Personalised Pricing in the Digital Era – Note by the Netherlands

28 November 2018

This document reproduces a written contribution from the Netherlands submitted for item 1 of the joint meeting between the Competition Committee and the Committee on Consumer Policy on 28 November 2018.

More documentation related to this discussion can be found at:

Please contact Mr. Antonio Capobianco if you have any questions about this document
[E-mail: Antonio.Capobianco@oecd.org]
1. Background

1. ACM is a multifunctional authority that was created on 1 April 2013 by the merger of the Netherlands Competition Authority (NMa), the Netherlands Independent Post and Telecommunications Authority (OPTA) and the Netherlands Consumer Authority (CA). ACM’s strategy focuses on the welfare of the consumer. We aim to create opportunities and options for businesses and consumers.

2. The digital economy is one of ACM’s key priorities. Society and markets are changing fundamentally because of digitalisation. Businesses increasingly use data and algorithms in order to offer services and products that are now part of our daily lives, or which offer new opportunities. Think of the rise of online platforms, search engines, the Internet of Things, and blockchain technology. Thanks to these innovations, the digital economy can offer businesses and consumers valuable options and opportunities.

3. At the same time, however, more and more attention is given to the risks of digitalisation. For example, privacy issues related to the use of data and concerns about the growing dominance of large platforms are being widely debated.1 The focus of this paper – online personalisation – is more specific, although concerns raised about the effects of online personalisation are closely related to issues of market power and big data.

4. With this paper we wish to contribute to the discussion on the policy implications of online personalisation strategies. Given our wide policy remit, ACM looks at online personalisation from the broader perspective of not only competition, but also consumer protection in the digital economy. Competition law and economics tends to focus specifically upon price discrimination and its welfare effects. However, from the perspective of consumer choice and competition dynamics in the digital age, we think it is wise not to narrow down the discussion on personalisation to pricing. We observe that the risks and opportunities of online personalised pricing overlap with other forms of price differentiation and other personalisation strategies like “price steering.” Given possible interdependencies, it appears to be difficult to distinguish between these various dimensions.

5. ACM therefore proposes to look at price personalisation within the scope of other forms of price differentiation and other personalisation strategies such as targeted advertisements and personalised rankings of online search results. In the following we will therefore address the questions raised by the Joint Committee’s Chair in the wider context of “online personalisation”.

6. In section 2, we define the concept of personalisation and the scope of this paper. In section 3, we discuss the (potential) benefits and risks of online personalisation. In section 4, we reflect on the challenges of detecting and proving harmful practices in a personalised environment. In sections 5 and 6, we set out the most important conditions

---

for a positive outcome of personalisation strategies and the instruments we have as an integrated enforcement authority to help make sure these conditions are met. In the final section, we propose some next steps to improve detection, analysis, and intervention approaches targeting the personalisation strategies of firms.

2. Definition of online personalisation

7. Essentially, online personalisation entails the practice of differentiating between online consumers. The differentiation is based on those personal characteristics and behaviours (including possibly their willingness to pay) that undertakings have inferred from the data on the consumer that they have collected, processed, and combined.\(^2\) The data may lead to a certain profile that an undertaking can target (almost) individually, and can thus result in different personalised offers for different consumers. It may also lead to businesses being able to predict consumers’ behaviour more accurately than they can do themselves.

2.1. Three types of personalisation

ACM distinguishes the following three relevant types\(^3\) of online personalisation, based on one or more personal characteristics or behaviours inferred from consumer data:

- personalised pricing: different consumers are offered different prices for the same product;
- online targeted advertising: different ads are presented to different consumers when visiting the same website or using the same application;
- personalised online search results: different consumers find a different (ranking of) search results while entering the same search query.

8. From the empirical literature\(^4\) available, we conclude that online targeted advertising and personalised online search results are used. We found only anecdotal evidence for the existence of personalised pricing. We also found that differentiation in personalised pricing and price steering is often based upon one variable or a limited set of variables, and not on a sophisticated, multi-data customer profile. In that sense, these forms of personalisation cannot strictly be regarded individualisation or “first degree” price discrimination. In the future, more sophisticated differentiation and pricing strategies that move closer to “first degree” price discrimination may be observed. This

\(^2\) European Commission (2018), Consumer market study on online market segmentation through personalised pricing/offers in the European Union, Brussels: European Commission, https://ec.europa.eu/info/publications/consumer-market-study-online-market-segmentationthrough-personalised-pricing-offers-european-union_en, p. 49: Personal data can be volunteered or ‘surrendered’ by online users (e.g. when creating accounts online or interacting on social media), observed (e.g. when browsing activity is tracked using cookies) or inferred (e.g. by combining and analysing data obtained from different sources, often from data brokers). Online firms can use several tracking methods to follow consumers across platforms, websites and devices. These include the usage of cookies, but increasingly also more advanced and sophisticated tracking methods, such as digital fingerprinting and web beacons, which are harder for consumers to prevent or stop.

