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Private Ordering of Online Platforms in Smart Urban Mobility

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PRIVATE ORDERING OF ONLINE PLATFORMS IN SMART URBAN MOBILITY

THE CASE OF UBER'S RATING SYSTEM

Rossana Ducato*

ABSTRACT

Rating and review systems are a self-regulatory mechanism widely used by online platforms, especially in the smart mobility sector. Such systems have already been analysed in empirical studies and legal contributions, in particular in the fields of consumer law, labour law and competition law.

This chapter aims to make an original contribution to the current debate from a relatively underinvestigated perspective: how rating and review systems interact with the European data protection framework. As a case study, the chapter will focus on the rating system adopted by Uber, one of the largest shared mobility platforms worldwide.

KEYWORDS

Online Platforms · Private ordering · Uber · Rating · Reviews · Data Protection · Automated decision-making

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“People have stars, but they aren’t the same. For travellers, the stars are guides. For other people, they’re nothing but tiny lights. And for still others, for scholars, they’re problems. For my businessman, they were gold. But all those stars are silent stars. You, though, you’ll have stars like nobody else”.

Antoine de Saint-Exupéry

1. Introduction

Rating and review (R&R) systems are private ordering mechanisms widely used by online platforms. The paradigmatic example is that of multi-sided platforms such as eBay, Amazon, Uber or Airbnb.¹ These platforms, although at different times and in different ways, have introduced R&R systems as a tool to build and maintain trust within their community and to preserve the attractiveness of their services.

The scoring system in particular has played a crucial role for the development of business models in the shared mobility sector, where platform users are able to organise urban and extra-urban rides in real time.²

In this context, R&R systems can be seen to perform essentially two functions: (1) informative and (2) self-regulatory.

First of all, R&R systems constitute a reputational mechanism that can help reduce information asymmetry between the parties and promote the overall transparency of the transaction.³ They represent a source of information which, before the advent of e-commerce, could have been obtained through channels such as advertising, direct

¹ On the notion of multi-sided platforms, see Kevin J Boudreau and Andrei Hagiu, ‘Platform rules: Multi-sided Platforms as Regulators’ (2009) 1 *Platforms, markets and innovation* 163; David S Evans, ‘Governing Bad Behavior by Users of Multi-sided Platforms’ (2012) 27 *Berkeley Tech LJ* 1201.

² On the different types and models of business in the shared mobility sector, see Boyd Cohen and Jan Kietzmann, ‘Ride on! Mobility Business Models for the Sharing Economy’ (2014) 27 *Organization & Environment* 279.

³ On the role of R&R systems in the platform economy, see Christoph Busch, ‘Crowdsourcing Consumer Confidence: How to Regulate Online Rating and Review Systems in the Collaborative Economy’ in Alberto De Franceschi (ed), *European Contract Law and the Digital Single Market: the Implication of the Digital Revolution* (Intersentia 2016); Guido Smorto, ‘Reputazione, Fiducia e Mercati’ (2016) 1 *Europa e diritto privato* 199; Lene G Braathen Pettersen, ‘Rating Mechanisms Among Participants in Sharing Economy Platforms’ (2017) 22 *First Monday* <<https://firstmonday.org/ojs/index.php/fm/article/view/7908/6586>> accessed 30 December 2019; Sofia Ranchordás, ‘Online Reputation and the Regulation of Information Asymmetries in the Platform Economy’ (2018) 5 *Critical Analysis of Law* 127 <<https://cal.library.utoronto.ca/index.php/cal/article/view/29508/21993>> accessed 30 December 2019.

experience or recommendations of friends or acquaintances. In this sense, R&R systems have codified the ‘word of mouth’ in the business models, contracts and digital architectures of such platforms.⁴

Reviews and ratings can be defined respectively as feedback (in a textual form) and scores (in a numerical form) given by the platform’s users to report their experience with a particular buyer or service provider in a supposedly impartial manner. In addition to that, some platforms also provide aggregate or consolidated ratings, which sum up the single ratings or reviews in an overall assessment. Consolidated ratings can play an important role in supporting the users’ decision-making process, addressing some cognitive difficulties and the problem of information overload (the ‘wall’ of reviews).⁵ As Busch stated: ‘the use of consolidated ratings thus takes into consideration the problems of bounded attention and bounded rationality and increases the salience (i.e. the cognitive accessibility) of the most important information’.⁶

The second function of R&R systems is self-regulation. On many platforms, users (both service providers and end users) assess each other. This bi-directional evaluation is an incentive for users to behave according to the rules of the community and maintain a high online reputation.⁷ A series of private sanctions usually complete the R&R systems: if the user’s overall score is below the threshold set by the platform, the personal account can be suspended or deactivated.

On the one hand, the platform aims to maintain a safe and attractive business environment by using this combination of ratings. On the other hand, this can have significant consequences for the online and offline activity of its participants: end users may decide not to accept a service from the provider with a low rating or, in the worst case, the user may be excluded from the platform.

⁴ Chrysanthos Dellarocas, ‘The Digitization of Word-of-Mouth: Promise and Challenges of Online Feedback Mechanisms’ (March 2003) MIT Sloan Working Paper No. 4296-03 <<https://ssrn.com/abstract=393042>> accessed 30 December 2019 or <<http://dx.doi.org/10.2139/ssrn.393042>> accessed 30 December 2019.

⁵ Busch (n 3).

⁶ *ibid* 12.

⁷ However, the reciprocity of the evaluation is also one of the reasons why users tend to score high. This distorting effect has been found in platforms such as eBay, where the evaluation is not anonymous and takes place at a delayed point in time. A user who has had a mediocre or negative experience is inclined to leave positive feedback, fearing that the other party might ‘retaliate’ by leaving a low score. Chrysanthos Dellarocas and Charles A Wood, ‘The Sound of Silence in Online Feedback: Estimating Trading Risks in the Presence of Reporting Bias’ (2008) 54 *Management science* 460; Abbey Stemler, ‘Feedback Loop Failure: Implications for the Self-regulation of the Sharing Economy’ (2017) 18 *Minn JL Sci & Tech* 673, 691ff.

R&R systems have already been at the centre of a series of empirical studies⁸ and legal analyses, particularly in the areas of consumer⁹ and labour law.¹⁰ The paper aims to contribute to the debate from a rather underinvestigated perspective, namely how the data protection framework applies to R&R systems.

As a case study, this chapter will critically analyse the rating system implemented by Uber, one of the major platforms for shared mobility worldwide (Section 2). The analysis will focus specifically on ‘UberX’, i.e. the automated service that (through the eponymous app) matches drivers and passengers within the same city. Considering that ratings can qualify as personal data, the contribution identifies and analyses two main points of friction between R&R systems and the General Data Protection Regulation (GDPR):¹¹ the identification of the appropriate legal basis for processing data (Section 3.1) and the limitations to data subjects’ rights, in particular their right not to be subject to a solely automated decision-making process (Section 3.2). In conclusion, the chapter will formulate guidelines and recommendations to encourage the design of R&R systems that are in line with fundamental data protection principles (Section 4).

1.1 Research Method

This contribution investigates the Uber R&R system through an empirical analysis of the legal documents available online (Terms and Conditions, Privacy Policy, Deactivation Policy, help pages, etc.). When some information was not available—for instance, the average minimum rating—the specific data were requested directly through the Uber help centre.

⁸ For an overview, see Cristiano Codagnone and Bertin Martens, ‘Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues’ (2016) Institute for Prospective Technological Studies Digital Economy Working Paper, 22.

