

Final report ILS 2.0

Data use, online consumer needs, business strategies and regulatory response

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In this period we have worked on several research projects to explore factors that impact upon the efficacy of information disclosure duties pertaining to customer data use in online business.

Publications:

- Boom, W.H. van, Rest, J.I. van der, Bos, C. van den, & Dechesne, M. (2020). Consumers Beware: Online Personalized Pricing in Action! How the Framing of a Mandated Discriminatory Pricing Disclosure Influences Intention to Purchase. *Social Justice Research*. [Online first](#).
- Graaf, T.J. de (2019). Consequences of Nullifying an Agreement on Account of Personalised Pricing, *Journal of European Consumer and Market Law*, 8(5): 184-193.
- Graaf, T.J. de (2019). Gevolgen van vernietiging van B2C-overeenkomsten bij conforme producten en diensten, in het bijzonder in het geval van prijspersonalisatie, *Maanblad voor Vermogensrecht* (10): 344-353.
- Ooijen, I. van, & Vrabc, H.U. (2019). Does the GDPR Enhance Consumers' Control over Personal Data? An Analysis from a Behavioural Perspective. *Journal of Consumer Policy*, 42(1): 91-107.
- Ooijen, I. van (2018). Opting opt-in or out? Effects of Defaults on Psychological Ownership and Valuation of Personal Data. In: A. Gershoff, R. Kozinets, and T. White. *Advances in Consumer Research*, 46.
- Ooijen, I. van (2018). Responses to Online Behavioral Advertising Disclosures: Effects of Disclosure Source Trustworthiness and Message Type on Advertising Outcomes. In: A. Gershoff, R. Kozinets, and T. White. *Advances in Consumer Research*, 46.
- Sears, A.M. (2020). The Limits of Online Price Discrimination in Europe. *Columbia Science & Technology Law Review*, 23(1): 1-43.
- Rest, J.I. van der, Wang, X.L., & Miao, L. (2020). Editorial - Ethical Concerns and Legal Challenges in Revenue and Pricing Management. *Journal of Revenue and Pricing Management*, [Online first](#).
- Rest, J.I. van der, Sears, A.M., Wang, X.L., & Miao, L. (2020). A Note on the Future of Personalized Pricing: Cause for Concern. *Journal of Revenue and Pricing Management*, [Online first](#).

Presentations:

- Boom, W.H. van, Rest, J.I. van der, Bos, C. van den, & Dechesne, M. (2016). Buyers Beware: Online Pricing in Operation! How the Framing of Mandated Behavioral Pricing Disclosure Influences Intention to Purchase. *First Conference on Empirical Legal Studies in Europe (CELSE)*, 21-22 June, Amsterdam, NL.
- Boom, W.H. van, Rest, J.I. van der, Bos, C. van den, & Dechesne, M. (2018). An Update on Buyers Beware: Online Pricing in Operation! How the Framing of Mandated Behavioral Price Discrimination Disclosure Influences Intention to Purchase. *ILS Lunch Seminars*, 15 February, Leiden, NL.
- Boom, W.H. van, Rest, J.I. van der, Bos, C. van den, & Dechesne, M. (2018). Unanticipated Effects of Regulatory Intervention: How the Framing of Pricing Disclosure Influences Purchase Intention. *Amsterdam Privacy Conference (APC)*, 5-8 October, Amsterdam, NL.

- Graaf, T.J. de (2019). Personalised pricing and the consequences of nullification. *17th Conference of the International Association of Consumer Law (IACL) on Innovation and the Transformation of Consumer Law*, 13-15 June, Indianapolis, USA.
- Ooijen, I. van (2018). How disclosure source affects trust and advertising effectiveness in online behavioral advertising. *Association for Consumer Research (ACR) annual conference* ('Trust in Doubt? Consuming in a Post Trust World'), 11-14 October, Dallas, US.
- Ooijen, I. van, & Kamleitner, B. (2018). May we Collect your Digital Identity? How Framing User Data as part of the Digital Identity affects Perceived Ownership and Data Disclosure Behaviors. *IFIP Summer School for privacy and identity management* ('accountability and transparency in the age of big data'), 20-24 August, Vienna, AT.
- Van Ooijen, I. (2018). Opting opt-in or out? How defaults affect data protective behaviors. Presented at *Amsterdam Privacy Conference*, October 7, 2018, Amsterdam, The Netherlands
- Ooijen, I. van,(2018). Control by default? How privacy by default affects perceptions of control. *Association for Consumer Research (ACR) annual conference* ('Trust in Doubt? Consuming in a Post Trust World'), 11-14 October, Dallas, US.
- Sears, A.M. (2018). The Limits of Online Price Discrimination in Europe, *eLaw Research Colloquium*, 14 December, Leiden, NL.

