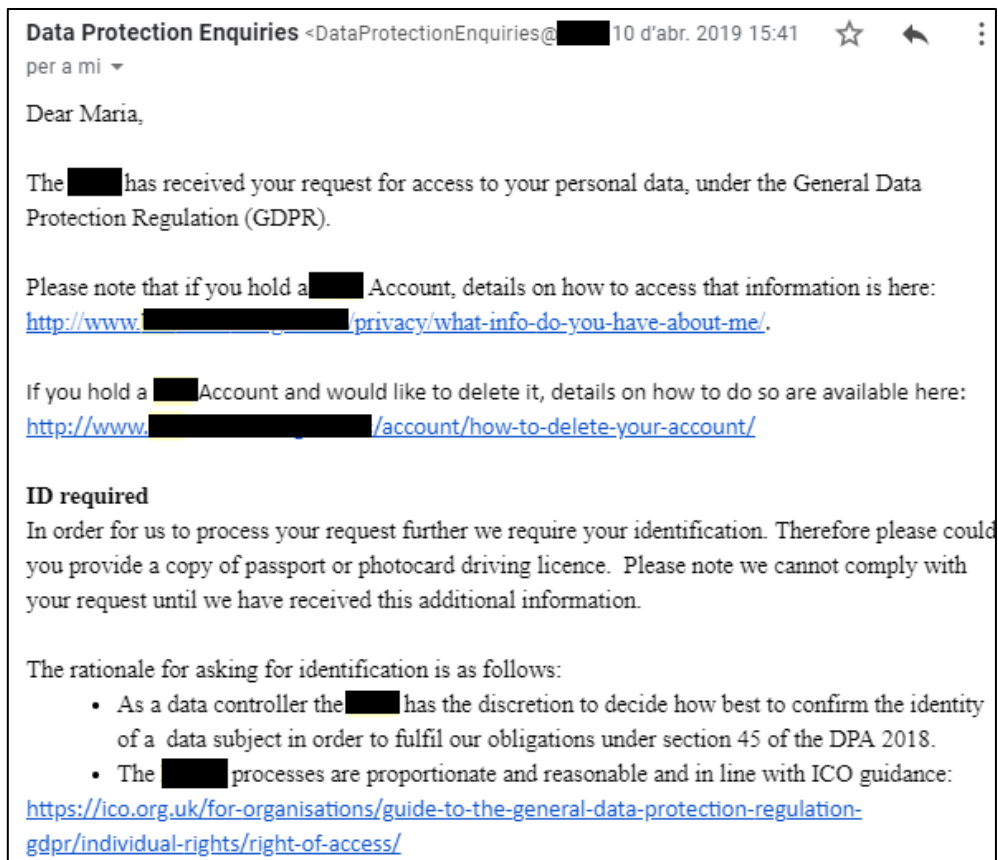
7. Confirmation - or rebuttal - of whether you consider your news/content recommendation system to be automated decision making within the meaning of Article 22(1) GDPR. If you consider doing so, could you also provide us with meaningful information on the logic involved, as well as on the importance and expected consequences of the news/content recommendation system for me in particular? (Article 15(1)h of the GDPR).

As we informed you in the previous point, automated decisions are not taken in the terms established in article 22 of the RGPD.

Fig 3. Providers asking for ID or more information before processing the request

> Sra. María Mitjans Serveto
>
> maria.mitjansserveto@student.kuleuven.be
>
> Estimada Sra.,
>
> Para atender su solicitud en conformidad con REGLAMENTO (UE) 2016/679 del Parlamento Europeo y del Consejo de 27 de abril de 2016 relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos (Reglamento General de Protección de Datos. RGPD) es necesario que nos remita una identificación, preferentemente una copia digitalizada de su Documento Nacional de Identidad.
>
> Quedamos a su entera disposición para cualquier aclaración que precise.
>
> Muy cordialmente,
>
> ▮▮▮▮▮▮
>
> ▮▮▮▮▮ 15 de marzo de 2019

In order to deal with your request in accordance with REGULATION (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulations. RGPD) it is necessary for you to send us an identification, preferably a digitised copy of your National Identity Document.