⁹ See, in particular, Omri Ben-Shahar, ‘One-Way Contracts: Consumer Protection without Law’ (2010) 6 *European Review of Contract Law* 221; Christoph Busch and others, ‘The Rise of the Platform Economy: a New Challenge for EU Consumer Law?’ (2016) 5 *Journal of European Consumer and Market Law* 3; Marta Cantero Gamito, ‘Regulation.com. Self-regulation and Contract Governance in the Platform Economy: a Research Agenda’ (2016) 9 *Eur J Legal Stud* 53.

¹⁰ Valerio De Stefano, ‘The Rise of the Just-in-Time Workforce: On-Demand Work, Crowdsourcing, and Labor Protection in the Gig-Economy’ (2015) 37 *Comp Lab L & Pol’y J* 471; Jeremias Prassl, *Humans as a Service: The Promise and Perils of Work in the Gig Economy* (Oxford University Press 2018); Adrián Todolí-Signes, ‘Algorithms, Artificial Intelligence and Automated Decisions Concerning Workers and the Risks of Discrimination: the Necessary Collective Governance of Data Protection’ (2019) 25 *Transfer: European Review of Labour and Research* 465.

¹¹ Parliament and Council Regulation (EU) 2016/679 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, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1 (GDPR).

All the documents and information refer to ‘UberX’ (as operating in Belgium). For the purpose of this contribution, the official English version (available for Belgium) of all the documents has been used.

To get more precise information to supplement the textual analysis, I have replicated the passenger’s journey on the platform, e.g. by signing up, requesting a ride and assigning a score. A limitation of the present study is that it does not perform the same analysis of the user’s journey from the driver’s perspective. Therefore, when the user’s path is described here, it always refers to the rider’s experience.

2. The Uber Rating and Review System

Uber is one of the most popular smart urban mobility platforms in Western countries. Its business model is well known and has already been analysed in several contributions.¹² Established in 2009 in San Francisco, the platform has spread beyond US borders over the last ten years and expanded its range of services from the transport of passengers to food delivery, bike-sharing and even helicopter rentals.¹³

According to Uber’s ‘Terms and Conditions’,¹⁴ the platform acts as a mere intermediary: its declared role is to facilitate both the matching of supply and demand and the conclusion of a contract between two or more users.

¹² For an overview of the legal issues raised by this business model, see Kristofer Erickson and Inge Sorensen, ‘Regulating the Sharing Economy’ (2016) 5 *Internet Policy Review* <<https://policyreview.info/articles/analysis/regulating-sharing-economy>> accessed 30 December 2019; Nayeem Syed, ‘Regulating Uberification’ (2016) 22 *CTLR* 14; Guido Noto La Diega, ‘Uber Law and Awareness by Design. An Empirical Study on Online Platforms and Dehumanised Negotiations’ (2016) 2 *Revue européenne de droit de la consommation/ European Journal of Consumer Law* 383; Diane M Ring and Shu-Yi Oei, ‘The Tax Lives of Uber Drivers: Evidence from Online Forums’ (2016) 8 *Columbia Journal of Tax Law* 56; Alex Rosenblat and Luke Stark, ‘Algorithmic Labor and Information Asymmetries: A Case Study of Uber’s Drivers’ (2016) 10 *Int’l J of Comm* 3758; Ryan Calo and Alex Rosenblat, ‘The Taking Economy: Uber, Information, and Power’ (2017) 117 *Columbia Law Review* 1623; Alex Rosenblat and others, ‘Discriminating Tastes: Uber’s Customer Ratings as Vehicles for Workplace Discrimination’ (2017) 9 *Policy & Internet* 256; Giorgio Resta, ‘Digital Platforms and the Law: Contested Issues’ (2018) 1 *Media Laws* 231.

¹³ See <<https://eu.usatoday.com/story/tech/2019/10/03/uber-helicopter-service-expands-all-iphone-users-new-york-city/3855008002/>> accessed 30 December 2019.

¹⁴ As indicated at section 2 of Uber’s Terms and Conditions <www.uber.com/legal/it/document/?name=general-terms-of-use&country=belgium&lang=en/> accessed 30 December 2019: ‘YOU ACKNOWLEDGE THAT UBER DOES NOT PROVIDE TRANSPORTATION OR LOGISTICS SERVICES OR FUNCTION AS A TRANSPORTATION CARRIER AND THAT ALL SUCH TRANSPORTATION OR LOGISTICS SERVICES ARE PROVIDED BY INDEPENDENT THIRD PARTY CONTRACTORS WHO ARE NOT EMPLOYED BY UBER OR ANY OF ITS AFFILIATES.’

However, such a legal classification has been contested. For instance, in *Asociación Profesional Élite Taxi*, the CJEU affirmed that the intermediation service provided by Uber must be considered as ‘inextricably linked to a transport service and therefore covered by the qualification of “services in the transport sector” within the meaning of Art. 58(1) TFEU’.¹⁵ In particular, the Court stressed that the platform could not be regarded as a mere intermediary because it exerts a decisive influence on the conditions under which the drivers provide the service. It is possible to infer such influence from the power of Uber to (1) determine the maximum fare for the ride by means of the Uber app, (2) regulate the payment process and (3) exclude drivers from the platform for reasons related to ‘the quality of the vehicles, the drivers and their conduct’.¹⁶

Although the Court does not specify which instruments are covered by the third hypothesis, it is evident that the R&R system is one of the primary means used to assess the driver’s performance.¹⁷

For the present analysis, it is then crucial to understand how Uber’s R&R system works in practice.

It can be preliminarily observed that despite the role of R&R in Uber’s business model, it is difficult to find clear and complete information about the system before creating a personal account on the platform. In the almost 50 documents available online (Terms and Conditions, Privacy Policy, Community Guidelines, etc.), the R&R system is described in very general terms.¹⁸

The Privacy Policy and some ‘help pages’ mainly explain the bi-directionality of the mechanism: each passenger can give a score from 1 to 5 to her driver and vice-versa.¹⁹

¹⁵ Case C-434/15 *Asociación Profesional Élite Taxi v. Uber Systems SpainSL* [2017] ECLI:EU:C:2017:981, para 48. For a comment on the judgment, see Philipp Hacker, ‘UberPop, UberBlack, and the Regulation of Digital Platforms after the *Asociación Profesional Élite Taxi* Judgment of the CJEU’ (2018) 14 *European Review of Contract Law* 80; Michèle Finck, ‘Distinguishing Internet Platforms from Transport Services: *Elite Taxi v. Uber Spain*’ (2018) 55 *Common Market Law Review* 1619; Alberto De Franceschi, ‘Uber Spain and the “Identity Crisis” of Online Platforms’ (2018) 7 *Journal of European Consumer and Market Law* 1.

¹⁶ *Asociación Profesional Élite Taxi*, para 39.

¹⁷ However, this conclusion is supported by the Case C-434/15 *Asociación Profesional Élite Taxi v. Uber Systems SpainSL* [2017] ECLI:EU:C:2017:981, Opinion of Advocate General Szpunar. See in particular paras 51-52.

¹⁸ On the contractual ‘flora’ that characterises the platform, see the critical comment by Guido Noto La Diega and Luce Jacovella, ‘UBERTRUST: How Uber Represents Itself to Its Customers Through its Legal and Non-Legal Documents’ (2016) 5 *Journal of Civil and Legal Sciences* 199.

