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PRICE DISCRIMINATION IN THE DIGITAL ECONOMY: A COMPETITION LAW PERSPECTIVE"

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ABSTRACT

The rapid growth of the digital economy has altered the use of pricing techniques because online platforms are adopting the use of algorithms and data to determine the price of a single consumer. These innovations can help to make the process more efficient, help to segment market and reach consumers, however, they also present some grave legal and ethical issues, including unfair pricing, consumer exploitation and monopoly practices. The paper shall take into account the aspect of whether the existing Indian competition law, which is Section 4 of the Competition Act 2002 is sufficient to deal with such behaviours. According to a review of relevant literature, the issues of innovative pricing, and or the threat of exclusionary or exploitative pricing are not new to the academic community or regulators. There is an opinion that the conventional methods of pricing enforcement may not be adequate in data markets. In the evaluation of the research question, this paper takes the doctrinal approach to evaluation by considering laws, court rulings, and regulatory strategies in India and a corresponding comparison to other approaches to the issue globally, such as the Digital Markets Act (2022) of the European Union and the Digital Markets, Competition and Consumers Act (2024) of the United Kingdom, when addressing the issue. The findings reveal that algorithmic price discrimination as an abuse of dominance can be conceptually addressed by the Indian competition law. Nevertheless, issues will persist, despite any applications of competition law aimed at combating algorithmic price discrimination, because of the convolutes and obscure nature of algorithmic pricing, and the relative lack of a legal regulation of algorithms. We believe that India needs a more robust ex-ante regulatory regime and impose more demands on transparency to protect consumer welfare, develop fairness, and encourage accountability in its online markets.

Keywords: Algorithmic pricing, Competition law, Abuse of dominance, Digital economy, Price discrimination, Consumer welfare.

I. INTRODUCTION

The emergence of the digital economy has flouted the traditional competitive law paradigms by revealing information of an algorithmic and individualized pricing almost everywhere. Such measures can help to increase the efficiency and bring about innovations, yet - in their essence - give the concerns about fairness, transparency, and even exploitation of consumers. The Competition Act of 2002 provides the avenues of tackling anti-competitive behaviour, yet - in contrast to the new regulatory frameworks of the digital economy, recently instituted in the EU and the UK, or the reliance primarily on the traditional enforcement of antitrust statutes - lacks any mechanism of tackling pricing concerns of the digital economy. The idea behind this analysis is to pose the question of whether the legal system of India has sufficient resources to handle these questions, and whether it can be educated by such jurisdictions.

1.1 Background of the Study

The digital economy has had a radical transformation in the functioning of the markets, it introduces the new possibilities of innovation and critical questions connected to the competition law¹. Price discrimination, or price differentiation, when companies charge different customers, the same product and/or service at different prices, is one of the practices closely associated with this topic and can be controversial². Although the idea of price discrimination is not new in the field of economics, the digital economy makes it difficult as there are algorithmic and data-driven methods that allow companies to dynamically adjust prices in real-time based on consumer trends, profit optimization data sets, and changing market conditions³. The application of algorithms, data-based decisions, and control of the platforms makes price discrimination an appealing market strategy, yet, it poses a risk of exploiting consumers.⁴

1.2 Research Problem

This paper relies on competition law as its point of reference that has been founded principally (though not solely) on the ban on collusion and exploitation of market power.⁵ The Competition

¹ Ariel Ezrachi & Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy* 25–27 (Harvard Univ. Press 2016). <https://share.google/C5ddcBs2AUHYUVWwj>

² Hal R. Varian, Price Discrimination, in *Handbook of Industrial Organization* 597, 598 (Richard Schmalensee & Robert Willig eds., 1989).

³ OECD, *Personalised Pricing in the Digital Era* 7–10 (2018), <https://www.oecd.org/daf/competition/personalised-pricing-in-the-digital-era.htm>

⁴ Arghya Sengupta & Pallavi Shukla, Algorithms and Competition Law in India: Challenges and the Road Ahead, 12 *NUJS L. Rev.* 23, 30–32 (2019).

⁵ Richard Whish & David Bailey, *Competition Law* 199–202 (Oxford Univ. Press, 10th ed. 2021).

