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Re: The Anti-Competitive Effects of Algorithmic Personalized Pricing and the Big Data Economy

Pascale Chapdelaine, Pierre Larouche, & Jennifer Quaid

The GW Competition & Innovation Lab
Suite 621, 6th Floor, 805 21th Street NW
Washington, DC 20052
gwucil@email.gwu.edu

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The following is a submission in response to the Competition Bureau's discussion paper "Algorithmic pricing and competition" [Discussion Paper] soliciting comments from the public. The undersigned co-authors of this submission are law professors who conduct research and have widely published in competition law, personal data protection and privacy law, artificial intelligence (AI) governance, corporate criminal law and economic crime. This includes publications focusing on algorithmic personalized pricing.

We welcome this initiative by the Bureau. Algorithmic pricing raises multi-faceted competition and other legal issues that have received little attention by regulatory bodies in Canada and worldwide. In its Discussion Paper, the Bureau brings forward various use cases for algorithmic pricing, for instance to deal with fluctuations in supply and demand (dynamic pricing). We do not express any opinion on dynamic pricing or other use cases: in this contribution, we focus entirely on "algorithmic personalized pricing" (APP), i.e. the use of algorithmic pricing to bring prices as close as possible to the maximum willingness to pay (WTP) of consumers.

In line with the structure of the Discussion Paper, we will first set out our general analysis of algorithmic pricing (1), before dealing more specifically with how the *Competition Act* [the Act] can apply to it (2).

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1. Algorithmic pricing in general

In Section 1 of the Discussion Paper, the Bureau provides an overview of what algorithmic pricing is, how it works, what type of data it uses and where the data comes from, before setting out four discussion questions. In this heading, we will discuss the first three questions.

1.1. A broader view of the costs and benefits of algorithmic personalized pricing

In the Discussion Paper, the Bureau distinguishes between algorithmic dynamic pricing – namely the use of algorithms to improve the ability of suppliers to react quickly to changing market conditions and price accordingly – and algorithmic personalized pricing – namely the use of algorithms to ascertain consumers' willingness to pay (WTP), in order to set prices as close as possible to WTP. WTP is understood, as stated by the Bureau, as the maximum price that a given consumer is willing to pay for a particular product or service.

The Bureau also quite rightly associates algorithmic pricing with

price discrimination, namely the ability of a firm to charge different prices to different consumers. Economic literature distinguishes between three types of price discrimination. First-degree (or perfect) price discrimination occurs when a firm manages to charge WTP to each consumer. Until recently, first-degree price discrimination was perceived as a theoretical construct that cannot be achieved in practice, given the cost of gathering the data needed to ascertain individual WTP.[1]

In contrast, second- and third- degree discrimination are frequently encountered. Second-degree discrimination (also called versioning) involves proposing a palette of product versions at different prices and letting consumers self-select into the version they prefer. With third-degree discrimination (also called group pricing), consumers are divided into groups (e.g. seniors, students, etc.), each with specific pricing.

In our remarks, we chose to focus almost exclusively on algorithmic personalized pricing (APP), for the following reasons. First, algorithmic dynamic pricing tends to improve the ability of firms to engage into second- or third-degree price discrimination. Both forms of price discrimination are already well known to economic literature and to competition authorities. Furthermore, the consensus, both in academic literature and in competition law practice, seems to be that they can sometimes be beneficial to consumers, sometimes adverse, depending on the circumstances.[2] APP, by contrast, can enable first-degree price discrimination, the widespread implementation of which would be a novel phenomenon in our market economies. If one follows a neo-classical approach with perfect competition as the theoretical benchmark, markets clear at the equilibrium price, resulting in producer surplus (profit) for firms whose cost of production is lower than the market price, and consumer surplus for consumers whose willingness to pay (WTP) was higher than the market price.[3] Perfectly competitive markets are rarely encountered in real life; various strategies enable firms to gain

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[1] Paul Belleflamme and Martin Peitz, *Industrial Organization: Markets and Strategies*, 2nd ed (Cambridge: Cambridge University Press, 2015) at headings 8.1.1. and 8.1.2.

[2] For a recent analysis and taxonomy of the ways that algorithms affect consumers under different market conditions, see: Oren Bar-Gill, Cass R Sunstein and Inbal Talgam-Cohen, "Algorithmic Harm in Consumer Markets" (2023) 15 J Leg Analysis 1, online: <https://doi.org/10.1093/joclec/nhaf014> (advance access publication 2023-08-21) [Bar-Gill et al. 2023]

[3] As Bar-Gill et al. 2023 explain, the confiscation of consumer surplus varies under different conditions, but they reach a clear general conclusion that concern increases where markets are imperfect in relation to two key variables: information and rationality. As the authors note, at 3: "algorithmic differentiation is generally beneficial in PI-PR [perfectly informed – perfectly rational] markets, but often harmful in II-IR [imperfectly informed – imperfectly rational] markets."

market power and thereby typically achieve supra-competitive prices, meaning that they pocket some of the consumer surplus in the form of higher profits.[4] First- degree price discrimination is the ultimate confiscation of consumer surplus.

One could counter that APP is merely the culmination of larger trends towards more personalized offerings, so that in return for prices matching their WTP, consumers will probably receive offerings that more closely align with their preferences in every respect (product characteristics, specifications, quality, etc.).[5] In that sense, APP would be the ultimate form of second-degree discrimination, where every consumer receives a different version of the product and pays a personalized price. This does not seem realistic, however. Whereas APP would allow individualized pricing, production constraints are likely to impose limits on the individualization of the product itself (especially for physical products).[6] Indeed, mainstream business models hinge on what is called "mass customization", i.e. the combination of economies of scale on the production side (through modularity, etc.) with personalization on the commercialization side (by allowing the customer to make choices or select options with respect to the product). [7]Hence the perfect product personalization that would match APP is unattainable in most sectors. This implies that consumers will be paying a personalized price for a product that is the same as that which is sold to other consumers (at different personalized prices). The gain to consumers from tailor-made

[4] Contemporary industrial organisation textbooks, such as Belleflamme and Peitz, *supra* note 1, are primarily structured along the various strategies available to obtain and exploit market power, including those corresponding to second- and third-degree price discrimination

[5] In addition, to the extent that the market price is at a supra-competitive level because of the presence of market power, first-degree price discrimination (perhaps to a greater degree than other forms of price discrimination) can enable firms to serve consumers in the « deadweight loss » triangle. As Bar-Gill et al. 2023, *supra* note 2 at 5–10, explain, while these efficiency effects (reduced deadweight loss) may bring some benefit in cases of perfect information and perfect rationality (though at the cost of overall consumer surplus), in cases where information and rationality are imperfect it is possible that efficiency is reduced rather increased because prices may end up being set above the actual benefit to the consumer.