\(^3\) Ibid. p. 33.

may be due to increased possibilities to collect data (e.g. as a result of IoT) as well as more sophisticated and cost-efficient ways to analyse these data and translate the results into differentiated offers (e.g. artificial intelligence and machine learning). Still, we believe that online personalised pricing for the time being will remain a form of “third degree” price discrimination.

9. In the following, we focus on online personalisation in consumer markets. In business-to-business markets, personalisation of prices, products and services has always been more commonly observed, and has been less influenced by digitalisation and the collection of online user data. It is also less objectionable where the relations between the parties involved are more symmetrical, because both are professional. This distinction is less clear-cut when the purchasing businesses involved are in fact self-employed persons and the relevant services could be tied to their role as private consumers as well.

2.2. Distinguishing personalisation from other trends

10. We agree with the OECD\(^5\) that personalised pricing differs from, for example, dynamic pricing, A/B testing, and targeted discounting.\(^6\) Of course there are important differences. Dynamic pricing for instance is driven by market information (for example through algorithmic monitoring of one competitors’ pricing), rather than (just) personal data. It is commonly applied to products that are perishable, time-sensitive, have a depreciating value, or are scarce.\(^7\) A/B testing may lead to randomly assigning a certain variant of an internet page, instead of this variant being the result of a personalised and targeted action by a business. Targeted discounting is the use of (loyalty) discounts and offers, based on previous shopping habits, or the consumer’s route to a website (i.e. via a price comparison site).

11. On the other hand, singling out personalised pricing from other pricing trends is not always rational from a policy perspective. Some of these trends imply similar risks and opportunities. Targeted discounts for example, may raise transparency issues comparable to personalised pricing: is the discount based on personal data? And is the reference price on which the discount is based a price actually charged to other consumers? Indeed it might be argued that, targeted discounts, though framed differently (“discounts”), do not differ in essence from personalisation of prices. Personalised, dynamic and A/B pricing have in common that they all lead to differentiated and more rapidly changing prices. This raises issues, both from the perspective of informed choice and from the perspective of detection and enforcement. Consumers may observe rapidly changing prices and may not know what these changes are based on. Consumers may think they are based on their personal data, whereas they are based on market information, or vice versa. Enforcement authorities may experience the same problems in the detection of price discrimination.

\(^5\). Ibid, p. 5.
\(^6\) For the definition, we refer to the OECD literature review (2018).
3. Benefits and risks

12. Online personalisation strategies bear both risks and benefits for the competitive process between businesses and for the final consumer. Moreover, positive and negative effects may well be unequally divided among various groups of consumers. For instance, as a result of personalisation, societal groups with fewer opportunities to recognise and opt out of personalisation are likely to pay a price for that, leading to issues of redistribution of wealth. As they are also likely to be less well-off to start with, this can be regarded as a public interest problem.

13. At its best, businesses apply personalisation strategies to offer consumers a better shopping experience, tailor their offers to their preferences regarding price, quality, and product characteristics, reduce their search costs and ease the decision making process. Research shows that a smooth decision-making process tends to make consumers feel more satisfied and less doubtful afterwards.8 As Townley (2017) has shown, personalised prices can intensify competition, when they are applied to offer a better deal to consumers that have to be “acquired.”

14. At its worst, personalisation strategies are employed to steer consumers’ choices towards offers that mainly generate the highest profits for businesses, to deter consumers from searching the market for the best options (e.g. through “buy now”-discounts)9, or to raise their search costs by steering consumers towards the most expensive options they are willing to pay for, while disregarding other preferences, e.g. with regard to quality. As a result, consumers may end up with products that do not serve their best interests, and may lose access to products they do need or like. Personalisation strategies that raise search and switching costs may also reduce competition between businesses.

15. We see two sources of risk of an unequal distribution of costs and benefits. First, we think that consumers who are more vulnerable towards impulse buying (for example the young), less tech-savvy (for example the old), or less engaged to compare prices risk losing out. Whereas in markets with standardised offers these customers are protected indirectly by the active consumers who switch, they lack this protection where offers are personalised. Second, we agree with the Joint Committee Chair’s note10 that the algorithms, used by businesses to distinguish between groups of consumers with different willingness to pay, may incorporate unlawful discrimination on the basis of gender, religion, sexual orientation, or ethnic origin.