Act of 2002 gives a framework through which the anti-competitive behaviour in India such as unfair or differentiated pricing can be regulated.⁶ Nonetheless, algorithms or data-based pricing is controversial in the case of no particular provisions in law.⁷ Unlike other forms of discrimination, which can be traced with relative ease, determining pricing discrimination that transpire in algorithmic systems are problematic and algorithmic pricing can be undertaken in non-transparent systems that complicate distinctions between useful schemes that are designed to increase savings and efficiency and a scheme that is merely designed to exploit customers.⁸ The European Union (via its Digital Markets Act, 2022), and the United Kingdom (via its Digital Markets, Competition and Consumers Act, 2024) have now started to contest EU contestable and fair markets in the digital sector.⁹

1.3 Objectives of the Study

To assess how the current competition law in India can deal with the challenges presented by digital pricing.

To interpret whether dominant firms conducting algorithmic and data-driven pricing, which may constitute abuse of dominance under Section 4 of the Competition Act, 2002, is possible.

To perform a comparative analysis of the reaction of other jurisdictions, in particular, EU, UK, and US to discriminating digital pricing.

1.4 Research Questions

1. Does the Indian competition law sufficiently involve discriminatory pricing procedures in digital markets?
2. Do dominant firms by the way of algorithmic or data-driven pricing practices commit an abuse of dominance?
3. What has been the response of jurisdictions including the US, UK and EU to issues that can be caused by algorithmic or discriminatory digital pricing?

⁶ The Competition Act, No. 12 of 2003, India Code (2003).

⁷ Rishabh Tripathy, Algorithmic Collusion and Indian Competition Law, 17 Indian J. L. & Tech. 101, 115 (2021). <https://ijlt.in/>

⁸ Maurice E. Stucke & Allen P. Grunes, *Big Data and Competition Policy* 122–26 (Oxford Univ. Press 2016). <https://global.oup.com/academic/product/big-data-and-competition-policy-9780198788133>

⁹ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector (Digital Markets Act), 2022 O.J. (L 265) 1; Digital Markets, Competition and Consumers Act 2024, c. 13 (U.K.).

1.5 Scope and Limitations

Scope: This research paper will be an analysis of the digital platforms within India, including e-commerce, ride-hailing, and fintech markets. It considers algorithmic pricing and its potential to fall under the category of an abuse of dominant position in the Indian competition law, and draws parallels with the EU, UK and the US.

Limitations: The forces that govern digital markets in India are still in their infancy and there is a paucity of empirical studies on digital market in terms of algorithmic pricing due to proprietary algorithm and unclear systems. The research is mainly doctrinal in nature and comparative and not empirical.

1.6 Research Methodology

The research is based on a doctrinal and comparative method. It examines relevant provisions of Competition Act, 2002, judicial cases, policy papers, as well as, regulatory policies. The comparison of lessons is based on the EU Digital Markets Act (2022), the UK Digital Markets, Competition and Consumers Act (2024), and the antitrust practices related to the issue in the US. This paper also examines academic research, case studies, and algorithmic and data-driven price discrimination to research the relationship between competition law, market efficiency, and consumer protection.

II. LITERATURE REVIEW

Dr. Tilottama Raychaudhuri's paper titled "**Abuse of Dominance in Digital Platforms: An Analysis of Indian Competition Jurisprudence**" (2020)¹⁰ critiques the Indian Competition Act, 2002, emphasizing its shortcomings in defining and regulating dominance within digital markets, where the complexities of algorithmic pricing and scale challenge conventional legal understandings of dominance. The study reveals a major deficit: the lack of a legally enlightened framework that is sensitive to digital realities and divergent judicial interpretations, inhibiting innovation. This paper is linked with Shambhavi Jha and Simran Nagra's (2024) article "**An Analysis of Algorithmic Collusion under Indian Competition Law: Comparative Study with EU and US.**"¹¹ which also indicates India's failures in handling

¹⁰ Tilottama Raychaudhuri, *Abuse of Dominance in Digital Platforms: An Analysis of Indian Competition Jurisprudence*, 1 COMPETITION COMM'N OF INDIA J. COMPETITION LAW & POLICY 5 (2020). <https://ccijournal.in/index.php/ccijoclp/article/view/5/22>

¹¹Shambhavi Jha & Simran Nagra, *An Analysis of Algorithmic Collusion under Indian Competition Law: Comparative Study with EU and US*, 5 JUS CORPUS L.J. 12 (2024). <https://www.juscorpus.com/wp-content/uploads/2025/01/3.-Shambhavi-Jha.pdf>

implicit algorithmic collusion because it lacks transparency and enforcement powers. The two articles emphasize "digital dominance" and "algorithmic collusion" as being essential problems, highlighting the necessity of Indian competition law reforms in order to properly deal with AI-based market conduct.