¹⁹ Section IV.C ‘Consultation of evaluations’, Uber Privacy Policy <www.uber.com/global/it/privacy/notice/> accessed 30 December 2019.

Only by registering and using the app it is possible to understand the R&R system in detail. The system is admittedly quite intuitive: at the end of the journey, a pop-up window informs the passenger that she can evaluate the driver using the well-known 5-star scale. The user is not obliged to give a score, but if she does, she may leave an explanation (albeit succinctly).

If the passenger decides to give the maximum score (5 stars), the system allows her to send a ‘compliment’ to the driver. This compliment can be shown in the driver’s profile to passengers who are paired with her in the future. Meanwhile, if the passenger assigns a score lower than 5, the system immediately shows a ‘headline’ close to each ‘star’. This is meant to give an idea of the score’s meaning, for example, 4 stars, ‘Ok, but I had an issue’; 3 stars, ‘Disappointing’; 2 stars, ‘Bad’; 1 star, ‘Terrible’. When the users assign a score <4 , the system allows them to select the issue they experienced from a pre-filled list (e.g. ‘driving’, ‘professionalism’, ‘music’, ‘conversation’). If the score given by the passenger is ≤ 3 stars, the user is obliged to select at least one of the reasons listed. Otherwise, she cannot submit her score. For grievances independent of the driver’s conduct—e.g. ‘traffic’—the app records the score without affecting the driver’s rating.

Uber then aggregates all the scores concerning a particular user and calculates the arithmetic average, forming the user’s rating. This person can then view their rating through the main menu of the app. With specific modalities and at certain times, future passengers can also view it. This last feature underlines an important point. The Uber rating is not shown to the user before she requests the ride. Only after the app has matched a driver and passenger (i.e. when the driver is already heading to the meeting point)²⁰ is the passenger able to see the identity of the driver, the licence plate number and the rating. Therefore, the rating has no real informative function here because it is not taken into account in the transactional decision-making process of the passenger (unlike in other cases, such as Blablacar or Airbnb). There is, however, a little room for the user to exercise choice: once the rating has been shown and before the driver arrives at the meeting point, the passenger has the chance to cancel the trip. However, this eventuality is residual, firstly because of the limited time window for making such a choice and secondly because the cancellation could cause the user to pay a penalty.

Given this premise, it is possible to conclude that the Uber R&R system is essentially based on ratings, with limited space for reviews. Other users can only view the latter if they are ‘compliments’. The explanations (mere ‘keywords’) that the passenger uses to justify the assignment of a medium-to-low score are not published but transmitted to the platform.

Considering these characteristics and the impossibility of the user choosing her counterparty based on the rating, one can observe that the exclusive function of Uber

²⁰ The app matches users based on criteria such as proximity. Therefore, the user does not have the option to really choose the counterparty on the basis of her rating.

ratings is what we have defined as ‘self-regulation’. The most important—and almost exclusive—consequence related to the rating is that all users’ profiles might be deactivated if their rating is ‘low’.²¹ Legally speaking, the deactivation of the account means the unilateral termination of the contract between the user and the platform at Uber’s discretion, leaving little doubt about the unfairness of such a provision under the consumer protection framework.

In the light of this consequence, the lack of information about the minimum threshold of the rating required by the platform is even more surprising.

Few details are provided in the document ‘Community Uber Guidelines’, where it is mentioned that:

Where applicable, there is a minimum average rating in each city. These may vary between cities because there may be cultural differences in the way people in different cities rate each other. Drivers, riders, couriers, or merchants that don’t meet the minimum average rating for their city may lose access to the Uber app. If you lose access to your account as a result of your rating, we may share information that may help you improve your rating.²²

Uber states that it does not set the same threshold for all cities, referring to a sort of sociological justification. While the justification for different minimum ratings might be acceptable in the light of specific verifiable parameters, these should at least be communicated to users before the conclusion of a contract and easily accessible on the website/app.

Nevertheless, information about the minimum score and the criteria for determining deactivation is almost absent. At least until December 2018, a deactivation policy was accessible on the Uber platform, but only for four countries (Denmark, Ireland, Puerto Rico and Norway). At the moment, the only deactivation policy still published online is Puerto Rico’s, which does not mention the minimum average score that users must maintain.²³

²¹ Section III.B.9, **Uber Privacy Policy** <www.uber.com/global/it/privacy/notice/> accessed 30 December 2019. A decision by the California Labor Commission confirms that the minimum average rating to remain on the platform is the same both for drivers and passengers. cf *Uber Techs., Inc. v. Berwick*, No. CGC-15-546378, Cal. App. LEXIS 9488 (Cal. Super. June 16, 2015); see also *O’Connor v. Uber Technologies, Inc.*, 82 F. Supp. 3d 1133, 1135 (2015).

²² <www.uber.com/legal/en/document/?name=general-community-guidelines&country=belgium&lang=en> accessed 30 December 2019.

²³ <www.uber.com/legal/deactivation-policy/pr-en/> accessed 30 December 2019.

As far as it has been possible to reconstruct (to give the reader an idea), the minimum average rating is 4.6/5 in San Francisco²⁴ and 4.5/5 in Brussels.²⁵

According to the Community Guidelines, when the user's profile is deactivated, the platform provides suggestions on how to improve the rating. The usefulness of this type of information once the user has lost access to her profile remains doubtful.²⁶ However, there is a specific condition for drivers: the latter can reactivate their profile if they 'provide proof that [they have] successfully taken a quality improvement course offered by third party experts, available online or in person'.²⁷

In addition to the vague and in some cases contradictory information,²⁸ there are three critical points in the design of Uber ratings that may undermine their reliability.

First of all, while the scores given by individuals are the result of a subjective assessment about the overall performance, both individual and aggregate scores are expressed in a number (from 1 to 5 stars),²⁹ which might create a misleading sense of objectivity.³⁰ Moreover, since the user does not have to evaluate each aspect of the performance but rather the service as a whole, there is the risk of introducing elements of discretionary

²⁴ As reported in *Uber Techs., Inc. v. Berwick*.

²⁵ This information was obtained after sending a direct request to the Uber assistance service on 4 December 2018.

²⁶ It is interesting to note that the previous version of the Community Guidelines (online at least until 19 November 2019) adopted a 'preventive' approach. They stated that: 'We will alert you over time if your rating is approaching this limit. However, if your average rating still falls below the minimum after multiple notifications, you will lose access to your account as your rating will no longer meet the overall quality standards that riders reasonably expect from drivers when using the Uber app in the relevant city' (<www.uber.com/legal/community-guidelines/be-en/> accessed 30 December 2019. This link has expired. However, the same provision remains in Porto Rico's deactivation policy: <www.uber.com/legal/deactivation-policy/pr-en/> accessed 30 December 2019).

²⁷ <www.uber.com/legal/en/document/?name=general-community-guidelines&country=belgium&lang=en> accessed 30 December 2019.

²⁸ By clicking on her rating, the passenger can access a page that provides general information about the rating. Such information is framed in positive terms. Uber reassures passengers who do not have an immaculate rating: 'very few people have a perfect rating, so don't despair if your average isn't 5.0. Things that seem small can matter to your driver—it's easy to accidentally slam a door if you are not thinking about it.' The platform then offers a series of tips to get a high score, such as not keeping the driver waiting, being polite, wearing a seat belt, etc. The information page concludes with a paragraph on the importance of ratings: 'ratings foster mutual respect between riders and drivers [...] a high rating is about more than bragging rights among your friends; it's a sign that people enjoyed their time with you. Keep up the good work!' Nothing, however, is mentioned about the other important consequences, should the score not be 'stellar'. The sanction of deactivation is mentioned in a section of the Privacy Policy (Section III.B.9, Privacy Policy Uber, n 21).