Van Boom, W.H., Van der Rest, J.I., Van den Bos, C., & Dechesne, M. *Consumers Beware: Online Personalized Pricing in Action! How the Framing of a Mandated Discriminatory Pricing Disclosure Influences Intention to Purchase.*

Abstract

Online businesses collect a wealth of data on customers, often without properly informing them. Increasingly, these data are used for behavioral price discrimination. In this two-study article, we explore how consumers would respond if businesses were compelled to disclose their use of discriminatory behavioral pricing techniques. Using different disclosure frames, we examine the effects of disclosure on purchase intention and purchase probability. The findings indicate that specific disclosure frames affect purchase intentions. Furthermore, we find that a disclosure frame that is more in line with a consumer's self-interest, increases purchase intention. Specifically, the frame indirectly influences intention to purchase through its effect on the perception that the use of behavioral pricing information serves self-interest. In this way, our study draws attention to a potentially unanticipated effect of regulatory intervention. Implications for future research and legal policy are discussed, focused on the need to design and empirically test the effectiveness of disclosures online.

Keywords: Personalized Pricing; Behavioral Price Discrimination; Mandatory Disclosure; Warning Frames; Information Regulation; Privacy.

- The research was accepted as a working paper for presentation at the *First Conference on Empirical Legal Studies in Europe (CELSE)* in Amsterdam (21-22 June, 2016). A second experimental study was undertaken. This study was added to the paper which has been accepted as a working paper for presentation at the *Amsterdam Privacy Conference (APC)* in Amsterdam (5-8 October, 2018).
- The final version of the paper was accepted by *Social Justice Research*.

Graaf, T.J. de. *Consequences of Nullifying an Agreement on Account of Personalised Pricing*

Abstract

Personalized pricing uses (big) data and artificial intelligence to allow suppliers to sell goods and services to each consumer at the maximum price that each individual consumer is prepared to pay for such good or service. Quite a lot of research focuses on whether suppliers using personalized pricing infringe upon EU laws and if so, what measures can be taken to act against such infringement. In general, EU consumer laws seem to allow for personalized pricing as long as the consumer has been duly informed thereof. However, if a consumer has not been so informed and national law allows for nullification of an agreement concluded under the influence thereof, the question arises what the civil law consequences of such nullification are. On this area of law, surprisingly little research has been conducted. It is this void I attempt to fill, in particular in relation to (national law implementing) the EU Unfair Commercial Practices Directive 2005/29. This is important because the EU has left it up to individual EU Member States to provide “effective, proportionate and dissuasive” sanctions against infringements of that directive. If research shows that the consequences of nullification do not meet that test and are perhaps even dead letters, other measures must be considered. Using Dutch and Belgian law as an example, three possible consequences of nullification were analyzed against the backdrop of this test: (1) let the consumer keep the good delivered or service provided free of charge, (2) let the consumer return the good or service delivered in exchange for the price paid minus a compensation for the use he/she has made of such product or service or (3) achieve a price reduction by means of partial nullification or full nullification with conversion.

Keywords: Personalized Pricing; Sanctions; Nullification.

- An abstract of the research was accepted for presentation at the *17th Conference of the International Association of Consumer Law (IACL) on Innovation and the Transformation of Consumer Law* in Indianapolis, USA, (13-15 June, 2019).
- The research has been published by the *Journal of European Consumer and Market Law (EuCML)*.
- The EuCML article has subsequently been remastered, revised to deal more specifically with Dutch law and published by the *Maandblad voor Vermogensrecht*.

Ooijen, I. van. *How disclosure source affects trust and advertising effectiveness in online behavioral advertising.*

Abstract

Research indicates that disclosures on online data collection often act as heuristic cues that foster trust, rather than induce caution. This study demonstrates that for a less trusted platform (i.e., Facebook), the effects of disclosures about online behavioral advertising (OBADs) on ad effectiveness depend on the OBADs source. Only when the OBADs source was a trusted third party (vs. the less trusted platform itself), the OBAD reduced reactance towards the advertising. Further, we found a boundary condition for this effect – An OBAD from a third party only increases advertisement effectiveness when the message is framed as a notice, not as a warning.