Based on these concepts, Dr. Aishwarya Singh and others' (2025) study titled "**An Analysis of the Abuse of Dominance Using Artificial Intelligence on Price Discrimination from a Legal Perspective**"¹² analyses AI-created customized pricing, which shows possibilities of discriminatory pricing hurting consumer well-being. The study finds a loophole regarding the lack of precise legal tools to govern autonomous AI pricing without human intervention. This study connects to Lavanya Garg and Suganya Jeba Sarojini's (2024) work "**A Critical Analysis of Algorithmic Predation in Competition Law in India.**"¹³ which discusses concerns about algorithmic predation and tacit cooperation that allow circumvention of traditional legal agreements. Both papers focus on themes of "AI-driven pricing discrimination" and "algorithmic predation," highlighting a regulatory inability to address autonomous algorithmic behaviours.

Mohsin Rahim's (2022) "**Collusion through Algorithms: A Comparative Analysis of the Regulatory Reforms**"¹⁴ is strongly related to such debates, investigating algorithmic conspiracies and implicit price-fixing facilitated by AI technologies. The gap found is the absence of ethical regulation and monitoring of AI, with proposals for institutional reforms. The theme of "algorithmic collusion" positions this paper among the contributions of Jha and Nagra, and Garg and Sarojini. Complementing these India-centered research works, the UK Competition and Markets Authority (2021) report "**Algorithms: How They Can Reduce Competition and Harm Consumers**"¹⁵ analyses algorithm-related harms like implicit collusion and price biases, highlighting an essential absence of regulatory readiness. Core topics like "algorithmic harms," "market distortions," and "regulatory readiness" bring this

¹² Aishwarya Singh et al., *An Analysis of the Abuse of Dominance Using Artificial Intelligence (AI) on Price Discrimination from a Legal Perspective*, 11 INT'L J. ENV'T SCIENCES 7 (2025). <http://theaspd.com/index.php/ijes/article/view/944>

¹³ Lavanya Garg & Suganya Jeba Sarojini, *A Critical Analysis of Algorithmic Predation in Competition Law in India*, ALOCHANA J. L. 14 (2024). <https://alochana.org/wp-content/uploads/14-AJ2442.pdf>

¹⁴ Mohsin Rahim, *Collusion via Algorithms: A Relative Analysis of the Regulatory Reforms*, SSRN ELECTRONIC J. (2022). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4146660

¹⁵ Competition & Markets Authority, *Algorithms: How They Can Reduce Competition and Harm Consumers* (UK Gov't 2021). <https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers>

report in line with the Indian research calling for legal reform in the wake of AI-led market behaviours.

Moving to the EU context, Christopher Townley, Eric Morrison, and Karen Yeung's (2017) article "**Big Data and Personalised Price Discrimination in EU Competition Law**"¹⁶ discusses the regulatory issues brought about by algorithmic consumer price discrimination (ACPD). The main gap found is the absence of decisive case law or doctrinal assistance on ACPD, creating regulatory uncertainties. This resonates with Grochowski, Jabonowska, Lagioia, and Sartor's (2022) article "**Algorithmic Price Discrimination and Consumer Protection: A Digital Arms Race?**"¹⁷, underlining the requirement for transparency and defensive actions against behavioural exploitation in EU consumer price discrimination.

Both articles highlight "consumer protection," "algorithmic price discrimination," and "regulatory transparency," calling for legal adjustments and technological defences. Arletta Gorecka's (2020) study "**A Confusing Relationship between Privacy and Competition Law: A Way Forward for EU Competition Law and Algorithmic Pricing**"¹⁸ overlaps with these debates by focusing on the interaction between data privacy and competition law. The study calls attention to a need for the current incorporation of the question of privacy into existing competition law, particularly around algorithmic pricing.

Themes such as "user consent," "algorithmic abuse," and "privacy" connect the present paper to the ACPD-centered studies of Townley et al. and Grochowski et al. by broadening the legal discussion to encompass privacy as a critical aspect. Lastly, Swati Vashistha (2024) "**Navigating the Digital Marketplace: Analysing Competition Issues in Indian E-commerce under the Competition Act, 2000**"¹⁹ investigates wider competition issues in Indian digital trade, focusing on concerns such as predatory pricing, technological dominance, and enforcement challenges. The research gap identified points to the failure of conventional

¹⁶Christopher Townley, Eric Morrison & Karen Yeung, *Big Data and Personalised Price Discrimination in EU Competition Law*, SSRN ELECTRONIC J. (2017). <https://academic.oup.com/yel/article/doi/10.1093/yel/yex015/4735227>

¹⁷Grochowski, Jabonowska, Lagioia & Sartor, *Algorithmic Price Discrimination and Consumer Protection: A Digital Arms Race?* TECH. & REGULATION 11305 (2022). <https://techreg.org/article/view/11305>