[6] See the literature on mass customization, which describes the ideal balance between achieving scale on the production side and differentiation on the consumer-facing side of the firm. Sources to be added?

[7] See B Joseph Pine, *Mass Customization: The New Frontier in Business Competition*, (Cambridge (MA): Harvard Business School Press, 1993), building on Stanley M Davis, *Future Perfect*, (Reading (MA): Addison Wesley, 1987). For more recent literature reviews, see Flavio S Fogliatto, Giovani J C da Silveira and Denis Borenstein, "The mass customization decade: An updated view of the literature" (2012) 138:1 Intl J Production Econs 14 and Gedas Baranauskas, Agota G Raisiene and Renata Korsakiene "Mapping the Scientific Research on Mass Customization: A Critical Review and Bibliometric Analysis" (2020) 13:9 J Risk Financial Management 220.

products is thus very likely to be less than the gain to producers from APP.

Second and more fundamentally, the generation of consumer surplus is a key factor in ensuring and maintaining the legitimacy of our economic policy. Economists tend to dismiss first-degree price discrimination quickly on account that it is impossible to achieve, limiting the analysis to pointing out that if it were implemented, consumer surplus would be entirely confiscated. First- degree price discrimination is then presented as a limit case within market theory, where every consumer becomes their own market. We would argue that, upon closer analysis, first-degree price discrimination does not fit within market theory at all: actually, markets are better presented as a device designed to counter or hinder first-degree price discrimination.[8] This requires, however, to acknowledge some core elements of markets that are usually assumed or presumed.

In neo-classical theory, for perfect competition to work, not only must there be large numbers of buyers and sellers on the market, but they must also be able to observe transactions. There must be a "marketplace". This marketplace was originally conceived of as a physical location, with direct observation (as still occurs on farmers markets), but it can also operate virtually and indirectly (through advertising and posted prices, among others). In addition to the practical impossibility so far of implementing first-degree price discrimination, the presence of a marketplace, i.e. the observability and publicity of market transactions, works directly against such discrimination: consumers will quickly observe that other prices are practised and will switch to other sellers. While perfect competition rarely if ever exists in practice, real-life marketplaces, however imperfect, for the most part still allow consumers to observe what is happening on the marketplace and behave accordingly. Producers that are rumoured to practice first-degree price discrimination suffer a hit to their reputation.

The consumer surplus that results from the impossibility of perfect price discrimination on a marketplace is a key element in the

[8] If for the sake of argument, a more Austrian view of markets (à la von Hayek) is adopted, the conclusion is similar. Under Austrian theory, the presence of information deficiencies and asymmetries drives market dynamism. Firms and consumers hold private information about their respective preferences, that cannot be gathered and centralized. Markets enable some private information to be revealed through transactions, hence improving the efficiency of markets on their way to an ever-elusive equilibrium. Entrepreneurs exploit a superior knowledge position to try to innovate. Perfect knowledge of consumer WTP is anathema to the very foundation of Austrian market theory.

legitimacy of economic policy: consumers who seldom if ever feel that they have "found a bargain" or "gotten a great deal" (i.e. the psychological manifestations of consumer surplus) are likely to become less confident or enthusiastic about the market economy. In the conventional understanding of market capitalism, the legitimacy of the market derives from the belief that it is a reliable driver of economic "merit": firms that best respond to demand will be rewarded with profit and success and those that do not risk failure or at least economic marginalization through the "discipline" of market forces. In addition, on the producer side, there is an obvious tension between the drive to increase profit by extracting consumer surplus and the constraints imposed by the marketplace on the ability to extract such surplus. Should these constraints disappear because first-degree price discrimination would become pervasive, then the incentive structure of firms would probably be affected to the detriment of consumers.

1.1. Existence of APP as a Commercial Practice

Through the questions it raises, the Discussion Paper aims to determine if the commercial practice of APP exists in Canada. In our view, there is ample academic literature, empirical research, business reports and international organization studies which, while acknowledging the opacity surrounding the use of algorithms by firms in general, and of APP in particular, leaves little doubt that this commercial practice is already present in Canada.[9] In light of

[9] See e.g., Oren Bar-Gill, Algorithmic Price Discrimination When Demand is a Function of Both Preferences and (Mis)perceptions, (2019) 86:2 U Chicago L Rev 217 at 218–19 and 226–27 (referring to British company B&Q, having tested in its stores price tags that interface with customers' phones and adjust display prices based on consumers' loyalty data and spending trends, and citing recent study findings that retailers and travel sites set prices that vary by hundreds of dollars between consumers; and referring to intermediaries gathering and selling information to retailers about consumers' willingness to pay, thus enabling personalized pricing); OECD, *Personalized Pricing In The Digital Era*, OECD Roundtables on Competition Policy Papers, No 222 (2018) at 16, online: <https://one.oecd.org/document/DAF/COMP(2018)13/en/pdf> (summarizing consumer reporting of experiences of personalized pricing, often negated by suppliers, documented in the literature: Amazon selling products to regular consumers at higher prices uncovered by deleting cookies on computer to cause drop in those prices; ZipRecruiter's (an online employment recruiter) experiment with algorithmic pricing based on customer data which resulted in 85% profit increase; online platform Coupons.com reporting on use of proprietary data on consumer behavior to target digital coupons to consumers; airline AirAsia BHD testing personalized baggage pricing to increase revenues, using big data and AI tools to better understand what passengers were prepared to pay; Aniko Hannak et al, "Measuring Price Discrimination and Steering on E-Commerce Websites" (Paper Delivered at the 2014 Internet Measurement Conference, Vancouver, 5 November 2014) online:

existing scholarship and evidence, we believe that gathering more data about these commercial practices in Canada and elsewhere, while commendable, should not delay efforts to develop a principled framework within which to examine the anti-competitive effects of APP.

Through its international collaboration with its G7+ peers, the Bureau is well-positioned to stay abreast of new developments internationally regarding APP, both in terms of new studies and enforcement activities. However, we also believe the Bureau has an important role to play in understanding how the phenomenon arises in a Canadian context. We urge the Bureau to devote resources to preparing publicly accessible information about APP, in order to ensure that the public and stakeholders are well-informed about how the Act applies to APP and when enforcement is appropriate. Given the particular risk to consumers, creating greater public awareness about APP though education and advocacy is essential.

