CCI'S EVOLVING APPROACH TO AI-DRIVEN MARKETS

Sakshi Yadav, University of Allahabad

ABSTRACT

This article examines the evolving approach of the Competition Commission of India (CCI) to AI-driven markets and its shifting focus from abstract AI ethics to concrete questions of market power. Using the CCI's 2025 AI market study as its core reference point, it maps structural mismatch between upstream AI infrastructure and models and downstream deployment and applications. It also outlines six theories of harm enabled by algorithmic opacity, speed and data concentration. It analyzes CCI's existing digital jurisprudence on abuse of dominance, especially cases involving Android billing and search self-preferencing, which already constrain data use and algorithmic ranking in ways that can be extended to AI systems. The article then examines the commission's institutional capacity, highlighting technical, inter-regulatory and informational gaps. Finally, it argues about the four structural issues in the AI market and the effectiveness of India's AI competition regime, raising a question that whether the commission can move from monetary penalties to layered data access and interoperability remedies.

Keywords: Competition Commission of India (CCI), AI market study, Abuse of dominance, Algorithmic self-preferencing, Digital Competition Bill 2024, Systematically Significant Digital Enterprises (SSDE's), Data access remedies.

1. Introduction:

In less than a decade, Google has defended at least three major cases with the Competition Commission of India (CCI/ 'Commission'), and Amazon and Flipkart are yet to settle major antitrust cases and penalty charges with the commission. It is evident that CCI's latest market study on AI reads almost like a manual for the next wave of complaints. Where most of the global conversations focus on 'AI ethics', CCI's focus is not just 'AI ethics' or security, but is far more clinical than that: the mechanics of market power.[1]

This article analyzes AI-driven markets in India, keeping antitrust enforcement at its core and a clear focus on three major operational pivots: algorithmic self-preferencing, abuse of dominance in the AI-stack, and the emerging toolkit of data-access remedies. The analysis mainly focuses on CCI's recently published AI Market study (October 2025). [2]The release of the AI report marks the first comprehensive regulatory audit for structuring the AI market in India. The release of the report marks the arrival of the convergence of the two major frameworks: the Digital Competition Bill, 2024, and Systematically Significant Digital Enterprises (SSDEs), signaling that the regulator is no longer waiting for harm to occur but is actively defining boundaries of self-preferencing and use of data before the market gets mature.[3]

2. CCI's Evolving Theory of Harm:

The recent AI market report of the commission sets a strong foundation, focusing on acting as an eye-opener for an effective regulation of the market, emphasizing its impossibility without a precise grasp of technical architecture. The report clearly shows its disinterest in indulging in abstract anxieties about "super-intelligence", but in mapping the operational terrain of the AI-stack. The objective of the report is to diagnose the accumulation of power and where harm actually materializes.

The commission exposes a structural tempo mismatch by slicing the market into upstream (infrastructure and models) and downstream (deployment and applications), and analyzing the

[1] Shilpi Bhattacharya & Pankhudi Khandelwal, Indian Competition Law in the Digital Markets: An Overview of National Case Law (2021), SSRN Working Paper No, 3897291.
[2] Competition Commission of India, Market Study on Artificial Intelligence and Competition (Oct. 6, 2025).
[3] Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law (Feb. 27, 2024), Annexure IV (Draft Digital Competition Bill, 2024).

evolution and movement of these layers. The upstream layer, comprising foundational model developers, providers, and data owners with major control on scarce resources, moves slowly with high fixed costs and deep concentration, while the downstream layer, with fine-tuners and end-user applications, sits entirely in the dependent tier for basic functionality reason; major scarce resources like API's, models, and compute are controlled by the upstream layer. About 67% of the Indian startups operate downstream,[4] leaving Indian firms exposed to unilateral changes in pricing, access, or model behaviour from upstream entities.