4. Detection of harmful personalisation in practice

16. Are the potential harms identified above likely to occur in practice? We think so. As the European Commission has observed, firms collect all types of personal data. This

---

8 In this respect, personalisation strategies are a sophisticated form of “choice architecture”, with the same benefits and risks. See https://www.acm.nl/en/publications/taking-advantage-predictable-consumer-behavior-online-must-stop


10 Introductory Chairs’ note (part 1) Roundtable on Personalised pricing in the digital era (28 November 2018)
includes both data that help to chart consumers’ preferences regarding the quality and price of certain products, and data that help to identify consumers who have limited consumer literacy, or have a higher willingness to pay – which can be caused by a lack of outside options. There can be little doubt that firms will use these data to apply both beneficial and harmful personalisation strategies. Moreover, in markets already characterised by high search costs and switching barriers, it is more likely that personalisation strategies employed by businesses will raise risks for consumers as well as for competition and ultimately society at large.

17. How can a competent authority assess the operation of personalisation and detect potentially harmful practices? Both the empirical literature on online personalisation and our own experience with the phenomenon of social selling suggest that detecting and proving harmful commercial practices in a personalised online environment poses a number of challenges. In the first place, personalisation strategies and their effects are opaque to the average consumer. This means that authorities should not expect to build on a significant number of spontaneous consumer complaints. Second, if an authority wants to investigate the phenomenon from the outside, it may require many different individual “customer journeys” over a long time to establish whether personalisation takes place, and how it affects different consumer groups. Finally, even if differentiated offerings, search results and prices are detected, it will not always be easy to establish the causes of differentiation. For example, is it a case of A/B-testing, geo-blocking or dynamic pricing?

18. There are several solutions to this, with varying degrees of intrusiveness and challenges to the authority’s capabilities. Authorities can promote public awareness of personalisation strategies, helping shoppers to recognise potentially harmful practices and stimulating consumers to report them. Real consumers and fake consumer profiles could be used to do mystery shopping. In addition, authorities could team up with academic experts to develop research methods based on these real and fake consumer profiles. Last but not least, authorities can also use their investigative powers to obtain the algorithms firms use as well as explanations on what their intended and actual effects are.

5. What are the most important conditions for a positive outcome?

19. Although we find that more empirical research is necessary to assess the occurrence and effects of personalisation, we think that it is safe to say that the following three conditions determine whether positive outcomes may result from the trend towards personalisation:

- **Effective competition:** In our view, effective competition does not only mean the absence of dominant firms inclined to engage in abusive behaviour, but also that consumers are willing and able to compare alternative offers. For example, search and switching costs should not be unreasonably high.

- **Balanced bargaining positions and opt-outs:** Many risks of personalisation strategies lead back to the fact that businesses know much more about consumers than consumers know about themselves. The massive collection of consumer data alongside the ability of digital firms to test their websites and apps and optimise the so-called "choice architecture," based on aggregate consumer data, as well as the ability to tailor this choice architecture towards individuals and small and dynamic groups of customers, has resulted in an asymmetry of information that is unprecedented before the digital age. In order for personalisation to work in
favour of consumers, this asymmetry has to be balanced out. Moreover, consumers should have options to “escape” personalised environments and choices with regard to sharing their data.

- **Protection of public interests:** In order for personalisation to work, we believe the outcome should not just be reasonable from the perspective of an individual consumer, but also for society as a whole. Personalisation should not lead to unlawful discrimination and harm to other public interests like accessibility and affordability of certain products and services. We believe that in a healthy digital environment, there should be (self-)regulatory structures that provide guarantees for the protection of public interests. Even dominant undertakings may be motivated to respect the interests of their consumers as part of the special responsibility that they have by definition, because the prohibition on abuse of dominance is a rule that exists only for undertakings with market power and as a matter of case law.\(^\text{11}\)

6. **What instruments do we have to guarantee the basic conditions necessary for positive outcomes?**

20. Below, we will first set out our general observations on the range of powers which ACM has at its disposal and the manner in which these can be applied. Next, we look at the instruments involved more specifically, first in relation to the general competition rules, second with regard to consumer protection, and third in relation to general public interest objectives.

21. **ACM already has a broad range of relevant powers:** As an organisation, ACM has a combination of general and sector-specific competition policy tools at its disposal, alongside consumer policy tools and general advocacy powers. Several instruments might be relevant for personalisation. These instruments range from the prohibition on abuse of dominance to various transparency and information requirements. In addition, in certain areas where ACM does not have an explicit role, ACM may exert some influence within its whole framework. Examples include the GDPR rules on informed consent, and on portability of data.