The *Competition Act* and algorithmic pricing

While APP can lead to first-degree price discrimination, for such a strategy to be successful, a firm requires more than knowledge of the WTP of individual consumers. It must also be able to defeat the built-in forces that seek to prevent first-degree price discrimination on the marketplace, that is to say, it must prevent consumer switching to its rivals. In a properly functioning marketplace, a consumer faced with an individualized price aligned with their WTP should be able to observe that the same or a similar product is offered at different prices to other customers – via advertising or by witnessing other transactions – and eventually switch to a competing producer that offers a lower price.[10] As noted in the Discussion Paper, current trends in online retailing point to decreasing availability of reference or comparison points for consumers: other transactions are not easily observable, advertising contains no price information[11] and the prices on offer are expressly presented as individualized and time-bound prices. This is what one of the co-

<https://www.ftc.gov/system/files/documents/ public_comments/2015/09/00011-97593.pdf> (detailing an empirical study of 300 consumers visiting 16 popular websites, and also creating fake accounts to track different patterns, pointing to evidence of personalized pricing); See also Ethan Wilk, "An Old-Fashioned Economic Tool Can Tame Pricing Algorithms - Left Unchecked, Pricing Algorithms Might Unintentionally Discriminate and Collude to Fix Prices" *Scientific American* (April 26 2022) online: <https://www.scientificamerican.com/article/an-old-fashioned-economic-tool-can-tamepricing-algorithms/>.

[10] Or threaten the supplier with switching in order to obtain a lower price.

[11] Or prices that the consumer knows or should know are unlikely to be encountered, such as « starting from… » prices.

authors to this submission has coined as the phenomenon of "micro-market chambers".[12]

This is where the connection is made with the Act. Typically, the situations in which consumer switching can be prevented match the main elements of the Act. Firstly, consumer switching can be rendered pointless because the pricing policy of the various suppliers is aligned, which would point to the collusion (s. 45) and anti-competitive agreement (s. 90.1) provisions of the Act (1.). Secondly, if the firm making the individualized offer at WTP is also dominant (e.g. because it controls the platform on which transactions are made), its rivals might not have the strength to pierce the wall of that informational "micro-market chamber" in which the dominant firm seeks to hold its customers. This would lead to the provisions of the Act on dominance (s. 79) (2.). Finally, consumers could be deceived into staying in the "micro-market chamber", whereby APP could be constitutive of a deceptive marketing practice. Examples of deception of this kind include personalizing prices unbeknownst to the consumer, by extracting information collected about past behaviour that indicates a tendency by a consumer to overestimate the benefits of a product or to underestimate its real costs. Marketing may also be tailored based on whether consumers are aware of and can access other options.[13] (3.) We will deal with each of these three cases in turn. At the outset, we want to emphasize that APP does raise difficult issues under each of the provisions mentioned above.

1.2. Competitor Collaborations

The starting point for analyzing collaboration is the following: where enough market participants can reliably coordinate their pricing behaviour, either through direct agreement among them or through a coordinating third party, it displaces vigorous competition as a rational pricing strategy. What constitutes *enough participation* in a collaboration depends on the circumstances, but past enforcement has revealed that collusion arises most often in markets with a limited number of competitors, involving products and services that are relatively homogenous, have similar input costs or for which there are limited substitutes.[14] Demand inelasticity

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[12] Pascale Chapdelaine, "Algorithmic Personalized Pricing" (2020) 17:1 NYU JL & Bus 1 at 23 (by analogy to the phenomenon of "echo chambers," whereby tailored online business practices may create or reinforce false perceptions by consumers about relevant markets).

[13] Bar-Gill et al 2023, *supra* note 2 at 12–15.

[14] For a description of the history of enforcement against collusion in Canada, which describes the facts of some of the most prominent cases brought under the former conspiracy provision, see, John S Tyhurst, *Canadian Competition Law and Policy*,

contributes to the likelihood that price increases can be successfully implemented and maintained. Ease of monitoring and the ability to inflict discipline for noncompliance increases the chances that these arrangements can be sustained for long periods. This chimes in with the economic idea of collusion (especially as it was refined through game-theoretical analysis), which is generally associated with supracompetitive prices, a form of interaction between participants and some kind of reward and punishment scheme.[15]
It should be noted that the collusion in the economic sense does not align perfectly with legal prohibitions against cartel-like behaviour or other competitor collaborations, since economics emphasizes the alignment of competitive behaviour, irrespective of how it is brought about (through agreement or otherwise as a result of coordinated behaviour in the absence of any communication between competitors). Accordingly, before discussing the ways that consumer harm may emerge from the coordinated use of APP by multiple competitors, it helps to look at how competition law has historically distinguished between conduct that raises competition concerns and behaviour that does not.

As the Discussion Paper points out, competition law in Canada and elsewhere categorizes coordinated behaviour as a function of certain characteristics.

1.2.1. Algorithms and coordination: a concept in need of refinement?

In spite of more recent economic thinking, competition law still aims to distinguish agreements from parallel behaviour – where firms acting rationally chose similar strategies based on what they observe in the market and what they know about each other. Where individual firms acting independently end up mimicking the prices and practices of others, the prevailing view is that this cannot be sanctioned as anticompetitive where it does not contain the essential ingredient of agreement.[16] This conclusion rests on the assumption, derived from the analysis of legal texts, that *agreement* is what separates behaviour that violates the basic foundations of

(Toronto: Irwin Law, 2021) at 275–84. More recent examples, since the 2009 amendments, include commercial bread *R v Canada Bread Company Limited*, 2023 ONSC 3790 (reasons for endorsement of joint submission on sentence), and retail gasoline (*R v Pétroles Global*, 2013 QCCS 4262 (conviction); *R v Pétroles Global inc*, 2015 QCCS 1618 (sentence).

[15] Roman Inderst and Stefan Thomas, "Algorithms and Antitrust: A Framework with Special Emphasis on Coordinated Pricing" (2025) J Competition L & Econ, 00, 1-31, online: <https://doi.org/10.1093/joclec/nhaf014> (forthcoming), at 3–4 [Inderst and Thomas 2025]; Ibrahim Abada et al, "Algorithmic Collusion: Where Are We and Where Should We Be Going?" (1 August 2025) at 4–5, online: <http://dx.doi.org/10.2139/ssrn.4891033> [Abada et al 2025].

[16] Tyhurst, *supra* note 15at 291–95.

competition law and that which does not.[17] By insisting on the need to prove an agreement (even tacit), competition law draws a bright line through a set of circumstances that cannot be so neatly separated as a matter of economic theory or applied economics.

The case of APP highlights this problem: as the Bureau suggests, it is unlikely that an explicit agreement would be made between competitors to use a given price derived from a "one-shot" use of APP. Rather, the competitive harm would arise through a more sophisticated scenario. In the Discussion Paper, the Bureau mentioned hub-and-spoke agreements, where competitors ("spokes") agree to rely on the signals issued by a third party ("hub"). These agreements can be explicit (the spokes all agree to work together via the hub) or tacit (rimless), where competitors independently converge upon a hub, for instance because the hub is a dominant player, or even because, through various management exercises (benchmarking, etc.), firms are brought to adopt the same solution (as the "best-of-breed"). Note that in such a hub-and-spoke setting with APP, prices might not be perfectly aligned. The coordination bears on the pricing method (APP) and the technical tools to implement it, not on the prices themselves.[18] Presumably, if every competitor relies on the same APP tools, prices will converge, at least in so far as they always are at a level that confiscates consumer surplus, but they might not be strictly identical.