²⁹ For an overview of the different types of rating systems, see Pettersen (n 3).

³⁰ The system indeed allows one to give feedback, but these qualitative inputs are limited and, in any case, they do not appear in the final rating.

decision-making: one can easily imagine that users will assign different weight and importance to various elements of the service. The lack of granularity of the score can therefore generate problems of simplification or, worse, distortion.

A second issue with Uber's rating system concerns the voluntary nature of the evaluation. Neither passengers nor drivers are obliged to score each other's performance at the end of the ride. If this architectural choice favours the usability of the system, it is likely to create some undesirable misrepresentations in the ratings. These are calculated not from the total number of rides made but from the total number of rides evaluated. Therefore, each rating is based on a partial cohort of data, which provides an incomplete picture. Several empirical studies have shown that users are more likely to leave an evaluation in the case of either a highly positive or extremely negative experience.³¹ Therefore, a rating might not be entirely reliable as an indicator of the performance of a person on the platform.

A third issue concerns the reliability of ratings in general and the risk that they become vehicles for unfair practices, prejudices or cognitive bias.³² Users might complain fraudulently just to get a refund or a discount, give a low score for reasons not related to the performance itself³³ or negatively interpret behaviours that would have been considered neutral if the users had not seen the score first (so-called confirmation bias, i.e. the tendency to find elements that validate our choices or behaviour).³⁴ Such problems, which depend on 'human' factors, could be partially counterbalanced in two ways: firstly by imposing an obligation to justify the low score and secondly by giving the possibility to contest the rating.³⁵

Regarding the first case, it was already mentioned that Uber does in fact provide a mechanism that obliges the user to leave a justification when giving a negative score. However, this architectural choice—which forces the user to stop, read the information and

³¹ Chrysanthos Dellarocas and Ritu Narayan, 'A Statistical Measure of a Population's Propensity to Engage in Post-purchase Online Word-of-mouth' (2006) 21 *Statistical science* 277.

³² Rosenblat and others (n 12).

³³ Unfortunately, the digital environment has replicated some discriminatory practices of the 'analogue age'. See for example Ray Fisman and Michael Luca, 'Fixing Discrimination in Online Marketplaces' (2016) HBR <<https://hbr.org/2016/12/fixing-discrimination-in-online-marketplaces>> accessed 30 December 2019; Benjamin Edelman, Michael Luca and Dan Svirsky, 'Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment' (2017) 9 *American Economic Journal: Applied Economics* 1.

³⁴ As Stemler (n 7) 694 points out: 'For example, if a passenger has a low rating, an Uber driver may interpret innocuous behaviour, like failing to make small talk, as unfriendly and give the passenger a negative review.'

³⁵ Bénédicte Drambine, Joseph Jerome and Ben Ambrose, 'User Reputation: Building Trust and Addressing Privacy Issues in the Sharing Economy' (2015) 9ff <https://fpf.org/wp-content/uploads/FPF_SharingEconomySurvey_06_08_15.pdf> accessed 30 December 2019.

make a choice—only applies to scores ≤ 3 . The user who opts for a 4 is free to send her evaluation immediately without any feedback. Considering that the minimum rating to maintain is around 4.5, it is easy to predict that even 4-star ratings can make a significant difference.

With regard to disputing a rating, the information available indicates that the platform does not provide an option to contest or review ratings.³⁶

These three controversial points in the design of rating systems seem particularly pernicious if we consider that the decision to exclude a user from the platform could be based on automated means that are not entirely reliable. Such aspects are even more critical when observed from the data protection perspective.

3. Ratings and Reviews: Data Protection Aspects

Ratings and reviews may be qualified as ‘personal data’ when they relate to an identified or identifiable person.³⁷ As stated by Art. 29 Data Protection Working Party (‘WP29’, now the European Data Protection Board, ‘EDPB’)³⁸ and confirmed by the CJEU,³⁹ the concept of personal data includes not only objective information (for example, John is 20 years old) but also subjective information, such as opinions or assessments. Therefore,

³⁶ *ibid* 11. On the contrary, in the United States, a specific procedure has been established in cooperation with the *Independent Drivers Guild* to deal with account deactivations due to low ratings (<<https://drivingguild.org/uberdeactivated/>> accessed 30 December 2019; <www.uber.com/drive/new-york/resources/appeals/> accessed 30 December 2019). However, the initiative seems to be somewhat limited. First, it is only available to drivers based in New York City (see <www.uber.com/drive/new-york/resources/improve-your-rating/> accessed 30 December 2019). Moreover, rather than a system to contest the rating, what the platform provides is a system of ‘reputation[al] rehabilitation’. Drivers can, in fact, reactivate their account by following an online course on how to improve customer satisfaction.

³⁷ GDPR, art 4(1) defines personal data as ‘any information relating to an identified or identifiable natural person (“data subject”); an identifiable person is one who can be identified, directly or indirectly, by reference in particular to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors characteristic of his physical, physiological, genetic, mental, economic, cultural or social identity’.

³⁸ Article 29 Data Protection Working Party (WP29), ‘Opinion 4/2007 on the concept of personal data’ (2007) WP136, 6.

³⁹ C-434/16 *Peter Nowak v. Data Protection Commissioner* [2017] ECLI:EU:C:2017:994, para 42. cf Karolina Podstawa, ‘Peter Nowak v Data Protection Commissioner: You Can Access Your Exam Script, Because It Is Personal Data’ (2018) 4 *European Data Protection Law Review* 252; Nadezhda Purtova, ‘The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law’ (2018) 10 *Law, Innovation and Technology* 40; Sandra Wachter and Brent Mittelstadt, ‘A Right to Reasonable Inferences: Re-thinking Data Protection Law in the Age of Big Data and AI’ (2019) *Colum Bus L Rev* 494.

ratings or reviews expressed in R&R systems may, in principle, fall within the notion of personal data.

On the one hand, an Uber rating is a summary of subjective opinions given about an identified person (driver or passenger). The consolidated rating would be personal data not only considering its content (John's score is 4.7) but also the purpose of the processing (the assessment of John's performance as a driver or passenger) and the result (the use of the data could lead to the exclusion of John from the platform).⁴⁰

On the other hand, the score assigned by each user has to be considered personal data as well. More specifically, it is personal data for a plurality of data subjects: it concerns both the individual who receives the score and the one who gives it.

This view is in line with the principles expressed in Nowak.⁴¹ In that case, concerning access to the results of a professional examination, the CJEU recognised as personal data not only the answers given by the candidate but also the examiner's comments, as their content 'reflects the opinion or the assessment of the examiner of the individual performance of the candidate in the examination, particularly of his or her knowledge and competences in the field concerned'.⁴² Furthermore, the comments would relate both to the candidate who receives them and to the examiner who makes them.⁴³

The qualification of ratings and reviews as personal data is not a mere exercise in definition. It has a legal consequence that is as simple as it is relevant: the data protection framework will apply. In particular, this means that the processing of such data will have to comply with the fundamental principles of data processing (Arts. 5-6, GDPR), the rules

⁴⁰ To determine whether a piece of information refers to an identified or identifiable person, the WP29 suggests taking the three following elements into account: content (the information concerns the person), purpose (the information is or is likely to be used to evaluate the person or to influence his or her behaviour) and outcome (the use of the information may have an impact—even if not necessarily significant—on the rights and interests of the person). These elements are alternative. See, WP29, 'Opinion 4/2007 on the concept of personal data' (2007).