With a focus on structural mismatch in the market, the report also organises six separate theories of harm, reflecting anti-competitive conduct enabled by AI systems using speed and opacity. Algorithmic collusion becomes feasible with human coordination. Self-preferencing and bundling are executed through ranking algorithms rather than contracts. Exclusive dealings generate compute-driven lock-in. Personalised pricing enables perfect discrimination. Data hoarding creates non-replicable advantages. And the opacity of deep models complicates both detection and proof, making intent nearly irrelevant when impact is automated.[5]

The most consequential insight of the commission's study is the slow enforcement for AI markets. The study clearly implicates that by the time traditional investigation concludes, the competitive harm may be irrelevant. The commission moves towards a proactive, structural, and soft-law approach. [6]

3. Building on Precedent: CCI's Existing Framework

The commission's engagement with the AI market is not an unexplored frontier. The commission already holds a set of precedents that show patterns of digital dominance, providing an interpretive base for emerging AI conduct. The CCI's evolved digital jurisprudence is the outcome of Section 4 of the Competition Act, 2002, which primarily focuses on 'abuse of dominance', which in turn enables the traditional competition law concepts apply to unique characteristics of digital markets shaped by data, network effects, and rapid tipping dynamics. Across its major technology cases, several doctrinal patterns have

[4] "Is Ai Reshaping India's Business Landscape? CCI Study Finds 67% Startups Focus on Applications, 76% Use Open Source Tech," Mint (oct, 2025).
[5] OECD, Algorithms and Collusion: Competition Policy in the Digital Age (2017).
[6] "CCI Issues Market Study on AI, Competition; Suggests Cos to Do Self-Audits of AI Systems," Mint (Oct. 7, 2025)

emerged.[7] Taken together, the commission's technology cases have crystallized doctrinal themes that gives a structural pathway for approaching AI markets.

A. Android and Play Store Billing: Leveraging and Data-Access Remedies

The CCI's case against Google concerning Google's dominant position on the Android platform, specifically its mandatory Google Play Billing System (GPBS), which imposed a discriminatory cost structure on developers while exempting its own applications, such as YouTube. It compelled the commission to intervene at the level of digital leverage and predetermined defaults, creating a protected lane for the platform's own services.[8] The decision also imposed one of the earliest and most explicit constraints on data use, providing remedies that function as a blueprint for the AI economy. It imposes restrictions on how a dominant intermediary converts the data of the dependent businesses into an advantage for its own downstream offerings.

The National Company Law Appellate Tribunal (NCLAT), in its 2025 ruling, largely upheld these findings. Although financial penalties received widespread attention, the more meaningful development lies in the behavioral remedies that survived appellate review. This outcome marks a shift from conventional antitrust enforcement to a data-access remedy.[9]

B. Search Bias and Self-Preferencing

In the 2018 ruling of Matrimony.com vs. Google, the commission determined Google's abuse of dominance by engaging in search bias. Google systematically elevated its own commercial flight vertical while downgrading competing aggregators. This case established that self-preferencing when executed through ranking algorithms can constitute abuse of dominance even when the mechanism is embedded in "just an algorithm".[10] This precedent becomes particularly significant when examining the introduction of AI Overviews and AI Mode in India, which replace the conventional/traditional search platforms' listings with generated "one-answer" responses, increasing the potential regulatory risk more sharply.[11]

[7] Competition Act, 2002, No. 12 of 2003, § 4 (India).
[8] Umar Javed v. Google LLC, Case No. 39 of 2018, Competition Commission of India (Oct, 20, 2022) (Android Mobile OS & Play Store orders).
[9] Google LLC v. Competition Commission of India, Competition Appeal (AT) (Android/Play Store) (NCLAT, 2025).
[10] Matrimony.com Ltd. v. Google LLC, Cases Nos. 07 & 30 of 2012, Competition Commission of India (Feb.8, 2018).
[11] "Decrypting Google's Search Engine Bias Case: Anti- Trust Dimensions," 8 Christ U. L.J. (2019).

Taken together, these cases provide the commission with an immediate regulatory framework for AI, grounded in principles such as prohibiting self-preferencing, limiting the use of business-user data, and ensuring nondiscriminatory access for dependent firms. AI may represent a new technical stack, but the conduct aligns closely with the patterns identified and corrected by the commission.