22. **The application of these powers to harmful forms of personalisation may sometimes regard a broad interpretation of the law:** Developments in personalised pricing give rise to new questions regarding the exact scope of ACM’s various powers and whether these powers are applied coherently. Also, it is difficult to discern the implications of every action. For instance, does the prohibition on abuse of dominance extend to price discrimination between consumers, and therefore to issues of redistribution, and/or to the fairness of transactions in general terms? If so, does this mean the objectives of competition policy will change? Will this also mean new priorities should be taken into account, such as the protection of vulnerable groups of citizens?

23. **The effectiveness of enforcement in the online context also requires attention:** ACM discerns issues that are related to effective enforcement. Ideally, the various instruments must be used consistently and effectively. Will a requirement of consent to

---

using personal data provide consumers with real choices, or will it amount to checking boxes in order to get to the next screen? First, we will have to prioritise problems, cases and target groups. Second, we will have to identify a proportionate approach to select the right instrument based on an escalating scale of intrusiveness. Third, we must use this instrument in a manner that maximises results in terms of consumer benefits. This is easily said, but less easily done.

24. Finally, interpreting existing powers broadly before asking for new ones is advisable: Must we first demonstrate that existing remedies do not suffice, before the need for new remedies becomes manifest? For example, we believe ACM might be able to interpret the prohibition on abuse of dominance as containing a duty of care, based on the special responsibility of dominant undertakings and given the extreme imbalance in bargaining power and information when dealing with data dominance. In this context it does not make sense to start from the premise that everything that is not specifically prohibited is therefore permissible.

25. Rather, if undertakings are targeting individual consumers based on a privileged data position in a fast moving environment where consumers and public authorities are likely to lag behind, their having a duty of care means at a minimum that they: (i) should not be allowed to make exploitative offers, (ii) should know their customers (as in the case of financial services), and (iii) take their best interests into account when offering personalised services online. The undertakings involved are obviously best placed to work out what this means in operational terms, priming their internal procedures and compliance. A duty of care could involve a commitment to “comply by design” i.e. to develop algorithms that produce results in line with the criteria mentioned above. However this duty of care approach does require defining principles. Public authorities would still enforce against transgressions of these norms alongside policing the quality of the compliance process as such.

26. ACM could try and apply this approach in practice within the current regulatory framework. For instance, based on the prohibition on dominance abuse. However, if courts refuse to see this interpretation as an admissible one under the law as it stands we could advocate additional legislation. This could take the form of general rules that extend to online personalised services beyond those provided by dominant undertakings. Still, we would prefer this pro-active approach now, as new legislation may take years to take effect, and we would risk wasting valuable time.

27. We will now discuss several remedies. In general terms, we do not suggest any hierarchical order of remedies. The choice of instruments depends on the issue at hand.

6.1. Remedies from a competition law perspective

28. In the exercise of its competition policy powers, ACM has focused primarily on promoting the competitive process and on consumer welfare in the sense of allocative efficiency. In the exercise of its consumer protection, ACM has always been sensitive to issues such as information asymmetries and relative bargaining power.\textsuperscript{12} Though not


Unclassified

PERSONALISED PRICING IN THE DIGITAL ERA – NOTE BY THE NETHERLANDS
without controversy, we observe that in the EU, fairness as a guiding principle and an underlying goal of EU competition policy gains prominence, most notably in the context of digital markets. The notion of fairness as promoted by Commissioner Vestager and DG Laitenberger comprises various aspects like procedural fairness and fair competition, but also includes “a fair share for consumers.” This raises the question what a more fairness-oriented interpretation of competition law by ACM would look like when applied to personalisation strategies.

29. We think that such an approach could imply that ACM decides to apply the prohibition on dominance abuse to price discrimination between (groups of) consumers. This will involve defining such abuse as exclusionary, exploitative or sui generis and developing a relevant theory of harm. For instance, it may be shown that not one’s ability to pay, but the absence of alternatives is the effective distinguishing criterion to charge some consumers a higher price than others. If the amount of alternatives a consumer has is dependent upon his socio-economic status (f.e. his postal code or the question whether he’s in debt), the theory of harm could be that discrimination in this case leads to the exploitation of socially vulnerable groups.