¹⁸Arletta Gorecka, *A Confusing Relationship Between Privacy and Competition Law: A Way Forward for EU Competition Law and Algorithms Pricing*, 1 INDIAN J. ARTIFICIAL INTELLIGENCE & L. 7 (2020). <https://heinonline-org-christuniversity.knimbus.com/HOL/P?h=hein.journals/ijail1&i=7>

¹⁹Swati Vashistha, *Navigating the Digital Marketplace: Analysing Competition Issues in Indian E-commerce under the Competition Act, 2000*, INT'L J. MULTIDISCIPLINARY TRENDS 4176 (2024). <https://www.multisubjectjournal.com/article/417/6-4-12-684.pdf>

frameworks in meeting the fast-changing nature of the digital economy. Terminologies like "digital marketplace," "predatory pricing," and "technological innovation" establish a connection with the studies of Raychaudhuri and Jha & Nagra on digital dominance and algorithmic market influence, thus rounding up the discussion of legal issues in digital competition.

III. RESEARCH QUESTIONS ARE ANALYZED AND PRESENTED BELOW.

Does the Indian competition law suffice in dealing with Indian Discriminatory pricing in digital markets?

With the emergence of online marketplaces, which are defined by platforms based on the use of data and algorithms to determine the dynamic price, the traditional model of competition has been completely changed. Discrimination pricing, whereby varying consumers can be charged differently on the same product or service, has become increasingly common with issues of consumer welfare and fairness in the market raised. The Competition Act, 2002 is the primary law governing anti-competitive behaviour in India like abuse of dominance as well as predatory pricing. Of much interest to lawmakers, the judiciary, and the concerned stakeholders, is the question of whether the legal system is sufficient in dealing with discriminative pricing in the digital arena.

Law: Competition act 2002 and Discriminatory pricing.

The abuse of a dominant undertaking is at the same time proscribed by Section 4 of the Competition Act, 2002. Particularly, Section 4(2)(a)(i) is phrased in terms such that, unfair or discriminatory pricing would be one of the forms of abuse. This is to guard against exploitative prices of a dominant undertaking to the advantage of the consumers.²⁰

The operation of the Act is complicated by the fact that the language of the Act was written prior to the beginning of algorithmic and data-driven pricing schemes, which happened at levels and sophistication of scale never heard of before the drafting of the Act. The Act fails to clarify the concept of dominance in digital markets and it does not deal with algorithmic opaqueness or independent pricing behaviors. There are no judicial rulings that give definite evidence which would negate or circumstantially lead to consider digital discriminatory prices as an alter oblique.

²⁰ Competition Act, 2002, § 4(2)(a)(i).

Such as in recent enforcement, in *Reliance Jio Infocom Ltd. v. Bharti Airtel Ltd*²¹. The Competition Commission of India concluded that predatory pricing and monopoly are, actually, punishable, nevertheless, the indications of intention and consumer damages are extremely grave. This highlights how hard regulators have a hard time trying to enforce regulations in order to conclusively determine the distinction between advanced algorithms-driven price-setting schemes that are allowed by the law and a form of abuse under current regulations.

There are difficulties with the Regulation of Discriminatory and Algorithmic Pricing in Online Markets.

The practice of discriminatory pricing that is facilitated with advanced algorithms poses special legal issues:

- **Opacity:** Algorithms are black boxes, normally proprietary, not accessible to regulators, and are therefore hard to detect and analyze.²²
- **Dynamic Pricing:** Dynamic pricing is changing in real-time based on immense consumer data, such as location, purchasing history, device type and willingness to pay, such that benchmarking and discrimination identification becomes difficult.²³
- **Lack of Human Intention:** The algorithms do not rely on human intent and this makes it more difficult to determine the intent required in conventional legal definitions of abuse or collusion.
- **Market Definition Problems:** The market definition in multi-sided digital platforms with network effects is problematic to traditional market share analysis, which is the foundation of dominance analysis.

In the present, disclosure of algorithmic criteria or algorithmic transparency is not a requirement of Indian law, which contributes to the restriction of regulatory capacity. Moreover, the Competition Act does not have specific procedural requirements into consideration of such tech complexities.

Landscape of the judicial and enforcement in india.

The issue of algorithmic discriminative pricing has not been widely addressed by Indian courts and enforcement authorities yet. **Bharti Airtel v. Airtel, the ruling of the Supreme Court.**

²¹ *Reliance Jio Infocom Ltd. v. Bharti Airtel Ltd.*, CCI Case No. 01/2017, available on Manupatra.