- This research has been accepted as a working paper for presentation at the *Association for Consumer Research (ACR) annual conference* (“Trust in Doubt? Consuming in a Post Trust World”) in Dallas (11-14 October, 2018).
- Currently, the paper has been submitted to a journal for review

Ooijen, I. van, & Kamleitner, B. *Control by default? How privacy by default affects perceptions of control.*

Abstract

This work aims to unravel why consumers do not act on their privacy concerns, by examining on how the architecture of choice design affects motivations to engage in privacy protection behavior. We demonstrated that the adoption of opt-in versus opt-out choice designs with regards to personal data disclosure increases the degree to which individuals experience control over their personal data, and, in turn, increases the degree to which they value their data. By doing so, this study provides an important first step in demonstrating that a lack of perceived control over one's personal data could be one of the factors that withhold individuals from taking action to protect their online privacy (i.e., the privacy paradox).

- This research has been accepted as a working paper for presentation at the *Association for Consumer Research (ACR)* annual conference ('Trust in Doubt? Consuming in a Post Trust World') in Dallas (11-14 October, 2018). It has also been accepted as a working paper for presentation at the *Amsterdam Privacy Conference (APC)* in Amsterdam (5-8 October, 2018).
- Currently, five additional studies have been conducted. The manuscript is likely to result in a paper (international journal submission).

Ooijen, I. van, & Kamleitner, B. *The digital blueprint as metaphor for online identity: effects on internet users' perceived ownership and privacy concerns.*

Abstract

In online data requests, personal data is often framed as 'user data'. This study examines how framing personal online data as "a digital self" affects perceived ownership of personal data, perceived vulnerability and data protection behavior in a situation where individuals are asked to disclose their personal data online. We manipulated the communication strategy that is used by either framing personal data as "user data" or as "digital self" (digital self condition). Results indicate that individuals experience more ownership of the collected data about themselves when data is framed as "a digital self", compared to when data is merely framed as "user data". As a result of increased perceptions of ownership, participants felt more vulnerable, and actually disclosed less personal data to a website.

- This research has been presented as a full paper presentation at *IFIP Summer School for privacy and identity management* ('accountability and transparency in the age of big data') in Vienna (20-24 August, 2018).

Ooijen, I. van, & Ursic, H. *Does the GDPR Enhance Consumers' Control over Personal Data? An Analysis from a Behavioural Perspective.*

Abstract

Because of increased technological complexities and multiple data-exploiting business practices, it is hard for consumers to gain control over their own personal data. Therefore, individual control over personal data has become an important subject in European privacy law. Compared to its predecessor, the General Data Protection Regulation (GDPR) addresses the need for more individual control over personal data more explicitly. With the introduction of several new principles that seem to empower individuals in gaining more control over their data, its changes relative to its predecessors are substantial. It appears, however, that, to increase individual control, data protection law relies on certain assumptions about human decision making. In this work, we challenge these assumptions and describe the actual mechanisms of human decision making in a personal data context. Further, we analyse the extent to which new provisions in the

GDPR effectively enhance individual control through a behavioural lens. To guide our analysis, we identify three stages of data processing in the data economy: (1) the information receiving stage, (2) the approval and primary use stage, and (3) the secondary use (reuse) stage. For each stage, we identify the pitfalls of human decision-making that typically emerge and form a threat to individual control. Further, we discuss how the GDPR addresses these threats by means of several legal provisions. Finally, keeping in mind the pitfalls in human decision-making, we assess how effective the new legal provisions are in enhancing individual control. We end by concluding that these legal instruments seem to have made a step towards more individual control, but some threats to individual control remain entrenched in the GDPR.

– This paper has been published in *Journal of Consumer Policy*.

Sears, A.M. *The Limits of Online Price Discrimination in Europe*.

As big data capabilities have increased, so has the ability for price discrimination. Price discrimination occurs when sellers offer goods and services at different prices to different consumers. Profiles of consumers can be created based on a variety of factors, such as their location, past purchases or behaviors online, or, more frequently, a large number of factors that when combined enables sellers to serve tailored prices based on differences between these consumer profiles. In addition to these algorithmic forms of price discrimination, simpler methods are also in use, such as discriminating prices solely on the basis of a consumer's IP address.