The likelihood that prices would converge is of course increased if firms share the data that is fed into the APP tool. Next to the hub-and-spoke agreement, agreements to share data also increase the likelihood that APP will cause consumer harm through alignment of competitive behaviour. In general, firms engage into business intelligence gathering; this is viewed as an acceptable practice because it is expected not to involve access to sensitive commercial information of other firms. The performance of an APP tool improves, however, with access to more commercial data. The use of APP is likely to be coupled with arrangements to expand the pool

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[17] Recent literature has noted that true algorithmic collusion, that is accomplished without human intervention, is unlikely to fall within the ambit of existing cartel provisions, which are based on the existence of an agreement or a concerted practice: Inderst and Thomas 2023, *supra* note 16 at 10–13; Abada et al 2025, *supra* note 16 at 7–8.

[18] The Apple book cases from the 2010s involved prototypical hub-and-spoke agreements, and there as well the concern was not so much that publishers agreed on prices, but rather that they agreed on pricing methods. Publishers used Apple as the hub to coordinate on the terms of their contracts with online bookstores (including Amazon), such that they all moved to an agency model that gave publishers greater control over retail prices, thereby enabling them to collectively raise prices without fear of undercutting by rival publishers. See *United States v Apple Inc,* 952 F Supp 2d 638 (SDNY 2013), affirmed 791 F.3d 290 (2d Cir 2015); cert denied, 136 S Ct 1376 (2016) and European Commission, Case AT.39847, *E-books* [2013] OJEU C73/17 (2012).

of information that might provide insight on consumers (and on other market players). Some examples are: access to data brokers with customer lists that amalgamate information from multiple sources not available to any one firm; direct surveillance by firms made possible through the digitization of transactions and through the exchanges that arise in vertical relationships; and information-sharing mandated by platform operators, ostensibly for purposes like maintenance and quality assurance. The upshot is that the competition law assessment of the reasonable and plausible scope of commercial intelligence and information sharing must be revisited. This raises the question: if access to this information plausibly creates an incentive for firms to stop challenging rivals for market share in favour of a system of mutually-assured restraint, is it still possible to characterize this kind of "coordinated" information sharing as benign? Does access to algorithmic pricing tools, particularly if the number of different tools is limited and their functionality optimized for the same metrics (such as revenue maximization), transform parallel conduct into something that requires attention from competition authorities?

In the end, instead of a sharp dividing line between cases where an agreement is present and those where no explicit or tacit agreement can be found, competition authorities could reframe the analysis as a matter of causation. Hub-and-spoke agreements and data-sharing agreements will probably qualify as agreements for the purposes of competition law, but their effect on consumer welfare will arise indirectly: these agreements will make it easier to achieve pricing coordination, as opposed to directly coordinating prices.[19]

1.2.2. Algorithms and explicit agreements among competitors

In Canada and other jurisdictions, we typically distinguish between agreements that are inherently anticompetitive (per se illegal) collaborations, without redeeming value,[20] and those that require an evaluation of pro and anticompetitive benefits (using a "rule of reason") to determine if they raise concerns that are material enough to warrant a remedy (in Canada the materiality threshold described as a "substantial" lessening or prevention of competition). In principle, agreements around APP are amenable to this distinction;

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[19] For an illustration of how this analysis could work, see CJEU, Case C-8/08, *T-Mobile Netherlands* [2009] ECR I- 4529.

[20] Tyhurst, *supra* note 15, 265–72. The objections to *per se* illegal collusion is both economic and moral, at least in jurisdictions like Canada, which criminalize the conduct as a wrongful and deliberately dishonest violation of the basic tenets of market competition: For a discussion, see, Jennifer A Quaid, "Making Sense of the Shift in Paradigm on Cartel Enforcement: The Case for Applying a Desert Perspective" (2012) 58:1 McGill LJ 149.

however, certain features of Canadian competition law will create difficulties, in comparison with other jurisdictions.

1.2.2.1. Agreements around APP as hardcore collusion or naked restraints on competition

Hardcore cartel behaviour is generally understood to include intentional agreements among competitors to collude rather than compete in specific ways that are presumed to lead to allocative inefficiency: price-fixing, output restriction and market allocation, as well as bid-rigging.[21]

In Canadian law, these behaviours are explicitly prohibited in the Act in sections 45, 46 and 47 (specialized prohibitions are set out in ss 48 and 49 and will not be discussed here). Other jurisdictions, such as the United States, have prohibitions that are more broadly worded, allowing for an evolution in the concept of per se illegal behaviour that is not tied to a specific practice but to the fact that the practice is a restraint of trade which leads to market distortion through the elimination of some or all of the competitive rivalry that would otherwise exist in a market.

This feature of US law is evident in two recent US cases involving algorithmic pricing,[22] both civil class action lawsuits in the federal courts, where motions to dismiss[23] the claims were rejected. Though the cases signal a willingness of US courts to hear cases that allege illegal collaboration achieved using algorithms, they also highlight a tension in the characterization of algorithmic collusion. One case sees the use of algorithms as a natural evolution in the techniques used by conspirators to implement a collusive arrangement. The other considers that use of algorithms to restrain trade is a novel phenomenon that should be assessed under a rule of reason standard.

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[21] While not universal, a large consensus has emerged around the definition put forth by the OECD in its 1998 Recommendation, which has been refined over the years: OECD, *Review of the 1998 OECD Recommendation concerning Effective Action against Hard Core Cartels*, (2019) at 13–15, online (pdf): <https://www.oecd.org/content/dam/oecd/en/publications/reports/2019/09/review-of-the-1998-oecd- recommendation-concerning-effective-action-against-hard-core-cartels_23b865d3/58c38ceb-en.pdf>.

[22] *Duffy v Yardi Systems Inc et al*, No 2:23-cv-01391-RSL, 2024 WL [Document 190] (WD Wash 2024) [*Duffy*]; In *re RealPage, Inc, Rental Software Antitrust Litig (No II)*, No 3:23-MD-03071, 2023 WL 9004806 (MD Tenn, 2023) [*RealPage*].

[23] When assessing a motion to dismiss the court determines whether the plaintiffs have stated a plausible cause of action – practically speaking this means that the facts as alleged are accepted as true and the pleading are construed in the terms most favorable to the plaintiff.