²² See, e.g., CMA Report: Algorithms and Competition (UK Competition & Markets Authority, 2021).

²³ Id

CCI (2019 SCC Online SC 1746)²⁴ confirmed that the sphere of the applicability of the provisions of the abuse of dominance is quite broad but failed to resolve whether such provisions applies to digital algorithmic pricing.

The Competition Commission has been largely reactive and ex post in its approach without having a regulatory framework or a benchmark of proactively regulating digital algorithms or data-based pricing. The lack of explicit case law in such spheres means that there is a major gap in enforcement in these spheres.

Samir Agrawal v. ANI Technologies Pvt. Ltd.²⁵

In this case, Competition Commission of India (CCI) considered whether the usage of the same algorithm by drivers on a common platform was going to constitute an instance of cartelization under the Competition Act. The CCI believed that the fixed prices through the algorithm created by the platform did not constitute collusion among the drivers because there was no collusion to give the platform pricing power. The case has shown that it is difficult to apply classical definitions of collusion to algorithmic pricing in digital markets.

Shikha Roy v. Jet Airways.²⁶

The case dealt with the charges of collusive algorithms within the airline industry. The Competition Appellate Tribunal (COMPAT) noted that effects-based test of the cases of the abuse of dominance needed to exist, and the existence of algorithmic pricing as such did not always suggest the existence of the anti-competitive behaviours. Such an opinion is consistent with the growing perception of the competition of digital markets.

2 Does the Indian competition law classify algorithmic or data-driven price discrimination as an abuse of dominance?

2.1 Statutory Grounding

The Competition Act of 2002 is categorical in its forbidding of abuse of dominant position. Section 4(2) (a) (ii) includes the imposition of unfair or discriminatory conditions in the selling or purchase of goods and services and of unfair or discriminatory price of the selling or purchase of goods and services.²⁷ This was written in a pre-digital world, but it is very

²⁴ Bharti Airtel Ltd. v. Competition Commission of India, (2019) SCC OnLine SC 1746, *available on Manupatra*.

²⁵ Samir Agrawal v. ANI Technologies Pvt. Ltd., CCI Case No. 10/2019, *available on Manupatra*

²⁶ Shikha Roy v. Jet Airways (India) Ltd., COMPAT Appeal No. 50 of 2018, *available on Manupatra*.

²⁷ The Competition Act, 2002, § 4(2)(a)(ii).https://www.indiacode.nic.in/show-data?actid=AC_CEN_22_29_00005_200312_1517807324781&orderno=4

comprehensive to include discriminatory pricing mechanisms carried out by algorithms or machine-driven tools. In the event that a leading platform employs consumer information to divide purchasers and charge them varied costs to obtain the same service, the conduct can be exploitative abuse within the law.

2.2 How Discrimination is made possible by Algorithms.

Price discrimination was observable in the traditional markets, such as in airline tickets or telecom tariffs, where various classes of consumers voluntarily charged different prices. Discrimination in the digital economy is less visible and much more discrete. The personal information, web history, type of device, and previous spending habits, as well as even location, are processed using algorithms and can identify the highest price that a particular consumer can accept. This enables companies to sell to certain consumers higher prices and provide discount to others without the consumer being aware of this²⁸. Although these practices have the potential to make things more effective, they also cast serious doubts about fairness, transparency and the exploitation of consumers.

2.3 Implementation of Section 4 in the Digital Space.

In order to prove abuse under Section 4, two conditions should be met:

1. Dominance: the firm should be in a situation of strength such that it can do without the influence of the competitive forces.²⁹ Market share is not the only form of dominance in the digital economy, where control over consumer data, network effects, and ecosystem lock-ins is also an issue. The Google Android case of the CCI acknowledged that this dominance could be generated through the control of data and platforms.³⁰
2. Abusive Conduct: The discriminatory algorithmic pricing should have a prejudiced result. To give an example, when a ride-hailing systematically raises the costs of some users according to their profile, it might be considered an unfair and discriminatory condition under Section 4(2)(a)(ii).

Therefore, the Indian competition law does not exclude algorithmic discrimination as an imaginative part of the law. The fact is that the unfairness is difficult to prove in practice.