> Data Protection Enquiries <DataProtectionEnquiries@▮▮▮ 10 d'abr. 2019 15:41 ☆ ↩ ⋮
> per a mi ▾
>
> Dear Maria,
>
> The ▮▮ has received your request for access to your personal data, under the General Data Protection Regulation (GDPR).
>
> Please note that if you hold a ▮▮ Account, details on how to access that information is here: http://www.▮▮▮▮▮▮▮▮▮/privacy/what-info-do-you-have-about-me/.
>
> If you hold a ▮▮ Account and would like to delete it, details on how to do so are available here: http://www.▮▮▮▮▮▮▮▮/account/how-to-delete-your-account/
>
> **ID required**
> In order for us to process your request further we require your identification. Therefore please could you provide a copy of passport or photocard driving licence. Please note we cannot comply with your request until we have received this additional information.
>
> The rationale for asking for identification is as follows:
> - As a data controller the ▮▮ has the discretion to decide how best to confirm the identity of a data subject in order to fulfil our obligations under section 45 of the DPA 2018.
> - The ▮▮▮ processes are proportionate and reasonable and in line with ICO guidance: https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/individual-rights/right-of-access/

Data Protection Enquiries <DataProtectionEnquiries@■■■■ 10 d'abr. 2019 15:49

per a mi ▾

Dear Maria

Thank you for providing identification.

Could you also please provide further information about how you have interacted with the ■■■? Without this information, we may not be able to identify your personal data.

Fig 4. Controllers replying that they consider GDPR is not applicable

← REPLY   ← REPLY ALL   → FORWARD   •••

Mark as unread

Thu 14/03/2019 21:32

To: Maria Mitjans Serveto;

● You replied on 17/03/2019 13:07.

Hi Maria,

I don't see you as a registered user and we do not target EU visitors so I won't be able to comply with your request as the GDRP does not apply. We are a small site consisting of myself and a contractor that tried to create an easy way for users to create their own RSS feed page as I explained in my prior email. I do not have the resources to answer your questions and I hope you can understand.

Thanks,

■■■■

.com>   Mark as unread

Sun 17/03/2019 17:12

To: Maria Mitjans Serveto;

■■■■■■■■■■■

I am sorry but I don't see you as a user so I don't believe GDPR applies.

Also, ■■■■ is a side project that has no backing and this request will likely shut down the site as it's very expensive to answer your questions. If you would like to have a call and I can help walk you through how the site works I can.

Fig 5. Example of provider's first explanations received

> Estimada usuaria,
>
> En respuesta a su solicitud, le informamos de que al acceder a cualquier noticia de ▮▮▮▮, tiene a su disposición un recomendador de noticias, bajo el título *"Te puede interesar"*. Este recomendador de noticias tiene 2 formas de adaptación:
>
> - Contextual (muestra noticias relacionadas con la noticia que está en pantalla).
>
> - Personal (muestra noticias relacionadas con el tipo de noticias que más ha consultado el usuario).
>
> Asimismo, al acceder a ▮▮▮▮▮ se personalizan también los contenidos publicitarios (anuncios), basándonos en su perfil de navegación en el sitio web.
>
> Esperando haber resuelto sus dudas, reciba un cordial saludo.

Dear user,

In response to your request, we inform you that when you access any news from X, you have at your disposal a news recommender, under the heading "You may be interested". This news recommender has 2 ways of adaptation:

- Contextual (shows news related to the news that is on screen).

- Personal (shows news related to the type of news that the user has consulted the most).

Likewise, when accessing X, the advertising contents (announcements) are also personalised, based on your browsing profile on the website.

Hoping to have resolved your doubts, receive a cordial greeting.

> **Data Protection Enquiries** <DataProtectionEnquiries@▮▮▮▮   dt., 9 d'abr. 11:42   ☆   ↩   ⋮
> per a mi ▾
>
> Dear Maria
>
> Thank you for your email.
>
> Please note that information about ▮▮▮ personalisation is available here:
> http://www.▮▮▮▮▮▮▮/account/how-is-the-▮▮▮personalised-to-me/
> In relation to news, we set your national value based on the first three letters of the post code which you supplied when you registered for a ▮▮▮account. To find out how this works please read: https://www.▮▮▮▮news/46619202
>
> Please also note that you can turn-off personalisation if you wish. These features will turn-off personalisation in your▮▮▮account settings. You also have an option to choose your nation. But, you do not have to select a nation if you do not want to.