In *Duffy*,[24] Judge Robert Lasnik of the US District Court (W.D. of Washington) denied a joint motion to dismiss in a case that alleges ten operators of multifamily residential units and the property management software company they use to manage revenues participated in an illegal horizontal agreement that resulted in an unreasonable restraint of trade contrary to s. 1 of the *Sherman Act*. The decision is noteworthy because Judge Lasik determined that the alleged conduct was an illegal horizontal agreement among competitors that sought to fix pricing structures and thus fell within the category of conduct that is analyzed as per se illegal. In arriving at this conclusion, Judge Lasik expressly disagreed with a contrary ruling[25] in a case involving a similar agreement, issued by Chief Justice Crenshaw of the Tennessee District Court. CJ Crenshaw decided that since fixing prices using an algorithm was novel, it was not appropriate to apply the per se standard.[26]

Judge Lasnik anchored his conclusion to longstanding case law holding that how a price-fixing conspiracy is implemented is immaterial and does not alter the basic principle that price-fixing has a pernicious and undisputed impact on competition. He was unswayed by the contention that Yardi's software was a revenue management product and thus not a form of naked pricing fixing. While Yardi negotiated individually with each competitor, which the defendants argued was a series of separate vertical agreements, Lasik found that the plaintiffs had plausibly established a tacit horizontal agreement – a rimless hub and spoke structure in which

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[24] *Duffy*, *supra* note 24.

[25] In *RealPage*, *supra* note 24.

[26] While it is beyond the scope of this short submission, we acknowledge that classifying algorithmic collusion is not as straightforward as Justice Lasik's reasons might suggest. As Inderst and Thomas 2025, *supra* note 16 discuss, sometimes algorithms are simply a mechanism for implementing what is clearly an agreement to collude, but in other cases, autonomous algorithmic pricing that leads to supracompetitive prices cannot reasonably be characterized as cartel conduct. Abada et al 2025, *supra* note 16 at 7–8, distinguish between cognitive collusion (where supracompetitive prices are the product of human cognition) and algorithmic collusion (supracompetitive prices are produced by learning algorithms independently). It is possible for an algorithm to be deployed in support of the creation and maintenance of cognitive collusion. We note more generally that the distinction between a human-driven use of algorithmic pricing to support collusion and "autonomous" pricing that leads to supracompetitive prices rests on the current understanding of how algorithms work. Abada et al 2025, *supra* note 16 provide a helpful overview of the research on how well algorithms learn, specifically in relation to pricing (at 15–18, Appendices A and B). Their survey suggests that most algorithms do not – yet – possess the minimum characteristics needed to supplant human decision-making, namely that they are sophisticated, robust and have a low cost of learning (at 3). This suggests a need for caution before concluding that it is impossible to attribute human accountability for algorithmic collusion, be it through the application of individual liability or liability on business organizations.

Yardi (the software company) acted as an intermediary. Though the competitors did not communicate directly with each other, they each shared sensitive commercial information with Yardi on the expectation that this would enable Yardi's algorithm to generate supracompetitive rental rates. Part of the reasoning behind this conclusion was that sharing confidential pricing information is not in the rational self- interest of a competitor, unless they share the information knowing others are doing the same.

The reasoning behind Judge Lasik's decision aligns with the idea that the manner in which an agreement is reached and then implemented should not cloud the analysis of its purpose. However, it is important to stress that he was ruling on a civil per se case, an option not available under Canadian law.

While agreements concerning APP that fall into the categories of per se illegal conduct identified in Part VI of the Act can prosecuted as a criminal offence, prosecutions are difficult and rare. To date, there have been no contested proceedings under s. 45 (as amended in 2009). *Per se* conduct that falls under the amended s. 45 (which must have occurred after March 10, 2010) has been sanctioned only through guilty pleas negotiated through the Immunity and Leniency Program or prohibition orders negotiated under par 34(2) of the Act. We encourage the Bureau to consider how cases involving algorithmic collusion that plausibly violates the cartel provisions will be examined under the Program. One final observation we would make, in relation to the sanctioning of algorithmic collusion under the *per se* criminal provisions, is the importance of communicating the normative basis on which this criminalization – and consequent use of potentially heavy criminal punishment – rests. In cases where algorithmic collusion cannot be said to involve an agreement, the historical basis for treating cartels as morally reprehensible (deliberate coordination intended to subvert the competitive process and to confer – illegitimately – supracompetive rents on participants), falls away. With our understanding of the nature of algorithmic collusion still evolving, it may be difficult to articulate a new compelling basis for criminal enforcement in the short term. This may change, however, if Canada develops and implements a legal framework to govern the development, deployment and use of artificial intelligence in further of business interests. Without pre-judging how this framework might be designed, features like delineating acceptable and unacceptable uses of AI, imposing algorithmic transparency obligations and determining how to allocate accountability for decisions among different parts of the value chain could provide a robust and fair basis for determining when firms and individuals must answer for the anticompetitive consequences of algorithm use.

An AI governance framework would also provide an anchor on which to build a prohibition against "market distortion" (styled along the lines of what Germany, Italy and the UK have developed), should Canada opt to add one to the Act.

1.2.2.2. Agreements around APP as anticompetitive agreements that are not hardcore collusion

Explicit agreements between competitors that are not naked restraints on trade can cause anticompetitive effects sufficient to warrant a remedy, but this requires an assessment on what is sometimes called a "rule of reason", in essence a consideration of the net impact of the agreement on competition considering anticompetitive effects as well as procompetitive effects. While there is a high-level consensus on the need to look at both the positive and negative impacts on competition that flow from an agreement among competitors, there continues to be debate about what should be included, particularly on the pro-competitive side of the ledger.

There is also debate about whether we should be concerned about who reaps the benefits of agreements that generate a "surplus". Canada has recently repealed the provisions that allowed for efficiency gains to be considered when assessing anticompetitive agreements. The repeal leaves open how procompetitive impacts will be assessed and in particular whether or not the total surplus approach (which presumes that a dollar of surplus increases total welfare regardless of who receives it) that undergirded the previous approach to efficiencies,[27] will be replaced by a different approach, such as consumer surplus, which focuses on the benefits that accrue to consumers.

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[27] Another method of assessing efficiencies – called the balancing weights method – was recognized in the quartet of cases on the *Superior Propane* merger as an acceptable alternative to the total surplus method in appropriate circumstances. See *Canada (Commissioner of Competition) v Superior Propane Inc*, 2001 FCA 104 rev'g 2000 CATC 15, leave to appeal dismissed, [2001] 2 SCR xiii; *Canada (Commissioner of Competition) v Superior Propane Inc*, 2002 CATC 16, aff'd 2003 FCA 53. This method allows for deviations from the total surplus approach based on whether the gains to producers are more or less important to society than the losses imposed on consumers, such as when the surplus is transferred from vulnerable or marginalized consumers to relatively better-off shareholders. However, the standing of this approach was weakened following the Supreme Court of Canada's decision in *Tervita Corp v Canada (Commissioner of Competition)*, 2015 SCC 3 [*Tervita*]. Rothstein, J. writing for the majority, noted that while s. 96 did not mandate a particular approach, "[F]rom an economic perspective, there are arguments in favour of the total surplus standard.", *Tervita* at para 99. It is unclear whether the balancing weights approach might be applied to the assessment of procompetitive effects going forward now that s. 96 has been repealed.