²⁸ OECD, *Personalised Pricing in the Digital Era* (2018), at 7–10 <https://share.google/mZ4NiJBDVfQ9iIvb8>

²⁹ N. Nayak, *Competition Law in the Digital Economy: Rethinking Market Power in India*, Indian Journal of Law and Technology (2020) https://www.researchgate.net/publication/383662764_Digital_Economy_and_Antitrust_Rethinking_Competition_Law_in_the_Context_of_Big_Data

³⁰ *Competition Commission of India v. Google LLC & Ors.*, Case No. 39 of 2018 (CCI, 2022) <https://indiankanoon.org/doc/54000789/>

2.4 Implementation and Operational Laws.

- Although the law, in theory, is adequate, in practice implementation is undermined by obstacles:
- Algorithmic Opacity: Algorithms can be described as black boxes. It is very hard to prove intentional discrimination because regulators can hardly have access to the source codes or datasets.
- Evidence and Capacity: Proving that pricing results are discriminatory takes technical knowledge in data science, statistical modelling and digital forensic, which the CCI does not have presently.
- Legitimate Efficiency vs. Abuse: some price discrimination could be beneficial to consumers (e.g. discounts to price-sensitive customers). It is not a matter of fact that the welfare-enhancing and exploitative practices can be distinguished.
- Absence of Precedent: Jurisprudence of competition in India has mostly been concerned with predatory pricing and monopolistic deals (Meru v.). Ola; CCI v. Amazon/Flipkart.³¹ but has not so far clearly dealt with algorithmic price discrimination. This leaves it unclear the manner in which the courts would interpret the use of Section 4 in these situations.

Such a development of data-driven and algorithmic pricing of digital markets has spawned a heated discussion on the place of competition policy in ensuring the safeguarding of the interests of consumers and balanced market structures. The jurisdictions have taken different modes including the United States, United Kingdom, and the European Union, which indicate the difference between legal traditions, enforcement pro-dispositions, and regulatory horizons.

What has been the response of jurisdictions like the US, UK, and the EU to the challenges associated with the problem of algorithmic or discriminatory digital pricing?

The rise of algorithmic and data-driven pricing in the digital market has created a heated discussion about the presence of competition policy to ensure that the interests of consumers are safeguarded and the market forms balanced. Different jurisdictions, e.g. United States, United Kingdom, and European Union, have taken different approaches, which indicate the differences of their legal traditions, enforcement tendencies, and regulatory visions.

³¹ Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd. (Ola), Case No. 25 of 2015 (CCI, 2017); Delhi Vyapar Mahasangh v. Flipkart Internet Pvt. Ltd. & Amazon Seller Services Pvt. Ltd., Case No. 40 of 2019 (CCI, 2020) <https://indiankanoon.org/doc/25157856/>

3.1 United States: Relying on Traditional Antitrust and Consumer Protection.

The legal system of the US operates largely on an ex-post basis and this is founded on the Sherman Act of 1890³². The Federal Trade Commission (FTC) Act of 1914³³. Historically, the discriminatory price setting was prohibited under the Robinson-Patman Act of 1936³⁴. Its application has since been lost due to the fear it would be seen as discouraging healthy competition in terms of discounting. The discriminatory age of the internet pricing is being tamed with:

- Antitrust Enforcement (DOJ/FTC): DOJ has cautioned that algorithmic collusion³⁵ would be unlawful agreements under Section 1 of the Sherman Act, irrespective of whether such agreements were carried out using third-party price software. Nevertheless, the courts have found it difficult to differentiate tacit algorithmic coordination and justified unilateral behavior. A landmark ruling that has stated customized pricing is monopolistic or abusive has not been made.
- Consumer Protection (FTC): The FTC pursues actions against unfair or deceptive practices in the under-hand techniques of Section 5 of the FTC Act. Adjusting the price according to the fake perception of a consumer or refusal to provide material information may lead to some action against you. In the 2015 report, *Big Data: A Tool for Inclusion or Exclusion?* issued by the FTC, the authors noted discriminatory pricing against vulnerable populations and deemed it an issue that needed attention.³⁶
- Policy Debate: Stigler Centre Report (2019) and FTC hearings Competition and Consumer Protection in the 21st Century have noted the dangers of secret algorithmic pricing.³⁷ It is widely agreed that, in spite of the fact that in the existing legislation, abuses can theoretically be addressed, the impossibility to implement the law is impeded by both the presence of evidentiary issues and ambiguity.
- Major Weakness: The US strategy is case-specific, reactive in nature, and extremely evidence-based. The US in contrast to the EU/UK has not developed a proactive framework of regulating the digital platforms.

³² Sherman Antitrust Act, 15 U.S.C. §§ 1–7 (1890)

³³ Federal Trade Commission Act, 15 U.S.C. §§ 41–58 (1914).

³⁴ Robinson–Patman Antidiscrimination Act, 15 U.S.C. § 13 (1936).