En resposta a la seva petició passo a informar-la del següent:

El portal de la ▮▮▮▮ ofereix continguts personalitzats a través d'un mòdul disponible només en l'entorn web (no està disponible encara ni a les aplicacions mòbils ni a les televisions connectades, però s'està treballant per oferir una experiència personalitzada en tots els productes de la ▮▮▮▮).

En general, la resta de l'oferta de continguts que ofereix és igual per a tothom (excepte en el cas de continguts amb drets que depenen de la geolocalització de l'usuari). La recomanació personalitzada actualment només està disponible per a aquells usuaris que naveguin havent iniciat sessió a la web després d'haver-se donat d'alta en el registre de la ▮▮▮▮ i d'haver acceptat la política de tractament de dades. En conseqüència, si un usuari navega de manera anònima (sense loginar-se o en mode incògnit) no rebrà recomanacions personalitzades.

Els continguts que recomanem són vídeos de programes d'entreteniment, d'informatius, de divulgació i sèries. En termes generals, recomanem programes sencers, tot i que en aquells casos en què no tinguem disponible el programa sencer, podem recomanar talls d'un programa.

El sistema de recomanació utilitza una base de filtre col·laboratiu (https://es.wikipedia.org/wiki/Filtrado_colaborativo) amb algunes regles específiques donada la naturalesa dels continguts de la ▮▮▮▮ i del seu cicle de vida, però sempre es basa en el consum fet pels usuaris. No està basat en perfilats d'usuari ni té en compte les seves dades sociodemogràfiques.

Consta de dues parts:

- Recomanacions basades en el que consumeixen el conjunt dels nostres usuaris. És a dir, els programes que tenen més audiència són més recomanables que els que tenen menys audiència. La informació del que consumeixen els usuaris que naveguen de manera anònima es recull a traves de cookies. Però com s'explica a la "política de privacitat i cookies" de la web, aquesta informació és anonimitzada, és a dir, no recollim la IP d'aquests usuaris, només el seu consum. El consum de dispositius que no accepten cookies o naveguen en mode incògnit no es té en compte en el recomanador de continguts.

- Recomanacions basades en el que consumeix el propi usuari, quan navega loginat. És a dir, una part de les recomanacions que veu cada usuari estan basades en el seu propi consum. Aquesta informació sí que queda associada a cada usuari en concret i s'utilitza, per exemple, per no recomanar un contingut que ja s'ha vist o per mostrar el següent capítol d'una sèrie que està visionant aquest usuari.

Per tant, els continguts que finalment es recomanen a cada usuari són fruit d'aquestes dues variables, a més de tot un seguit de paràmetres que ajuden a ajustar el resultat. Per exemple, si un contingut recomanat passa un determinat temps sense que l'usuari el cliqui, s'entén que no li interessa i va baixant de posicions en el mòdul de recomanats.

In response to your request, I will inform you of the following:

The X portal offers personalized content through a module available only in the web environment (it is not yet available for mobile applications or connected TVs, but it is working to provide a personalized experience in all products of the X).

In general, the rest of the content offer that it offers is the same for everyone (except in the case of content with rights that depend on the geolocation of the user). The personalized recommendation is currently only available to those browsing users having logged into the web after registering with the X and having accepted the data treatment policy. Consequently, if a user browses anonymously (without logging in or in incognito mode), they will not receive personalized recommendations.

The contents we recommend are videos of entertainment programs, news programs, outreach and series. In general terms, we recommend whole programs, although in those cases where we do not have the entire program available, we can recommend program cuts.

The recommendation system uses a collaborative filter base (https://es.wikipedia.org/wiki/Filtrado_colaborativo) with some specific rules given the nature of the contents of the X and its life cycle, but it is always based in the consumption made by the users. It is not based on user profiles nor does it consider its sociodemographic data.