In Canada, conduct that does not fall under the ambit of the criminal provisions of Part VI is examined under s. 90.1 of the Act. This section was not, prior to the amendments made to the Act over the period 2022-2024, the subject of a contested proceeding before the Tribunal, so it has never been formally interpreted. However, given its similarity to s. 92 (substantive merger review), prior to the reform most, including the Bureau, assumed that s. 90.1 would follow an identical two- step analytical framework: 1) determine if there is an substantial lessening or prevention of competition and then 2) consider whether efficiency gains outweighed and offset those effects (applying a total welfare approach), in which case the collaboration could remain in place.

The structure of s. 90.1 has since been altered in a several ways, making it difficult to determine precisely how it will be applied. The most important changes are: the removal of the efficiencies defense (just as it was for mergers), the addition of an express reference to agreements with non- competitors where those nevertheless affect competition (designed to enable enforcement against restrictive covenants, particularly in commercial leases), and perhaps most importantly, the addition of a private right of action, with leave from the Tribunal.

The unsettled state of s. 90.1 makes it hard to know how effective civil enforcement against APP will be.

More broadly, the absence of a civil *per se* provision in Canada[28] raises three connected issues for enforcement:

Reframing agreements to engage in naked cartel behaviour as something else: Since only criminal enforcement is available for naked restraints on competition, will this colour the characterization of agreements concerning APP where they can plausibly be characterized as a cartel activity prohibited under Part VI of the Act? In other words, will the presence of an algorithm in a situation of competitor collaboration tend to favour analysing the agreement

[28] Private parties can bring a suit in damages for the harm caused by the behaviour, under s. 36 of the Act, though these tend to be brought only where convictions (usually through pleas or admissions) have been obtained against the parties to the agreement. It remains to be seen whether the new private right of access to the Tribunal to seek a remedy for anticompetitive conduct in contravention of Part VIII (except mergers) will generate a greater volume of litigation, particularly under the "public interest" prong. For a discussion of some of the legal and interpretative issues that the new private access rules raise, see: Jennifer Quaid and Mistrale Goudreau. "Réforme du droit de la concurrence - Perspective du détenteur de droit de propriété intellectuelle" (2025) 37:1 CPI 1 [Quaid & Goudreau 2025].

under s. 90.1, irrespective of the nature of the conduct the agreement seeks to coordinate? The argument advanced by the defendants in the *Duffy* case – that each operator was seeking to *maximize its individual revenue*, not fix prices – illustrates how parties may look for ways to paint the purpose of arrangements that link competitors through an algorithm as something other than cartel activity. When developing its enforcement vision, the Bureau should articulate the underlying rationale behind the prohibitions of cartel practices, to avoid overly technical and textual arguments about when the purpose of an agreement falls within the ambit of s. 45.[29]

Framing algorithmic collusion as something new or distinct from conventional notions of cartel behaviour: We expect that some will raise the relative novelty of collaboration involving algorithms as a reason to examine these cases as anticompetitive agreements under s. 90.1 rather than cartels under s. 45, 46 and 47. We would urge caution in applying a blanket "novelty" label to technologies that facilitate agreements among competitors, especially those that facilitate what *prima facie* appear to be naked cartel activities (such as hub and spoke arrangements, whether rimmed or rimless). While the literature on the topic points to certain features to distinguish between collusion that is the product of human intention and collusion that flows from the deployment of an "autonomous" algorithm, it will be important to validate these categories through the analysis and assessment of real-world cases. In the *Duffy* case, the arrangements between competitors were predicated on sharing confidential information with the algorithm. The judge was unconvinced by the position of the defendants and held that while a technology for sharing information may be new, the obvious concern about sharing commercial information with

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[29] For reasons of space and analytical simplicity since the consultation is focused on algorithmic *pricing*, we do not discuss the possible implications of algorithm use in connection with conduct that could plausibly fall under s. 45(1.1) of the Act: wage-fixing and reciprocal no-poach agreements. The most recent enforcement guidance in the United States notes that use of algorithms to share competitively sensitive information (such as compensation information, other terms of employment or exchanges of information that harm competition for workers) among companies that compete for workers may be illegal: US Dept of Justice and Federal Trade Commission, "Antitrust Guidelines for Business Activities Affecting Workers"(January 2025) at 2 and 6–7, online (pdf): <https://www.justice.gov/atr/media/1384596/dl?inline>. We would argue that there is a strong basis for prohibiting algorithmic personalization of wages and other employment benefits, particularly in sectors where workers may be vulnerable to exploitation and in times where economic insecurity is high. We recognize, however, that the bulk of employment and labour law is provincial and that protection of workers falls squarely within this jurisdiction, leaving a smaller role for competition law focused on the most egregious cases of wage-fixing and no-poach agreements (where these remain legal).

competitors is not. Independent of their novelty, we would urge the Bureau to consider whether are there circumstances where algorithmic personalized price-setting tools could be cast as an ancillary restraint necessary to achieve the goals of a broader, legitimate agreement. The new certificate available for agreements that promote protection of the environment, though still to be fleshed out, is an explicit recognition of the potential value of collaboration undertaken in support of a wider societal objective that is not typically seen as one of the core goals of competition.

Civil enforcement is necessarily rule of reason. The final and most critical issue is how to assess the anticompetitive effects of an algorithmically aided collaboration. Without a civil per se standard, the anticompetitive effects of collaborations that are not prosecuted criminally will have to be determined and weighed in a coherent manner. Given the recent and substantial changes to the analytical framework of s. 90.1, which mimic those made in substantive merger review, it is difficult, if not impossible, to predict how these effects will be measured, compared and ultimately weighed.

1.3. Practice of Anti-Competitive Acts

As set out above, APP can conceivably produce anti-competitive effects if it is linked with agreements where competitors align their pricing policy on APP, all the more if they use common APP tools (hub-and-spoke arrangement) which is fed by data sharing agreements.

Next to that, as outlined in the introduction, we think that APP can also succeed if it is implemented by a dominant firm that succeeds in locking consumers in a "micro-market chamber" in which they have no way to escape the confiscation of consumer surplus via APP-based first-degree price discrimination.

In competition law terms, such conduct would fall to be assessed under the provisions on abuses of dominant position, namely in Canada, ss. 78 and 79 of the Act.