⁴¹ This ruling exceeds the principles of law expressed in the previous Joined Cases C-141/12 and 372/12 *YS c. Minister voor Immigratie, Integratie en Asiel and Minister voor Immigratie, Integratie en Asiel* [2014] ECLI:EU:C:2014:2081 (hereinafter *YS and others*). In this case, concerning access to a decision about a residence permit, the Court considered that the personal data contained in the so-called 'minute' (the draft decision containing the assessment of the applicant's request) were exclusively the information related to the applicant (name, surname, etc.) and not the information concerning the assessment and application of the law to the situation of the applicant (the so-called 'legal analysis'). For a critical comment, see Evelien Brouwer and Frederik Zuiderveen Borgesius, 'Access to Personal Data and the Right to Good Governance during Asylum Procedures after the CJEU's *YS. and M. and S.* judgment (C-141/12 and C-372/12)' (2015) 17 *European Journal of Migration and Law* 259; Wachter and Mittelstadt (n 39).

⁴² *Nowak* (n 39), para 43.

⁴³ *Nowak* (n 39), para 45.

on consent where applicable (Arts. 7-8 GDPR) and, with the clarifications set out below, the provisions for the exercise of data subjects' rights (Arts. 12 et seq.).⁴⁴

Considering the characteristics of Uber's rating system seen in Section 2, two significant points of friction with the discipline of the GDPR emerge, namely (1) the opacity surrounding the lawful basis for the processing and (2) the limitations to the exercise of data subjects' rights.

3.1. Lawful Basis and Processing of Personal Data in the Context of the Rating System

Article 6 GDPR lists six lawful bases on which the controller may rely in making the processing of personal data legitimate.⁴⁵ Such bases are alternative.

In the case study in question, Uber's Privacy Policy mentions a series of bases potentially suitable to ensure the lawfulness of the processing.⁴⁶ They are: (1) the consent of the data subject,⁴⁷ (2) the necessity for the performance of a contract or a pre-contractual measure,⁴⁸ (3) the necessity for the purposes of the legitimate interests pursued by the data controller or third parties⁴⁹ and (4) the necessity for the compliance with a legal obligation to which the controller is subject.⁵⁰ However, it is not possible to reconstruct from the document which lawful basis corresponds to the purpose concerning the processing of rating and scores data.

⁴⁴ With specific reference to processing in the employment sector, the GDPR leaves a certain margin of discretionary power to the Member States (GDPR, art 88(1)). In Italy, for example, some specific provisions in this context have been introduced by art 9 of Legislative Decree of 10 August 2018, no. 101 (see Maria Cristina Degoli, 'I Trattamenti in Ambito Lavorativo' in S Scagliarini (ed), *Il 'Nuovo' Codice in Materia di Protezione dei Dati Personali. La Normativa Italiana Dopo il d.lgs. n. 101/2018* (Giappichelli 2019); Vincenzo Turco, 'Il Trattamento dei Dati Personali Nell'ambito del Rapporto di Lavoro' in Vincenzo Cuffaro, Roberto D'Orazio and Vincenzo Ricciuto (eds), *I Dati Personali nel Diritto Europeo* (Giappichelli 2019)). However, despite the control exercised by the platform, the qualification of Uber drivers as employees is still contested in many Member States. Consequently, the following analysis will not focus on the special rules applicable in the employment context.

⁴⁵ The data controller is defined as 'the natural or legal person, public authority, service or other body which, individually or jointly with others, determines the purposes and means of the processing of personal data' (GDPR, art 4(7)).

⁴⁶ See Section III.F 'Reasons for processing', Uber Privacy Policy <www.uber.com/global/it/privacy/notice/#choice> accessed 30 December 2019.

⁴⁷ GDPR, art 6(1)(a).

⁴⁸ GDPR, art 6(1)(b).

⁴⁹ GDPR, art 6(1)(f).

⁵⁰ GDPR, art 6(1)(c).

This is already a problematic point in terms of transparency given that the data controller has the precise obligation to inform data subjects about the relevant conditions of the processing.⁵¹ However, for the aim of this chapter, it is worth investigating what lawful basis might eventually legitimise an instance of processing in which its main purpose is the self-regulation of the platform's environment.

Firstly, it can be observed that there is no rule in European or domestic law that requires the use of R&R systems. Therefore, Art. 6(1)(c) GDPR is not relevant for our case.

Consent might be a suitable lawful basis. However, the particular modality for its obtainment coupled with the platform's business model raises more than one doubt. According to Art. 4(11) GDPR, consent must be (a) freely given, (b) specific, (c) informed, and (d) unambiguous.⁵² In particular, it must consist of a 'clear affirmative act'⁵³ by the data subject and the controller shall implement exclusively opt-in mechanisms for the obtainment of consent.⁵⁴

A preliminary problem in this context concerns how the consent might be requested. In the platform's registration procedure, there is no specific moment where the controller provides information about the processing (especially about ratings) and asks for consent.

The first time the app is launched on the smartphone, the user is requested to enter her phone number. Once she has typed it in, the user receives a confirmation code to complete the registration (and therefore the contract with the platform). In all these steps, the existence of the T&C or Privacy Policy is not even mentioned.

Registration via the website does not lead to substantially different results. The registration form and the manner the consent is "obtained" raise several concerns. To begin with, the interface is designed in a way that users are led to insert the data necessary for the registration first; then, a big green button invite to "sign up". Only below the button, few lines of text (in a smaller font) recite: "By clicking 'sign up', you agree to Uber's Terms of Use and acknowledge you have read the Privacy Policy". As a matter of fact, the text at the

⁵¹ See GDPR, arts 13(1)(c), 14(1)(c). On transparency duties, WP29, 'Guidelines on transparency under Regulation 2016/679' (2018) WP260 rev.01.

⁵² On the requirements for valid consent, Giorgio Resta, 'Revoca del Consenso ed Interesse al Trattamento nella Legge sulla Protezione dei Dati Personali' [2000] *Rivista critica di diritto privato* 299; Roger Brownsword, 'Il Consenso Informato nella Società dell'Informazione' (2012) *XI(3) Salute e Società* 161; Fausto Caggia, 'Libertà ed Espressione del Consenso' in Vincenzo Cuffaro, Roberto D'Orazio and Vincenzo Ricciuto (eds), *I Dati Personali nel Diritto Europeo* (Giappichelli 2019); Ingrida Milkaite and Eva Lievens, 'Counting Down to 25 May 2018: Mapping the GDPR Age of Consent Across the EU' (2018) <<https://biblio.ugent.be/publication/8561253>> accessed 30 December 2019.

⁵³ GDPR, recital 32.