It consists of two parts:

- Recommendations based on what they consume our users as a whole. That is, the programs that have the highest audience are more advisable than those with the least audience. The information that users browsing anonymously consume is collected through cookies. But as explained in the "privacy and cookies policy" of the web, this information is anonymised, that is, we do not collect the IP of these users, only their consumption. The consumption of devices that do not accept cookies or navigate in incognito mode is not taken into account in the content recommender.

- Recommendations based on what the user consumes himself, when he navigates logically. That is, a part of the recommendations that each user sees are based on their own consumption. This information is associated to each user in particular and is used, for example, not to recommend content that has already been seen or to show the next chapter of a series that this user is viewing.

Therefore, the contents that are finally recommended to each user are the result of these two variables, as well as a series of parameters that help to adjust the result. For example, if a recommended content is spent for a certain time without the user clicking on it, it is understood that it is not interested in and goes down of positions in the recommended module.

The information you seek may already be available to you via a number of secure online tools we provide to all users to access their data. ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮com) gives you an overview of the ways you use ▮▮▮▮▮▮ services, and the data associated with that use. From that page you can also review your basic account information, see what data is in your account (via myactivity.▮▮▮▮▮▮▮ and Dashboard), review settings for sharing data with third party apps and sites, and use our dedicated tool (accessible via ▮▮▮▮▮ Account page) to Download Your Data, back it up, or move it to another service.

Logged-in users can directly access these tools via the Account Menu, accessible via the standard ▮▮▮▮▮ header on many of our core consumer products, by clicking on their ▮▮▮▮▮ Account profile picture or username in the upper right hand corner of the user interface and then clicking on "Privacy" or "▮▮▮▮▮ Account" links.

Users must log-in to their account to access these tools to verify the user's right to access the data and to ensure that personal information is not disclosed to the wrong person.

We are committed to being clear about what information we collect and how we use it. You can find details of our commitments in our Privacy Policy ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮privacy/) and at privacy.▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮com/your-data.html), along with explanations of the types of information we collect, how it is collected, why we collect it, how it is used and when it is shared.

We also provide users with various settings to control sharing and use of their data via ▮▮▮▮▮ Account and Dashboard, such as the ability to review and manage permissions for the entities with whom data is shared via the 'Connected applications and sites' tab in ▮▮▮▮▮ Dashboard (https:▮▮▮▮▮▮▮▮▮▮▮/settings/security/permissions).

Depending on the products you use, there may be additional settings available via the user interface of the specific products. The overview section of our Privacy Policy contains a ▮▮▮▮ Product Privacy Guide ▮▮▮▮▮▮▮▮▮▮▮▮policies/technologies/product-privacy/), which provides users with an easily accessible resource for product-specific privacy information, controls and settings for many of ▮▮▮▮▮ core consumer products, including ▮▮▮ and others.

We designed these tools to be easily understandable and usable by everyone. If there is any further detail you require that you can't find via our tools, please visit our Privacy Troubleshooter (https:▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ (accessible via the "Contact Us" link in our Privacy Policy) and submit a request for further information using this web-form. Similar to the above-mentioned tools, you must log-in to submit requests via this web-form, which will help us to verify your identity, and ensure we only disclose personal information directly to you.

Regarding ▮▮▮▮▮▮ specific advertisements, we try to serve you relevant ads based on your interest, which might include your online browsing behavior and ▮▮▮▮▮ watch history. You can manage your ads settings from your ▮▮▮▮▮ Ads Settings.

The ads you see while watching ▮▮▮▮▮ videos on mobile are tailored to your interests and based on your ▮▮▮▮▮ Ad Settings, the videos you've viewed, and whether you're signed in or not.

When you're logged in, these anonymous signals may determine which ads you see:

- Types of videos you've viewed
- The apps on your device and your use of apps
- Websites you visit
- Anonymous identifiers associated with your mobile device
- Previous interactions with ▮▮▮▮▮ ads or advertising services
- Your geographic location
- Age range
- Gender
- ▮▮▮▮▮ video interactions

Whether you are signed in or not, the ads you see are based on the content of the videos you've viewed.