In the Discussion Paper, the Bureau raises two cases from the academic literature. First, APP tools could be used to single out "available" consumers for the purposes of predatory pricing while allowing simultaneous recoupment from other, less-sensitive or high-WTP consumers. Secondly, APP tools could also be used to support what is in fact a second-degree price discrimination strategy, whereby tied or bundled offers are made to certain consumers only. We think that these cases are plausible, but that they do not create

significant analytical difficulties, to the extent that APP is used to bolster the chances of success of a practice that is otherwise already well-recognized as a potential competition law issue under the Act. Moving beyond these cases, the more fundamental issue arises of whether the use of APP by a dominant firm, in and of itself, could violate the Act. We argue that the Act could apply to APP as such, independently of any other anti-competitive conduct. The harmful nature of APP was discussed in section 1 of this paper: inasmuch as it leads to first-degree price discrimination, it involves a confiscation of consumer surplus that is unlikely to be counter-balanced by the provision of a personalized product better matching the non-price preferences of the consumer. Previously, the Act would not have offered any path to characterizing APP as an anti-competitive act for the purposes of ss. 78–79 of the Act, in the absence of any exclusionary or predatory effect on competitors.

In the recent set of amendments, however, the scope of application of ss. 78 and 79 was broadened by rephrasing the introductory paragraph to s. 78(1) and bifurcating s. 79(1). In line with this broadening of ss. 78 and 79, a new item, s. 78(1)(k) was added to the list of s. 78(1) of the Act. S. 78(1)(k) adds to the list of anti-competitive acts that can lead to the application of s. 79 of the Act "directly or indirectly imposing excessive and unfair selling prices". The use of APP by dominant firms could fall under section 78(1)(k) of the Act, and we would encourage the Bureau to pursue that avenue.

This new clause echoes art. 102(a) of the *Treaty on the Functioning of the European Union* (TFEU), which specifies that the notion of abuse of a dominant position includes "directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions".[30] This provision covers excessive prices, which have been defined as prices that are in excess of those that would have been practiced in a competitive environment. As has been noted in the literature,[31] few excessive pricing cases have been brought over the years in the EU. Neither the case-law nor the literature has been able to successfully outline a test whereby the observed pricing of the dominant firm can be characterized as excessive, the main problem being the difficulty of finding a sound counterfactual with which to compare the price practised by the dominant firm. Successful cases have tended to involve very

[30] See recently the review made by Pablo Serra, « European Union Case Law on Excessive Pricing: An Economic Assessment » (2025) 21 J Competition L & Econ (forthcoming), online: <https://doi.org/10.1093/joclec/nhaf009>. [33] Consolidated Version of the TFEU [2016] OJ C 202/47.

[31] Consolidated Version of the [TFEU 2016] OJ C 202/47

significant profit margins that are arguably excessive on any conceivable benchmark. They provide little guidance for future cases.

In the case of APP, however, in contrast with the traditional cases, where the crux of the harmful conduct lies in the margin between the would-be excessive price and the "normal" price, the harmful conduct would arise out of the very use of APP – irrespective of the actual individualized prices resulting from it, without the need to make a finding on the "normal" price – since confiscating the entire consumer surplus could be considered an excessive or unfair pricing practice in and of itself.

We would encourage the Bureau to pursue this avenue of using Art. 78(1)(k) to bring APP under the scope of "anti-competitive act" for the purposes of the provisions on abuse of dominant position at ss. 78–79 of the Act.

In addition, it is quite likely, as outlined in the next section, that the implementation of APP by a dominant firm would involve conduct that runs afoul of data protection and privacy legislation, in the course of collecting, processing and sharing personal data on consumers. Because the firm is dominant, consumers have few if any alternatives to avoid that their personal data be handled in breach of the law. Consumers face the choice of either consenting or be deprived of the services of the dominant firm. Hence any user consent that the dominant firm would invoke in its defence is probably vitiated by the absence of a meaningful alternative due to the dominance of the firm. Under such circumstances, the dominant firm is effectively compelling consumers to consent to personal data processing that would otherwise be questionable under privacy law. Such a course of conduct by the dominant firm, in the course of implementing APP, could itself also qualify as an anti-competitive act under s. 78(1) or as a conduct having the effect of substantially preventing or lessening competition within the meaning of s. 79(1)(b) of the Act. The analysis made by the Bundeskartellamt, the German courts and the CJEU in *Meta v Bundeskartellamt* could serve as a model here.[32]

Finally, by way of elaboration on the hub-and-spoke scenario discussed above, such a hub-and- spoke arrangement is most likely to work if the APP tools are common to the spokes. This could arise either because the APP tools used by the spokes are coming from a single provider acting as a hub, or because a single third-party provider is operating the APP tools in the hub (with the information

[32] See CJEU, Case C-252/21, *Meta v Bundeskartellamt* ECLI:EU:C:2023:537.

emanating from the APP then being distributed to the spokes). Under both scenarios, the APP tool provider/operator could be a dominant player on a relevant market that would be defined as the provision of APP services for the industry where the spokes are. It is conceivable that such APP tool provider/operator could have entered into conduct running afoul of ss. 78 and 79 of the Act in the course of asserting or maintaining its dominant position. This could offer a roundabout path to addressing the anti-competitive effects of APP in a hub-and-spoke context, by undermining the position of the hub.

Beyond that, the use of APP will not be limited to dominant market players. In the absence of dominance or collusion, competition law would not be applicable, unless APP can also amount to a deceptive marketing practice, as we argue in the section below.[33] As outlined above, outside of dominance or collusion, markets might function to help consumers avoid the confiscation of consumer surplus. Here the Bureau might want to explore ways to bolster and strengthen countervailing market mechanisms that could defeat APP, in particular those that would involve putting AI at the service of consumers. Among others, consumers could also employ AI systems to enhance their ability to obtain the best offer for themselves (consumer-side AI agents, for instance). These AI agents will probably seek to create a "privacy bubble" around the consumer, by safeguarding and withholding personal information to the greatest extent possible in the course of dealing with supply-side agents. This would force firms to revert back to second- or third-degree price discrimination, which is less harmful to consumers. We think that it will prove crucial to ensure by all legal means that such robust consumer-side AI agents are not defeated, excluded or rejected by firms, via technical or contractual means.

The overlap between big data, privacy, and competition concerns is becoming clearer and stronger: keeping personal information out of APP is not only a matter of preserving consumer privacy, but also of defeating first-degree price discrimination and preserving consumer surplus.