⁵⁴ On the prohibition of opt-out mechanisms for consent, see the recent *C-673/17 Bundesverband der Verbraucherzentralen und Verbraucherverbände–Verbraucherzentrale Bundesverband e.V. v Planet49 GmbH* [2019] ECLI:EU:C:2019:801.

bottom of the registration form does not refer to privacy consent at all.⁵⁵ There the user merely confirms that she has read the Privacy Policy.⁵⁶

Furthermore, if drivers are going to qualify as employees of the platform, consent can hardly be an appropriate lawful basis because it is unlikely that it will be freely given.⁵⁷ Indeed, the WP29 states that the freedom of consent shall imply that the data subject is in a position to make a real choice and that ‘there is no risk of deception, intimidation, coercion or significant negative consequences if he/she does not consent’.⁵⁸ As a paradigmatic example of consent that is not freely given, the WP29 refers precisely to the context of employment relationships, where the data subject is in a weaker position vis-à-vis the controller (the employer). In this situation, she cannot really exercise choice with regard to the processing, especially if consent is a condition of employment.⁵⁹

The third possible option to consider is Art. 6(1)(b) GDPR. However, even taking into account the contractual dimension of the R&R system, it is difficult to argue that the processing is necessary for the performance of the contract between the data subject and the platform or to fulfil any pre-contractual activity requested by the data subject. According to the EDPB, the processing of data cannot be considered necessary if the contractual obligation can be performed without the use of personal data.⁶⁰ Considering the contract between the platform and the users, the object is the obligation of the carrier to transfer a person from one place to another (see e.g. Arts. 1678 and 1681 Italian Civil Code).⁶¹ To

⁵⁵ Even if the user agrees to the Terms and Conditions of Service, such consent shall not be confused with the consent required under GDPR, art 6(1)(a). See European Data Protection Board (EDPB), ‘Guidelines 2/2019 on the processing of personal data within the meaning of Article 6(1)(b) of the General Data Protection Regulation in the context of the provision of online services to data subjects’ (2019), point 20.

⁵⁶ The only consent that is ‘requested’ is for marketing purposes, but its modalities raise serious doubts about its validity.

⁵⁷ According to GDPR, art 7(4), ‘when assessing whether consent is freely given, utmost account shall be taken of whether, *inter alia*, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract’.

⁵⁸ WP29, ‘Opinion 15/2011 on the definition of consent’ (2011) WP187, 12. See WP29, ‘Guidelines on Consent under Regulation 2016/679’ (2018) WP259 rev.01.

⁵⁹ WP29, ‘Opinion 8/2001 on the processing of personal data in the employment context’ (2001) WP48. See WP29, ‘Opinion 2/2017 on the processing of data at work’ (2017) WP249, 6-7.

⁶⁰ On the requirements that the data controller may take into account when assessing the necessity of the processing for the purpose of performing the contract: EDPB, ‘Guidelines 2/2019’. See in particular point 33.

⁶¹ Uber has been qualified as a service in the transportation sector by the CJEU. Even before the European judgment, Italian courts qualified the contract between the platform and its users as a transport contract according to arts 1678 and 1681, Italian Civil Code (see, for instance, Court of Turin, commercial section, 22 March 2017, no. 1553, in *Foro it.* 2017, 6, I, 2082, with comment by Caputi.

this end, it is necessary to process, for example, the passenger's destination address. However, the presence of the rating does not appear functional either to the performance of the transportation or to the payment of the fare.⁶²

The processing of ratings data might become relevant in the light of the platform's business model: ratings encourage users to behave in a way that keeps their online reputation high while the platform benefits from having a community where users can expect certain standards of conduct from each other. Therefore, the legitimate interest of the controller or third parties can come into play.⁶³

However, it is important to stress that Art. 6(1)(f) GDPR is far from being a silver bullet. It cannot be invoked automatically in cases where the controller cannot rely on any other condition listed in Art. 6(1) GDPR. The legitimate interest is perhaps the most complex ground on which the controller can base the processing. It always requires a comparative assessment that weighs the interests of the controller or third parties on the one hand against the impact on data subjects on the other. This assessment must be as granular as possible and shall take into account the appropriate safeguards to reduce the undue impact on the interests, rights or freedoms of the data subject; furthermore, in the light of the principle of accountability, the controller must be able to justify the outcome of such balancing.⁶⁴

Moreover, Arts. 13(1)(d) and 14(2)(b) GDPR explicitly require that where processing is carried out based on the legitimate interest of the controller or third parties, such interest shall be clearly communicated to the data subjects.

As already mentioned, it is not easy to deduce from the Uber Privacy Policy what lawful basis governs the processing of the ratings data and, a fortiori, what specific legitimate interest is invoked. Therefore, serious doubts remain as to what legal grounds exist for the processing of ratings.

See also, Giovanni Basini, 'Innovazione Disruptive e Limiti dell'Azione di Concorrenza Sleale per Violazione di Norme Pubblicistiche, Dopo il Caso Uber-II Parte' (2018) 83 *Responsabilità civile e previdenza* 1316; G Resta, 'Uber di Fronte alle Corti Europee' (2017) 2 *Diritto dell'informazione e dell'informatica* 330).

⁶² As clarified by the EDPB, just because the ratings data are mentioned in the T&C does not mean that the processing is necessary for the purposes of the contract. See EDPB, 'Guidelines 2/2019', point 28, referring to WP29, 'Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC' (2014) WP217, 20.

⁶³ GDPR, art 6(1)(f).

⁶⁴ WP29, 'Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC' (2014), 36.

3.2. Ratings and Limitations to Data Subjects' Rights

Data protection is a fundamental right, established in the CFR and 'constitutionalised' with the entry into force of the Lisbon Treaty.⁶⁵ However, it is not an absolute right: it can be restricted in the balancing of conflicting interests, fundamental rights or freedoms.⁶⁶

Data subjects' rights, a manifestation of the broader right to data protection, are no exception: the exercise of the rights in Arts. 15 et seq. GDPR (access, rectification, erasure, limitation of processing, portability, prohibition of solely automated decision-making processes) could, in fact, be limited in some cases⁶⁷ and interpreted teleologically.

In the context of ratings, the right of access (to check what data are processed and how), the right to rectify (to correct inaccurate data), the right to erasure (to delete data in certain circumstances) and the right not to be subject to solely automated decision-making processes that have legal consequences for the data subject (such as exclusion from the platform) play a primary role.

Such rights can be exercised, balanced against the other interests involved according to the concrete circumstances of the processing. In *Nowak*, the CJEU stressed the need to contextualise the exercise of data subjects' rights in relation to the purpose of the processing.⁶⁸ For instance, the Court recognised the right of access to personal data but not the right to rectify incorrect answers given by the candidate,⁶⁹ nor the right to delete the examiner's comments or corrections.⁷⁰ Since the purpose was to verify the knowledge and skills of the candidate at the moment of the examination, the right of rectification and erasure could not extend to the point of depriving the test of its own function. On the contrary, the right of erasure can be exercised once the data are no longer necessary, i.e. when the examination procedure is closed and cannot be challenged,⁷¹ while the right of

⁶⁵ See, Stefano Rodotà, 'Data Protection as a Fundamental Right' in S Gutwirth and others (eds), *Reinventing Data Protection?* (Springer 2009); Gloria González Fuster, *The Emergence of Personal Data Protection as a Fundamental Right of the EU* (Law, Governance and Technology Series vol 16, Springer Science & Business 2014); Orla Lynskey, *The Foundations of EU Data Protection Law* (Oxford University Press 2015).

⁶⁶ On the balancing of the right to privacy and data protection with other interests, see Federica Giovanella, *Copyright and Information Privacy: Conflicting Rights in Balance* (Edward Elgar Publishing 2017).

⁶⁷ GDPR, art 23 confirms this.

⁶⁸ *Nowak* (n 39), para 53.

⁶⁹ *Nowak* (n 39), para 52.

⁷⁰ *Nowak* (n 39), para 55.