Thanks for your inquiry.

We use the information we have (subject to choices you make) as described below and to provide and support the ▮▮▮▮▮ Products and related services described in the ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ Terms.

Here's how:

Provide, personalize and improve our Products.
We use the information we have to deliver our Products, including to personalize features and content (including your News Feed, ▮▮▮▮▮ Feed, ▮▮▮▮▮▮ Stories and ads) and make suggestions for you (such as groups or events you may be interested in or topics you may want to follow) on and off our Products. To create personalized Products that are unique and relevant to you, we use your connections, preferences, interests and activities based on the data we collect and learn from you and others (including any data with special protections you choose to provide where you have given your explicit consent); how you use and interact with our Products; and the people, places, or things you're connected to and interested in on and off our Products. Learn more about how we use information about you to personalize your ▮▮▮▮▮▮▮▮▮▮ experience, including features, content and recommendations in ▮▮▮▮▮ Products; you can also learn more about how we choose the ads that you see.

Information across ▮▮▮▮▮ Products and devices: We connect information about your activities on different ▮▮▮▮▮ Products and devices to provide a more tailored and consistent experience on all ▮▮▮▮▮ Products you use, wherever you use them. For example, we can suggest that you join a group on ▮▮▮▮▮ that includes people you follow on ▮▮▮▮▮▮ or communicate with using ▮▮▮▮▮ We can also make your experience more seamless, for example, by automatically filling in your registration information (such as your phone number) from one ▮▮▮▮▮ Product when you sign up for an account on a different Product.

Location-related information: We use location-related information-such as your current location, where you live, the places you like to go, and the businesses and people you're near-to provide, personalize and improve our Products, including ads, for you and others. Location-related information can be based on things like precise device location (if you've allowed us to collect it), IP addresses, and information from your and others' use of ▮▮▮▮▮ Products (such as check-ins or events you attend).

Product research and development: We use the information we have to develop, test and improve our Products, including by conducting surveys and research, and testing and troubleshooting new products and features.

Face recognition: If you have it turned on, we use face recognition technology to recognize you in photos, videos and camera experiences. The face-recognition templates we create are data with special protections under EU law. Learn more about how we use face recognition technology, or control our use of this technology in ▮▮▮▮▮ Settings. If we introduce face-recognition technology to your ▮▮▮▮▮ experience, we will let you know first, and you will have control over whether we use this technology for you.

Ads and other sponsored content: We use the information we have about you-including information about your interests, actions and connections-to select and personalize ads, offers and other sponsored content that we show you. Learn more about how we select and personalize ads, and your choices over the data we use to select ads and other sponsored content for you in the ▮▮▮▮▮▮▮▮▮▮▮▮ Settings.

We trust that we have answered your questions.

Fig 6. Example of provider's explanations received after the follow up letter

> **e. Més informació sobre com es va dissenyar el seu sistema de recomanació de notícies/continguts, sense haver de donar secrets comercials o informació protegida de propietat intel·lectual (és a dir, antecedents de les persones involucrades, si es tracta d'un procés continu, etc.).**
>
> Tal com vam explicar a la primera resposta, el sistema consta de dues parts:
> - Recomanacions basades en el que consumeixen el conjunt dels nostres usuaris. És a dir, els programes que tenen més audiència són més recomanables que els que tenen menys audiència. La informació del que consumeixen els usuaris que naveguen de manera anònima es recull a traves de cookies. Però com s'explica a la "política de privacitat i cookies" de la web, aquesta informació és anonimitzada, és a dir, no recollim la IP d'aquests usuaris, només el seu consum. El consum de dispositius que no accepten cookies o naveguen en mode incògnit no es té en compte en el recomanador de continguts.
>
> - Recomanacions basades en el que consumeix el propi usuari, quan navega loginat. És a dir, una part de les recomanacions que veu cada usuari estan basades en el seu propi consum. Aquesta informació sí que queda associada a cada usuari en concret i s'utilitza, per exemple, per no recomanar un contingut que ja s'ha vist o per mostrar el següent capítol d'una sèrie que està visionant aquest usuari.
>
> No podem donar informació sobre els criteris de priorització de contingut dels nostres algoritmes, perquè formen part del nostre aprenentatge i ens permet millorar el servei respecte la competència.
>
> **f. Les prioritats que han guiat el disseny del sistema de recomanació de notícies/continguts.**
>
> En el disseny del sistema de recomanacions de notícies i vídeos, hem prioritzat sempre la privacitat dels nostres usuaris. És per això que fem servir sempre les dades mínimes necessàries per oferir les recomanacions. A aquests efectes a cada usuari que inicia sessió en els nostres productes li assignem un identificador XXXXX que ens permet recollir els continguts que consumeix, sigui quin sigui el dispositiu des del qual es connecti. Ara bé, aquest identificador mai es relaciona amb les dades d'usuari per fer un perfilat.
> A l'hora d'oferir recomanacions als usuaris, no fem servir cap dada personal del registre (sexe, edat, població), ja que el nostre sistema de recomanació no es basa en perfilats d'usuari.
> Ens basem només en el consum que els usuaris fan dels nostres continguts.
>
> **g. La forma en què es comporta el sistema de recomanació de notícies/continguts quan es tracta d'un perfil incomplet.**
>
> Com que no hi ha perfilat d'usuaris, si un usuari registrat no té tots els camps omplerts (perfil incomplert) no afecta en absolut al sistema de recomanació.