1.4. Deceptive marketing practices for consumers in the digital marketplace

As stated in the above section "Practice of Anti-Competitive Acts", APP can support first-degree price discrimination, especially if a dominant firm is able to keep consumers in an informational "micro-market chamber". Pricing at individual WTP by extracting

[33] See section "Deceptive marketing practices for consumers in the digital marketplace" below.

the personal data of consumers decreases and even entirely confiscates consumer surplus. This undermines the goals of competition law, as set out in s. 1.1 of the Act, and more broadly economic policy at their core. Competition law offers some tools to counter APP as such, especially when carried out by dominant firms.

The regulation of APP on the basis of its overall anti-competitive effects on consumers will fill important gaps on how this practice is presently regulated through personal data protection, anti-discrimination law, contract, and consumer protection law. These bodies of law offer limited remedies to consumers.[34] Furthermore, they tend to approach APP and other commercial practices at the per transaction level, which significantly undermines the success of consumer claims. In the case of APP, the harm that the consumer needs to prove on a per transaction basis is often *de minimis*. It is the aggregated effects of APP which can lead to significant harm to consumers.

One of the authors of this submission has argued elsewhere that APP as we define it here violates personal data protection law, more specifically the PIPEDA[35] and potentially similar provincial legislation. This author has also analysed how APP may violate anti-discrimination law,[36] and how in some cases APP could be an unlawful pre-contractual practice.[37] This provides a strong legal base to explicitly recognize how it may also amount to a deceptive marketing practice in a competition law framework, considering the overall anti-competitive effects of APP aiming to shrink consumer surplus.

Analogies can be drawn between APP, and the recent explicit addition of *drip pricing* as a deceptive marketing practice in the

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[34] This is particularly true in the case of personal data protection regimes such as the *Personal Information Protection and Electronic Documents Act,* SC 2000, c 5 [PIPEDA], where the powers of the Privacy Commissioner are limited and whereby infringement of personal data obligations involve lengthy procedures with limited meaningful outcomes for consumers. Bill C-27, *An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts*, 1st Sess, 44th Parl, 2022 (which would have led *inter alia*, to the implementation of the *Consumer Privacy Protection Act*, and the *Personal Information and Data Protection Tribunal Act*) would have introduced additional fines and remedies for violations of personal data protection violations.

[35] *Supra* note 36.

[36] Pascale Chapdelaine, "Algorithmic Personalized Pricing and the Limits of Anti-Discrimination Law" (2024) 69:4 McGill LJ 489 [Chapdelaine 2024b].

[37] Chapdelaine 2024a, *supra* note 38 at 13–20.

Act.[38] With APP (similarly to *drip pricing*), it is not the price at which goods or services are offered to the consumer that is deceiving, it is the manner by which it is arrived at. In the case of APP, it is the surreptitious extraction of consumers' personal data (or consumer profiling) entirely for the firm's benefit, to which consumers cannot consent meaningfully, and which does not fulfill a legitimate purpose under personal data protection laws, that is both abusive and deceptive.[39] This surreptitious extraction is amplified in the case of faithful customers on retail platforms such as Amazon, where the amount of purchasing habits and other personal data collected by Amazon on each consumer can be significant.[40] Such retail platform customers might be even more penalized than others through what is referred to as the "loyalty penalty". The position that these various forms of personal data extractions are abusive is strengthened by the increasingly prevailing view that personal data protection and privacy are quasi-constitutional rights that should be interpreted broadly and give rise to a heightened degree of protection and therefore more stringent obligations on firms in the private sector.[41]

In short, APP has many attributes to qualify as a deceptive marketing practice under the Act. That is, the anti-competitive effects of APP having the goal to eliminate consumer surplus, and the surreptitiousness of extracting consumer personal data without the possibility for consumers to validly consent or opt out from such practice. Finally, addressing how APP may amount to a deceptive marketing practice will fill important gaps to the protection of consumers in the digital marketplace. Competition law's legal framework looks at the macro-market effects of commercial practices, whereas contract and consumer protection law, as well as personal data protection law, tend to treat APP and other commercial practices on a per transaction basis. This significantly impairs consumers' ability to obtain meaningful reparation and remedies against this commercial practice.

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[38] S. 74.01(1.1) and s. 52 (1.3).

[39] Chapdelaine 2024a, supra note 38, at 20–33.

[40] Users of social media platforms are also vulnerable to the exploitation of the personal information they share on the platform, as was the case with Meta (Facebook) failing to disclose that it shared user information with third parties. This was the subject of a consent agreement in Canada in 2020 and a Stipulated Order in the US (in 2019, in response to a failure by Meta to abide by an earlier 2011 consent agreement). For an analysis of the Canadian consent order and its limitations in terms of consumer privacy protection see: Jennifer A Quaid, "AI and Competition Law", in Teresa Scassa and Florian Martin-Bariteau, eds, *AI and the Law in Canada*, (Toronto: LexisNexis Canada, 2021) 151 [Quaid 2021].

[41] See *Douez v Facebook, Inc*, 2017 SCC 33 at paras 59 and 105 (citing earlier Supreme Court decisions).

2. Conclusion

In this submission, we have focused on what we see as the most significant risk associated with algorithmic pricing – i.e. APP. Long seen as only a theoretical construct, it is now something that could become a reality, at least in some markets and under some conditions. With the mass collection of personal and confidential data from and about consumers and the ever-increasing amount and quality of information being made available to firms, through public, proprietary and third-party channels, there is already significant personalisation of prices underway.

Given the possible financial rewards of calibrating their offers to an individual's WTP, firms have an incentive to find ways to deploy and finetune APP strategies. We have provided an overview of some of the legal and normative questions that arise when we consider how the Act might apply to firms who, in the pursuit of the objective of APP, try to leverage collective (collusion or collaboration) or unilateral (abuse of a dominant position) market power or engage in deceptive marketing practices that deprive consumers of the ability to discern the presence of APP and take measures to adjust their behaviour accordingly.

As we note, ongoing study of APP is essential to effective enforcement. We trust the insights we have provided above will assist the Bureau as it moves forward in response to this pervasive business phenomenon. We hope to see the publication of more specific enforcement guidance on how best to respond to APP as well as education and advocacy efforts to ensure the public, and especially consumers, are well-informed and well-equipped to protect themselves from the very real risk of harm to their interests, both economic and social, associated with the widespread use of APP.

We remain at your disposal for any follow up or questions regarding the content of our submission.

With our best regards,

Pascale Chapdelaine (Ph.D.) Associate Professor, University of Windsor Faculty of Law, Chair in Law, Intellectual Property, and the Digital Marketplace, Director of Windsor Law LTEC Lab

Pierre Larouche (Ph.D.), Professor of Law and Innovation, Faculty of Law, Université de Montréal, Fellow, CERRE and GW Competition & Innovation Lab

Jennifer Quaid (Ph.D.), Full Professor, Civil Law Section, Faculty of Law, University of Ottawa

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