30. In addition to what we suggested above in general terms, in a more fairness-oriented approach, ACM could apply the duty of care with regard to undertakings with a dominant position, especially those companies that obtained that position through the collection of data of their own customers. If such data-generated dominant position of an undertaking can be established, a duty of care could involve requiring them to use their resources and superior information position in order to avoid exploiting their customers, pre-emptively and as a matter of compliance. In this way discrimination of consumers can be tackled as an unfair price or trading condition within the meaning of Article 102 (a) TFEU.

6.2. Remedies from a consumer protection law perspective

31. In this policy area ACM already has a number of powers that are more established and require fewer innovative interpretations:

- At the most general level, ACM can promote consumer empowerment by directing consumers towards existing market-based solutions, such as price comparison sites, and by informing consumers about their rights.

---


16 The notion of a fair share for consumers seems to refer primarily to distributive fairness between businesses and consumers and not to distributive fairness among different groups of consumers.

17 This would most likely be based on unfair prices under Article 102(a) or as a sui generis abuse under Article 102 TFEU (which is open-ended in this respect). The recent Case C-525/16, MEO – Serviços de Comunicações e Multimédia S.A v v Autoridade da Concorrência, Judgment of 19 April 2018, ECLI:EU:C:2018:270 has made clear that Article 102(c) TFEU would not apply here, as it is restricted to undertakings that are mutually in competition.
• ACM can inform consumers on matters such as disabling cookies and using private mode while browsing the internet.

• Existing rules on transparency and information requirements can also be applied to personalised offers. For instance, existing duties in European law to inform consumers about tracking and about the processing of their data for the purpose of personalised offers, the duty to disclose the commercial intent and the duty to inform on essential information may extend to the act of personalisation. The Consumer Rights Directive’s provisions on information requirements for distance contracts include an obligation to provide consumers in a clear and comprehensible manner with information on the total price including additional charges or “the fact that such extra charges are payable.” This provision can be read as an obligation to inform consumers about the fact that the price offered is based upon an analysis of his online behaviour and/or personal data.

• Other consumer rules such as those regarding undue influencing based on personalised advertisements and unreasonable conditions with regard to sharing personal data can also be applied.

• In addition, ACM and the Authority for Personal Data (AP) can work together in order to boost consumer influence on the use of their personal data. Notably this can involve explicit obligations with regard to personalisation, such as information and transparency obligations but also rights to opt in or opt out.

32. We propose to carry out a more integrated approach that goes beyond a traditional law and economics view, and may also involve ethics, behavioural economics and psychology. Multidisciplinary research may, for example, lead to a better understanding of consumers’ perspectives on informed choices and actions.

6.3. Remedies aiming to secure public interests in the area of discrimination and social inequality

• ACM has some explicit responsibilities, for example in securing access and affordability as part of its regulatory tasks. In addition, the prohibition on geo-blocking that will take effect end of this year gives ACM a role in the regulation of geographic discrimination.

• Where ACM does not have the primary responsibility to secure specific public interests, it can for example take those public interests into account in other ways. For example, when prioritising cases. As mentioned above, the question whether ACM can use inequality or redistributive concerns in the context of its competition law enforcement remains to be answered.

• Even when there is no explicit or implicit role, ACM can raise public interest concerns with regard to harmful market behaviour as part of its general advocacy role.

7. What do we propose?

33. Above, we have advocated an integrated and coherent approach based on utilising the different roles that ACM plays as a multidisciplinary authority. This means focusing on the consumer interest in a more traditional way, but also exploring new ways. This
could include the enforcement of non-discrimination rules against undertakings enjoying positions of dominance based on data collection from their own customers, and requiring these undertakings to observe a duty of care as a matter of compliance with their special responsibility as dominant undertakings.

34. We advocate a proportionate approach and propose a mix of instruments. For example, the structural information imbalance between consumers and (dominant) businesses should be redressed. In the first place, consumers should be informed about their rights and their options. In addition, consumer empowerment and the promotion of market based solutions, such as various intermediaries may be useful. Nevertheless, new regulation may also be required.

35. More broadly, the changes at hand in digital markets require reconsideration of the role of the government in markets, especially for market authorities such as ACM. What are the proper objectives and methods of a modern authority in this realm? Is a market authority an enforcer of rules or should it take a proactive approach and “make markets work”? Could traditional tools and methods be applied in a more proactive approach? Or would we need a new framework?

36. As regards methodology, we propose a multidisciplinary approach, which includes studying the behavioural effects of the various types of possible policy interventions. This in itself would require close collaboration with external experts, notably at universities and other research institutes, as well as other authorities in the Netherlands and abroad. Such collaborations, like the behavioural experiment on personalised offers undertaken by the OECD, can also contribute to the understanding of best practices.