e. Learn more about how your news / content recommendation system was designed, without giving you commercial secrets or protected intellectual property information (that is, history of the people involved, if it is a continuous process, etc.).

As explained in the first answer, the system consists of two parts:

Recommendations based on what they consume our users as a whole. That is, the programs that have the highest audience are more advisable than those with the least audience. The information that users browsing anonymously consume is collected through cookies. But as explained in the "privacy and cookies policy" of the web, this information is anonymised, that is, we do not collect the IP of these users, only their consumption. The consumption of devices that do not accept cookies or navigate in incognito mode is not taken into account in the content recommender.

Recommendations based on what the user consumes himself, when he navigates logically. That is, a part of the recommendations that each user sees are based on their own consumption. This information is associated to each user in particular and is used, for example, not to recommend content that has already been seen or to show the next chapter of a series that this user is viewing.

We cannot give information about the criteria for prioritizing the content of our algorithms, because they are part of our learning and allow us to improve the service with respect to competition.

f. The priorities that have guided the design of the news / content recommendation system.

 In the design of the system of news and video recommendations, we have always prioritized the privacy of our users. That is why we always use the minimum data necessary to provide the recommendations. For these purposes, each user that logs in to our products assign a XXXXX identifier that allows us to collect the contents they consume, regardless of the device from which they are connected. However, this identifier is never related to user data to make a profile.

When offering recommendations to users, we do not use any personal data of the registry (sex, age, population), since our system of recommendation is not based on user profiles.

We rely solely on the consumption that users make of our content.

g. The way the news / content recommendation system behaves when it comes to an incomplete profile.

Since there is no profiling of users, if a registered user does not have all the fields filled (incomplete profile) it does not affect the recommendation system at all.

> **e. More information on how your news/content recommender system was designed, without having to give trade secrets or IP protected information (i.e. background of people involved, is it an ongoing process, etc.).**
>
> We consider this part of your request to be a request for information under the Freedom of Information Act 2000 ('The Act'). However, please note that the information you have requested is excluded from the Act because it is held for the purposes of 'journalism, art or literature.' The ███ is therefore not obliged to provide this information to you and will not be doing so on this occasion. Part VI of Schedule 1 to FOIA provides that information held by
>
> the ███ and the other public service broadcasters is only covered by the Act if it is held for 'purposes other than those of journalism, art or literature". The ███ is not required to supply information held for the purposes of creating the ███ output or information that supports and is closely associated with these creative activities.
>
> The limited application of the Act to public service broadcasters was to protect freedom of expression and the rights of the media under Article 10 European Convention on Human Rights ("ECHR"). The ███ as a media organisation, is under a duty to impart information and ideas on all matters of public interest and the importance of this function has been recognised by the European Court of Human Rights. Maintaining our editorial independence is a crucial factor in enabling the media to fulfil this function.
>
> That said, the ███ makes a huge range of information available about our programmes and content on ███ We also proactively publish information covered by the Act on our publication scheme and regularly handle requests for information under the Act.