³⁵ Maurice E. Stucke & Ariel Ezrachi, *Artificial Intelligence & Collusion: When Computers Inhibit Competition*, Univ. of Tenn. Legal Studies Research Paper No. 267 (2017), <https://ssrn.com/abstract=2921282>.

³⁶ Fed. Trade Comm'n, *Big Data: A Tool for Inclusion or Exclusion? Understanding the Issues* (2016), <https://www.ftc.gov/reports/big-data-tool-inclusion-or-exclusion-understanding-issues>.

³⁷ Stigler Center for the Study of the Economy & the State, *Stigler Committee on Digital Platforms: Final Report* (Sept. 2019), <https://www.chicagobooth.edu/research/stigler/news/2019/final-report>.

3.2 European Union: Hybrid Regulatory and Enforcement Framework.

EU has actively participated in changing its legislations to address the issues of digital markets.

- Article 102 TFEU Enforcement: Article 102 (abuse of dominance) has been applied by the Commission to combat discriminatory conduct by online giants. The case of Google Shopping (Case AT.39740, 2017)³⁸ The search results produced by self-preferencing was perceived as discriminatory and there was willingness to extend the law doctrine to the case of algorithms. Article 102(a) could also involve exploitive pricing.
- Digital Markets Act (DMA, 2022)³⁹ Another significant move forward, the DMA imposes ex-ante requirements on the so-called gatekeepers (e.g., Google, Amazon, Apple, Meta, Microsoft, and so on). Major provisions are:
 - Self-preferencing prohibition.
 - The mandatory disclosure of algorithmic decision-making and ranking.
 - Banning of the combination of personal data between the various services without user approval.
 - Making sure that access by business users is fair and non-discriminatory.
 - Though the DMA does not specifically prohibit personalized pricing, it indirectly limits the exploitive pricing by the mandate of transparency and fairness.
- GDPR & AI Act Synergies GDPR (2016) is limited to automated decision-making by Article 22⁴⁰. Relevant to algorithmic pricing, Article 22(1) of (General Data Protection Regulation), 2016 O.J. (L 119) 1 and which has extensive implications on consumers. The AI Act (2024)⁴¹ goes another step and categorises some of the algorithmic systems as being

Strength: The US strikes a balance between competition, protection of data, and regulatory requirements and generates a multi-level framework.

Weakness: The DMA focuses only on gatekeepers, which leaves gaps open to smaller yet, possibly, potentially dangerous players.

³⁸ Case AT.39740, *Google Search (Shopping)*, Comm'n Decision of 27 June 2017, https://competition-policy.ec.europa.eu/document/1b4bbec0-6ce4-4e91-901a-59b54ef18d91_en.

³⁹ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 Sept. 2022 on Contestable and Fair Markets in the Digital Sector, 2022 O.J. (L 265) 1, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R1925>.

⁴⁰ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 Apr. 2016 on the Protection of Natural Persons ... (General Data Protection Regulation), art. 22, 2016 O.J. (L 119) 1, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679>.

⁴¹ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence, 2024 O.J. (L 168) 1, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1689>.

3.3 United Kingdom: Innovative Institution and Selective Supervision.

Following Brexit, the UK has engaged in an institution friendly and flexible strategy.

- Competition Act 1998⁴²: Nevertheless in keeping with the EU-style prohibitions of dominant market position abuse. The concept of algorithmic discrimination is contained in Section 18, which resembles Article 102 TFEU.
- CMA Studies and Guidance: A 2021,⁴³ states that threats such as tacit collusion, pricing discrimination and opaqueness were highlighted.
- Digital Markets, Competition and Consumers Act (DMCCA, 2024)⁴⁴
 - Empowers the Digital Markets Unit (DMU) to control companies that have Strategic Market Status (SMS).
 - Exemptions of pro-competitive regulations might include prohibitions on discriminative prices and demands of algorithmic transparency.
 - Enhance consumer rights by prohibiting drip pricing and a fair subscription deal.
- Technical Skills: The Data, Technology, and Analytics (DaTA) Unit of the CMA is able to audit AI, check code, and assess AI-based pricing systems. This is not the case with the US or the EU.

Advantage: Proactive, flexible and capacity based approach; it lets the regulators intervene before potential harm can be compounded.

Weakness: Growing political opposition to regulatory inaction on SMS should be based on correct identification of SMS.

Comparative Insights

United States -Primarily serves to protect antitrust regulations and consumer protection; is strong but not very open and reactive to the incident.

European Union - features a mixture of post-competition law and proactive DMA obligations that are targeted against large platforms. Fairness and ability to compete are brought out.