⁷¹ *ibid.*

rectification can be invoked for the correction of material errors, such as the incorrect attribution of one candidate's answers to another.⁷²

What remains unresolved in the analysis of the CJEU in Nowak is whether the right of rectification could cover the content of the examiner's evaluation—more precisely, whether data subjects' rights could be used to ensure the accuracy of the decision-making process. Through a systemic interpretation of the CJEU case law, some authors have concluded that in the Court's view the right of rectification cannot be invoked to challenge the accuracy of the logic of the assessment itself or the inferences drawn by it.⁷³ Two main arguments support this conclusion:⁷⁴ on the one hand, the Court in Nowak gives some specific examples that relate only to the case of rectification of material errors (i.e. if the comments made by the examiner do not actually record her evaluation of the answers of the candidate);⁷⁵ on the other hand, in *Commission v Bavarian Lager*⁷⁶ and *YS and others*, the CJEU has affirmed that the scope of data protection law is to guarantee the right to privacy with regard to the processing of data relating to the subject and not to 'ensure the greatest possible transparency of the decision-making process of the public authorities'.⁷⁷ Therefore, if the data subject wants to challenge the decision, she should rely on other legal tools and governance mechanisms, such as access requests to administrative documents or existing appeal procedures. However, questions remain as to how to deal with cases that are not covered by *lex specialis*, such as the decision-making process of a private company.⁷⁸

Applying these principles to the case at stake, we must first recall that the purpose of the processing of ratings data is essentially to assess the behaviour of users and expel those with a low score. Within this context, there are no grounds to limit the data subject's right to access her rating. However, in order to be an effective tool, the right of access should be designed in a way that the user is able to access her rating in a disaggregated manner (i.e. to see the individual ratings) so that she can be aware not only of the number of stars received but also of the reasons for the complaint. To this end, the rights of other subjects involved should be safeguarded as well (Recital 63 GDPR). Therefore, the platform should put in place technical and organisational measures to ensure compliance with the principle

⁷² Nowak (n 39), para 54.

⁷³ Wachter and Mittelstadt (n 39) 42.

⁷⁴ *ibid* 45.

⁷⁵ Nowak (n 39), para 54.

⁷⁶ C-28/08 *European Commission v The Bavarian Lager Co. Ltd* [2010] ECLI:EU:C:2010:378.

⁷⁷ *YS and others* (n 41), para 47.

⁷⁸ Wachter and Mittelstadt (n 39) 49. The authors are open to the possibility that the right to rectify assessments might be recognised to data subjects in the future, considering that data protection law has to be interpreted teleologically.

of minimisation, for example by proceeding with the pseudonymisation of the evaluations (creating a mechanism similar to a blind peer-review).⁷⁹

Designed in such a way, the exercise of the right of access would be a useful tool for the user to improve her performance during the contractual relationship. To know the reasons behind complaints could be relevant information in terms of orienting the data subject's behaviours and actions. Nevertheless, 'granular' access to the rating might prove to be powerless if the rights of rectification or erasure are not supported.

To this end, the CJEU case law offers a quite narrow interpretation. Considering that the purpose of the rating is essentially to evaluate the user, we could reasonably conclude that the right of rectification could allow, for example, the correction of mistakes in the calculation of the average score or in the attribution of the rating to the wrong person. Meanwhile, the right to erasure should be exercised when the rating is no longer necessary (e.g. when the user voluntarily deletes her profile) or when discriminatory feedback accompanies the score given by a user. Nevertheless, hypotheses that build on the right to rectification and erasure of ratings data remain very limited.

More relevant for challenging the consequences of low ratings is the right of the data subject enshrined in Art. 22 GDPR. Such provision recognises the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning the data subject or affects her in a similarly significant way.⁸⁰

In principle, the decision to deactivate a user's profile can have legal effects on the person, as it entails the termination of the contract between the user and the platform.

Such a procedure can also be considered to be based on profiling, which is defined in the GDPR as 'any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular, to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movement'.⁸¹ The rating is the product of the automated aggregation of all the scores

⁷⁹ As proposed in Rossana Ducato, Miriam Kullmann and Marco Rocca, 'European Legal Perspectives on Customer Ratings and Discrimination' in T Addabbo and others (eds), *Performance Appraisal in Modern Employment Relations* (Springer 2020).

⁸⁰ In the literature, see Isak Mendoza and Lee A Bygrave, 'The Right not to Be Subject to Automated Decisions Based on Profiling' in T Synodinou and others (eds), *EU Internet Law: Regulation and Enforcement* (Springer 2017); Lee A Bygrave, 'Minding the Machine v2.0: The EU General Data Protection Regulation and Automated Decision Making' in K Yeung and M Lodge (eds), *Algorithmic Regulation* (Oxford University Press 2019); Elena Gil González and Paul de Hert, *Understanding the Legal Provisions that Allow Processing and Profiling of Personal Data—an Analysis of GDPR Provisions and Principles* (Springer 2019).

⁸¹ GDPR, art 4(1)(4).

given by users who have interacted with the data subject, and such data are used by the controller to analyse or infer the user's behaviour or her performance.

Nevertheless, the right enshrined in Art. 22 GDPR is subject to three exceptions.⁸² A solely automated decision-making process with legal consequences for individual users is allowed if the decision is (1) necessary for the performance of the contract between the data subject and the controller, (2) based on the explicit consent of the data subject or (3) authorised by the EU or national law.

For the reasons already given in Section 3, none of these three conditions can reasonably apply to the case of ratings. Therefore, a rating system based on a solely automated decision-making process that leads to the exclusion of a user should in principle be prohibited.

However, it is not entirely clear whether the process directed at the deactivation of profiles is solely automated in the case of Uber. In its Privacy Policy, the platform uses vague and generic terms to allude to the fact that a low score 'could' be a cause for exclusion. There is no certainty about the sanction and the precise consequences of the envisaged processing. This formulation raises more than one concern as to its compliance with the principle of transparency and purpose limitation. Anyhow, according to this wording, it should be understood that the decision made by the platform involves at some point the presence of the 'human in the loop'.⁸³

Even assuming that the decision is not fully automated within the meaning of Art. 22 GDPR, the platform performs a decision-making process which remains subject to the fundamental data protection principles in any case.

In this regard, the design of Uber's rating system, as seen in Section 2, raises several doubts, particularly with reference to the principle of accuracy.⁸⁴ Such principle requires, first and foremost, that the data processed shall be accurate. However, the EDPB adopts a broad interpretation, suggesting that the controller should take into account not only the accuracy of personal data as such but also the accuracy of the profiling or the (not exclusively) automated decision-making process at all stages (from the collection of the data

⁸² GDPR, art 22(2).

⁸³ However, such human involvement must be meaningful. The WP29 has been clear in affirming that the controller cannot circumvent art 22 by introducing a merely fictitious form of human control: 'for example, if someone routinely applies automatically generated profiles to individuals without any actual influence on the result, this would still be a decision based solely on automated processing' (WP29, 'Guidelines for automated decision making and profiling' (2018) WP251 rev.01, 23). In other words, art 22 will still apply if the controller does not provide for a supervisory mechanism that allows for effective oversight and intervention in the decision-making process.