Fig 7. Providers closing the file when the follow up letter is send or refusing to disclose some information

Estimada Sra. Mitjans,

Acusamos recibo de su respuesta de 8 de abril de 2019 y le comunicamos al respecto que ███████████████████ entiende que en todo momento se ha procedido de acuerdo con lo previsto en el art. 15 del REGLAMENTO (UE) 2016/679 del Parlamento Europeo y del Consejo de 27 de abril de 2016 relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos (Reglamento General de Protección de Datos. RGPD) y que, excediendo sus peticiones del mismo, no procede atenderlas.

En cualquier caso y en cumplimiento del artículo 77 del RGPD, le recordamos que le asiste el derecho a recabar la tutela de la Agencia Española de Protección de Datos.

Quedamos a su entera disposición para cualquier aclaración que precise.

Atentamente,

████████████████

Dear Mrs. Mitjans,

We acknowledge receipt of your reply of 8 April 2019 and inform you that X understands that at all times it has proceeded in accordance with the provisions of Article 15 of REGULATION (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and the free movement of such data (General Data Protection Regulations. RGPD) and that, exceeding its requests, it is not appropriate to meet them.

In any case and in compliance with Article 77 of the RGPD, we remind you that you have the right to seek the protection of the Spanish Data Protection Agency.

We remain at your entire disposal for any clarification you may require.

Annex IV. Identified good practices from the providers

Fig 1. Good practices while registering

These two examples are mentioned as good practices because while registering, there is an explanation of the purpose of asking for that personal data. There is a clear statement asking is do you want to personalise the information that you receive.

Privacy preferences, where it is clear and differentiated purposes with different legal basis. Clear separate options where consent is needed, and the user can mark these options (commercial communications or third parties and profile analysis in order to personalise the content) and those options where consent is no needed, but you can oppose to that processing.

Annex V. Identified mal practices from the providers

Fig 1. No fully compliance with the consent requirements

By ticking the box, you accept the Terms of Use, the privacy policy and the cookie policy all together.

Regístrate para ver fotos y vídeos
de tus amigos.

f Iniciar sesión con Facebook

O

Número de móvil o correo electrónico

Nombre completo

Nombre de usuario

Contraseña

Siguiente

Al registrarte, aceptas nuestras
Condiciones. Obtén más
información sobre cómo
recopilamos, usamos y compartimos
tu información en la **Política de
datos**, así como el uso que hacemos
de las cookies y tecnologías
similares en nuestra **Política de
cookies**.

¿Tienes una cuenta? Entrar

Descarga la aplicación.

Tell us you're not a robot

Please enter the text in the box

↻ Reload graphic

emiyzk

☐ Please tick this box if you would like NewsNow to use the contact details you have supplied, including your email address, to keep you informed about developments at ▮▮▮▮ (We reserve the right to send you emails directly related to the security or maintenance of your account and such emails may include information about other developments at ▮▮▮▮ or to its services.)

By proceeding, you consent to our Legal Notice and acknowledge how we process your personal data and set cookies as described in our Privacy Policy.