United Kingdom - It is concentrated on developing institutional capacities (through DMU and the DaTA Unit) that enable agile management of agile algorithmic risks that have responses that are individual firm-specific.

⁴² Competition Act 1998, c. 41 (UK).

⁴³ Competition & Mkts. Auth., *Algorithms: How They Can Reduce Competition and Harm Consumers* (Jan. 2021), <https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers>.

⁴⁴ Digital Markets, Competition and Consumers Act 2024, c. 13 (UK), <https://www.legislation.gov.uk/ukpga/2024/13/enacted>.

Lessons for India

The Competition Act 2002 (especially Section 4 on abuse of dominance) of India may potentially solve the problem of algorithmic price discrimination, but it lacks explicit provisions in this regard.

The lessons in other jurisdictions establish the significance of:

- Proactive regulation (adopting the DMA/DMCCA model)
- Algorithms transparency and auditing capability.
- The need to have a special regulator (like the DaTA Unit of the CMA).

India may contemplate the multi-layered approach and keep on using Competition Act and further suggest a Digital Markets Regulation on dominant platforms.

FINDINGS

The Indian competition law, especially Section 4 of Competition Act of 2002 gives a legal basis to address the issue of discrimination pricing but the complexity and the untransparency of the algorithm-based activities poses significant challenges in the enforcement. Although it is true that algorithmic and data-driven pricing would lead to increased efficiency it is also dangerous as it may result in exploitation of the consumer, lack of transparency and the unfair competition in the marketplace.

In order to overcome these weaknesses, India must supplement its existing system with certain reforms. This might be accomplished by introducing a regulatory framework of pre-emptive regulation of systemically important digital platforms following the example of the EU Digital Markets Act (DMA) and the UK Digital Markets, Competition and Consumers Act (DMCCA).

The Competition Commission of India (CCI) ought to receive stronger investigative authority to demand publication of algorithms, price information, and training models under strong confidentiality assurances, which will ease the evidentiary burdens related to the cases of algorithmic misappropriation. Introducing a Data and Algorithm Unit within the CCI that would be staffed with technical professionals would enhance the institution to have the ability to audit algorithms and detect instances of manipulative pricing schemes.

To address the overlapping concerns of competition, privacy and consumer rights, it is essential that different agencies work synergistically, including the CCI, the Data Protection Board and consumer protection agencies. Also, the provision of guidance documents and soft law tools

explaining how Section 4 will be used with respect to algorithmic pricing would provide regulatory certainty and protect the interests of consumers.

Finally, the practice of increasing consumer education and providing easily accessible redressal systems to grievances should be considered top priorities in order to empower individuals, enable the discovery of exploitative practices at the initial phase, and create confidence in digital markets. All these measures will help modernize the Indian competition framework, reduce the risk of a risk of an abuse of dominance, and bring enforcement practices in line with the realities of the digital economy.

V. CONCLUSION AND RECOMMENDATIONS.

The current Indian competition law, especially Section 4 of the Competition Act of 2002, gives a legal rationale to use discriminatory pricing, but the vagueness and impossibility of analyzing the work of algorithms is an important issue in terms of enforcement. Algorithms and data-driven pricing can indeed encourage efficiency, but it could also entail the exploitation of consumers, lack of transparency, and prevent any meaningful competition.

In order to overcome these shortcomings on future proposals, India must work on its current structures with certain reforms. Specifically, a regulatory approach that is similar to the Digital Markets Act in the EU and Digital Markets, Competition and Consumers Act in the UK regarding systemically important digital platforms might be the regulatory answer to this sector and offer input transparency, non-discrimination, and access share.

The Competition Commission of India needs a higher power to examine and coerce publication of algorithms, prices and training information, with a high degree of confidentiality, and that would restrict the power of evidentiary interference of algorithmic functioning. The Commission would develop the ability to audit algorithms and detect predatory pricing techniques by creating a new Data and Algorithm Unit within the CCI that has technical personnel.

To overcome such gaps in further proposals, India should develop its current structures with certain reforms. Specifically, a regulatory address like the Digital Markets Act by EU and Digital Markets, Competition and Consumers Act by UK of systemically important digital platforms as regulators would be an appropriate regulation of the field and contribute to

transparency in inputs and non-discriminatory input and access. Competition Commission of India needs more powers to probe and force disclosure of algorithms, pricing, and training information, under a high level of confidentiality, which will restrain the evidentiary power to violate algorithmic functioning. The Commission would develop the capability to audit algorithms and detect predatory pricing by establishing a new Data and Algorithm Unit in the CCI, which will have technicians.