⁸⁴ GDPR, article 5(1)(d).

to the application of the profile to the individual).⁸⁵ Interestingly, the EDPB stresses that ‘even if raw data is recorded accurately, the dataset may not be fully representative or the analytics may contain hidden bias’.⁸⁶

Such an opinion is particularly noteworthy because it seems to go one step further than Nowak and prefigure some form of assessment for the accuracy of the logic and content of the decision-making. Therefore, to return to our case, even if the result of the rating is formally correct—because the system meticulously collects all the scores given by individuals—it is not necessarily accurate. Firstly, the evaluation is optional. The rating is, in fact, the arithmetic average of the total of voluntarily given scores, not the total of all rides. Secondly, in the absence of appropriate safeguards (e.g. audit mechanisms), the individual scores can be a token of more or less conscious forms of discrimination. The user could complain fraudulently just to gain an advantage; in some cases, she could give a medium-low score without being required to give a reason; or the rating itself could influence her.⁸⁷

When the dataset is not entirely reliable, decisions based thereupon can be flawed to the detriment of individuals. Lacking appropriate guarantees to ensure the accuracy of the data, including with regard to the various stages of the decision-making, the processing risks coming into conflict with the principle of accuracy from a substantive point of view.

4. Recommendations for the Star System

The considerations made regarding the case study lead us to question what function and purpose R&R systems should have for ensuring the fair development of shared mobility platforms. This Section will outline some suggestions and guidelines for pushing the design of R&R systems in this direction.

The GDPR requires that data must be processed in accordance with the fundamental principles enshrined in Art. 5. The lawfulness of the processing requires, first and foremost, that any activity involving personal data be conducted on a legitimate legal basis. The identification of such a basis is intertwined with the purpose of the processing and its concrete modalities of execution. Therefore, if the purpose is informative rather than self-regulatory, the assessment can differ.

Among the bases that can make the processing lawful, the main one is the data subject’s consent, provided that its four fundamental conditions are ensured: consent must be free, informed, specific and unambiguous. Even by designing the appropriate choice

⁸⁵ WP29, ‘Guidelines for automated decision making and profiling’ (2018), 13.

⁸⁶ *ibid.*

⁸⁷ For a discussion of each example, see above section 2.

architecture to obtain users' genuine consent for a given purpose, consent may not be an adequate lawful basis in some cases, for example, because of the particular relationship between the parties. This situation could occur where there is a structural imbalance between the controller and the data subject, such as in an employment context or where 'the performance of a contract, including the provision of a service, is dependent on the consent despite such consent not being necessary for such performance'.⁸⁸ Furthermore, it should be borne in mind that data subjects are always free to withdraw their consent:⁸⁹ therefore, such consent may not even be the most efficient lawful basis if the platform intends to maintain the R&R system as a critical feature of its services.

Considering the importance of ratings for the business model of shared mobility platforms, the controller could potentially base the processing on the legitimate interest of the platform itself or third parties. This legitimate interest must be balanced against the fundamental rights or freedoms of the data subject in a comparative assessment that takes into account the appropriate safeguards, including those related to proportionality and transparency, to reduce any disproportionate impact on users.⁹⁰

Thus, if the ratings essentially have a self-regulatory function, for example, adequate mechanisms should be put in place to (1) inform data subjects about the functioning of the decision-making process, (2) allow the rectification of scores given by mistake, (3) exercise the rights under Art. 15 et seq. GDPR, (4) ensure the principle of accuracy in the design of the processing and at all stages of its development, and (5) prevent potential distorting or discriminatory effects of the rating. More generally, the controller could demonstrate its minimisation of disproportionate consequences for data subjects by complying with technical standards, where they exist (e.g. ISO 20488:2018, Online consumer reviews—Principles and requirements for their collection, moderation and publication).⁹¹

A concrete measure inspired by the case study could consist of not showing a user's rating to the other users of the platform. This solution would be consistent with the principle of minimisation. If the purpose of the rating is essentially punitive, the communication of this information to another user is superfluous given the limited

⁸⁸ GDPR, art 7(4) and recital 43. On this point, see also WP29, 'Guidelines on Consent under Regulation 2016/679' (2018), 8-9.

⁸⁹ GDPR, art 7(3).

⁹⁰ WP29, 'Opinion 6/2004 on the implementation of the Commission decision of 14-V-2004 on the adequate protection of personal data contained in the Passenger Name Records of air passengers transferred to the United States' Bureau of Customs and Border Protection, and of the Agreement between the European Community and the United States of America on the processing and transfer of PNR data by air carriers to the United States Department of Homeland Security, Bureau of Customs and Border Protection' (2004) WP95, 48.

⁹¹ Such standard has been modelled on the French standard NF Z74-501 (<<https://certificats-attestations.afnor.org/referentiel/NF522>> accessed 30 December 2019).

decision-making space of the latter in relation to the choice of the counterparty. Moreover, the communication of the rating could create a vicious circle if we take into account the effects of confirmation bias. The availability of the rating might unduly influence the individual score given by another user, which then flows again into the overall rating.

On the contrary, if the rating has a substantially informative function, its communication might be useful for the individual transactional decision. However, in this case, the principle of minimisation would require, for example, ensuring that the rating is only shown to registered users when requesting or offering a ride, not to any internet surfer.

The above considerations on the lawful basis allow us to underline a final point, which is becoming crucial in the light of the growing diffusivity of R&R systems and algorithmic decision-making processes. The analysis of Art. 22 GDPR should lead us to conclude that the possibility of using decision-making processes that result in the automated deactivation of users should be limited, if not entirely banned. It is true that Art. 22 GDPR is subject to exceptions, in particular when the decision-making process is necessary for the performance of the contract or is explicitly authorised by the data subject. However, these conditions are difficult to meet in the context of ratings.

Even if the decision-making process is not solely automated and provides for human oversight, it is fundamental to ensure the accuracy of the entire processing by default. As an additional measure, it will be necessary to provide a mechanism on the platform for users to challenge incorrect ratings in order to effectively exercise their rights of rectification and erasure.⁹²

5. Conclusions

The ability to assess one's peers and make this assessment available to other users has been one of the reasons for digital platforms' success. Ratings can potentially help create a trusted environment, allowing users to rely on each other's performance reasonably. After all, how many people would accept a ride from a stranger if it were not an Uber driver? Or how many would trust an individual's driving skills if they could not check her Blablacar reviews first?

One of the main functions of R&R systems is to provide information about the user's reputation. However, such systems are also meant to regulate the behaviour of users and maintain the platform as an attractive network. Nevertheless, the self-regulatory function of rating systems such as the one adopted by Uber raises a few concerns from a data protection standpoint. The analysis of this model has provided a paradigmatic case study

⁹² Analogous to what is guaranteed by GDPR, art 22(3) in case of solely automated decision-making.

not only to verify how R&R systems have been developed in practice but also to isolate those aspects that deserve special attention when controllers implement reputational systems.

To this end, it has been observed that a decision-making process based solely on the automated aggregation of scores and resulting in the exclusion of users from the platform is likely to be considered unlawful under the current data protection framework. Therefore, in developing an R&R system, the controller should ensure the presence of effective human oversight, where the person in charge considers further elements in addition to the results of the rating and ensures the fairness of the assessment.

In any case, the fundamental question as to the reliability of reputational systems remains. Despite the potential benefits and the promise of greater transparency, R&R mechanisms are still far from being a perfect tool for assessing the quality of a performance. In the absence of adequate safeguards, such as algorithmic audits and the appropriate design of the scoring system, ratings may serve as a vehicle for prejudice and discrimination, affecting the rights or interests of the subjects receiving the evaluation. It is therefore essential to ensure that the principle of substantive accuracy is respected in the design of rating systems and that the processing of personal data, including the associated decision-making, is accurate at all stages.