Create Account

When registering, without any affirmative action, you accept the Terms and Conditions, privacy policy and cookies.
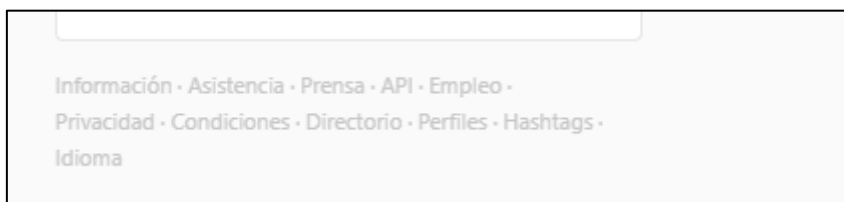
Fig 2. No explicit privacy policy button on the website/app
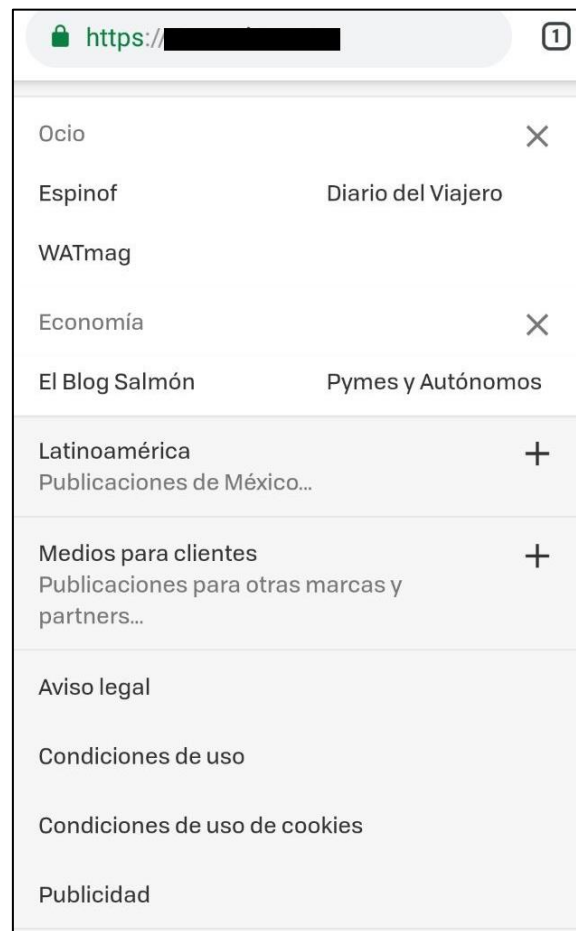
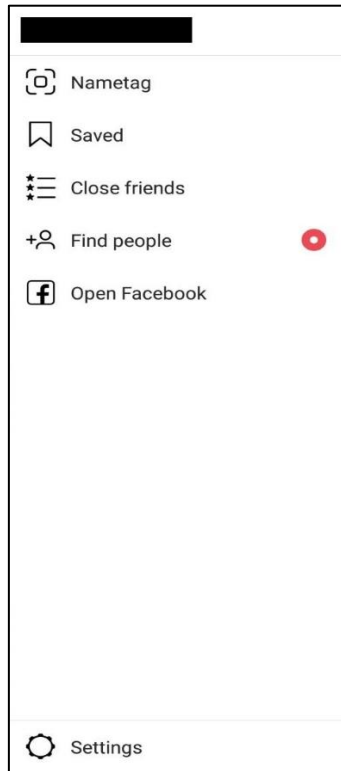Just legal notice, terms of use and terms of use of cookies, but not privacy policy as a separate button.

Fig 3. Privacy button difficult to find or difficult path to reach the privacy policy

Example of hidden privacy button, using a faint colour font in a provider's website.
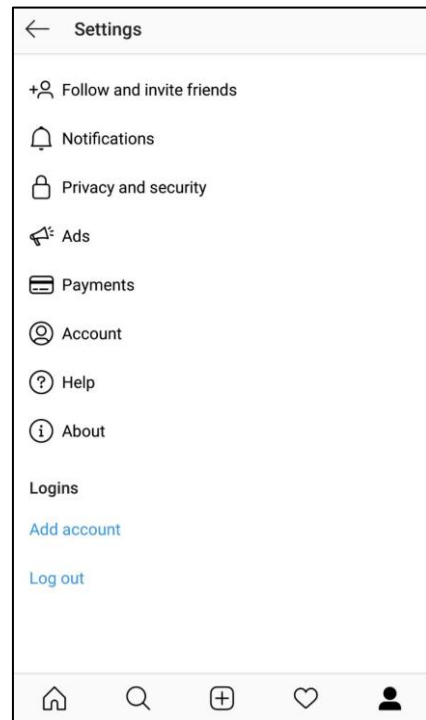
Example of a difficult path to find the privacy policy.

1) Go to settings

2) Intuitively you would go to privacy and security now, but there you will not find the privacy policy, you need to go to "About".

3) Finally, you will find the data policy.