This article aims to provide a comprehensive mapping of the boundaries of online price discrimination in Europe. While few legal provisions speak directly to online price discrimination or personalized pricing, a number of areas of law likely have a bearing on the extent to which price discrimination is legally permitted. As such, this article will examine competition law, consumer protection law, data protection law, and non-discrimination law in order to determine where online price discrimination may constitute noncompliance with one of the relevant provisions, as well as to denote where it appears that the framework is ill-equipped to adequately address the practice. Practical and sociological aspects relating to both online price discrimination and the application of the legal frameworks in these areas are also incorporated.

– This article has been published in the *Columbia Science & Technology Law Review*.
<https://journals.library.columbia.edu/index.php/stlr/article/view/4875>

Rest, J.I. van der, Wang, X.L., & Miao, L. *Ethical Concerns and Legal Challenges in Revenue and Pricing Management (Special Issue Editorial)*.

Editorial

Over the past two decades we have seen phenomenal developments in the field of pricing and revenue management (RM). This is exemplified by the rise of e-commerce, artificial intelligence and big data analytics which have influenced pricing and revenue management decision-making processes at both strategic and functional levels. Driven by competitive pressures and financial interests, we have witnessed how sophisticated RM systems and pricing practices have become data-driven, impacting the revenue growth. But, what are the downsides to this; what are the

costs? While little attention has been paid to ethical concerns in RM, the increased use of automation and consumer data have prompted much debate in the public arena, and subsequently pricing practices have come under greater legislative and regulatory scrutiny globally in recent years. The “dark side” of algorithmic pricing thus appears to have emerged, though has yet to be fully explored. This special issue aims to draw scholarly attention to ethical and legal concerns in pricing and RM, particularly as they relate to the hospitality and tourism industry. It intends to initiate more critical discussions on issues such as injustice, unfairness, dishonesty, and misconduct in pricing and RM practices that could impact the field for many years in the future.

1. Ethical and legal considerations of artificial intelligence and algorithmic decision-making in personalized pricing (14 pages)
<https://link.springer.com/article/10.1057/s41272-019-00225-2>
2. A special price just for you: effects of personalized dynamic pricing on consumer fairness perceptions (14 pages)
<https://link.springer.com/article/10.1057/s41272-019-00224-3>
3. A Note on the Future of Personalized Pricing: Cause for Concern (about 12 pages)
Sent to Springer on Sunday 16/2/2020
4. The perceptions of frontline employees towards hotel overbooking practices: exploring ethical challenges (10 pages)
<https://link.springer.com/article/10.1057/s41272-019-00226-1>
5. The impact of resort fees on perceived fairness and destination brand image: an exploratory study (9 pages)
<https://link.springer.com/article/10.1057/s41272-019-00218-1>

Book reviews

Martyn Pring: Luxury railway travel: a social and business history (2 pages)
<https://link.springer.com/article/10.1057/s41272-020-00230-w>

Conference review

3rd Revenue Management & Pricing in Services Conference (2019 RevME Europe) (about 5 pages)
Sent to Springer on the 16/2/2020

Van der Rest, J.I., Sears, A.M., Wang, X.L., & Miao, L. *A Note on the Future of Personalized Pricing: Cause for Concern.*

To date, pricing and revenue management literature has mostly concerned itself with how firms can maximize revenue growth and minimize opportunity cost. Rarely has the ethical and legal nature of the field been subjected to substantial comment and discussion. This viewpoint article draws attention to some inherent ethical concerns and legal challenges that may come with future developments in pricing, in particular online personalized pricing, thereby seeking to initiate a broader discussion about issues such as dishonesty, unfairness, injustice, and misconduct in pricing and revenue management practices. Reflecting on how legislators and regulators in Europe seek to limit recent developments in personalized pricing, we argue that not much is to be expected from the legal system, at least not in the short run, with regard to

guiding the pricing and revenue field in setting and implementing minimum standards of behavior. Scholarly attention should however not only be directed to the legal challenges of new forms of direct price discrimination, such as algorithmic personalized dynamic pricing, but also to the ethical and legal implications of more granular forms of indirect price discrimination, through which consumers will be allowed to 'freely' sort themselves into different microsegments, especially when the 'self-selection' is enticed by deceptive personalized applications of psychological pricing and neuromarketing.