4. Institutional Competence: Can CCI Effectively Oversee AI Markets?

The commission clearly expresses its intent to oversee digital gatekeepers, but a structural gap persists between its scale of mandate and its present institutional capabilities. Even the CCI's own AI market study acknowledges a central constraint: traditional antitrust methods, such as long investigations, rigid market definitions, and limited technical inquiry/assessment, are misaligned with the speed and opacity of AI systems. To bridge this gap, the report recommends establishing an interdisciplinary technical center within the regulator. This is not an incremental hiring exercise but a systematic redesign of the regulator's talent base by integrating data scientists, machine learning specialists, and algorithm auditors who can examine proprietary models beyond external disclosures.[12]

With an existing global nature of AI development, the commission cannot build such capacity in isolation, so it must embed itself in international networks, learning from peer authorities, and coordinating standards is necessary to avoid regulatory arbitrage by multinational digital platforms.[13] This engagement becomes necessary to deal with AI-specific harms, which require technical capabilities that cannot be developed in isolation.

This harm also clarifies what institutional upgrade must be achieved. Detecting algorithmic collusion, identifying discriminatory or exclusionary outcomes, and understanding how autonomous systems may converge on supercompetitive pricing demand, the ability to test, simulate, and stress-analyse algorithmic systems. Without the capacity to run these systems and without access to the underlying code, the regulator remains dependent on what firms choose to disclose.[14] This dependency gets further complicated by the intersection of AI governance with multiple sectoral regulators. Questions of data access meet DPDP constraints,

[12] Competition Commission of India, Market Study on Artificial Intelligence and Competition (Oct. 6, 2025), executive summary and recommendations.
[13] Press Information Bureau, Competition Commission of India Releases Market Study Report on Artificial Intelligence and Competition (Oct. 6, 2025).
[14] OECD, Abuse of Dominance in Digital Markets (2020).

and AI deployment in fintech, telecom, and health intersects with the RBI, TRAI, and other authorities. Without structural mechanisms for inter-regulatory coordination, enforcement gets slowed by overlapping mandates rather than substantive assessment.[15]

This produces a widened information asymmetry lacking technical audit powers, compelling CCI to rely on the compliance report produced by the enterprises it regulates, and such self-assessment without credible verification weakens the enforcement.

These structural gaps get sharper under the proposed Digital Competition Bill, 2024. The shift from ex post intervention to ex ante obligations assumes the regulator's continuous monitoring and early intervention. Yet if the CCI already struggles to audit algorithms in isolated investigations, its ability to supervise ongoing AI deployment across multiple Systematically Important Digital Enterprises becomes uncertain. Unless digital infrastructure and technical talent grow/scale at the same pace as legislative ambition, the DCB risks becoming formally powerful but practically ineffective.[16]

5. Critique and Gaps: What the AI Market Study Underplays

The CCI's market study maps the architecture of the AI stack, but several structural blind spots can be seen in its analytical frame. The study emphasizes market structure over real-world power dynamics while it overlooks the exercise of dominance in contemporary algorithmic markets. Four gaps are particularly significant:

i. The "Open-Source" Status

The commission's study heavily relies on the claim that 76% of the Indian startups use open-source models. It presents this as proof of decentralization and competition.[17] However, this assumption is flawed because most popular "open" models, such as Llama and Mistral, remain dependent on proprietary compute infrastructure for fine-tuning, training, and deployment. That infrastructure is controlled by a small set of cloud incumbents, the same firms whose open-source models purportedly counterbalance. The study equates open-usage with genuine independence but completely ignores how these developers still function as tenants within

[15] Standing Committee on Finance, 25th Report, Digital Competition Bill, 2024 (Aug. 11, 2025).
[16] Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law (Feb. 27, 2024).
[17] "Is Ai Reshaping India's Business Landscape? CCI Study Finds 67% Startups Focus on Applications, 76% Use Open Source Tech," Mint (oct, 2025).

incumbent-controlled cloud ecosystems.[18]

ii. The Missing Economics of Vernacular Data

The study treats data as undifferentiated in a linguistically diverse market, failing to recognise that English-language datasets are abundant and commoditised, whereas, high-quality datasets for Indian languages are scarce, expensive to produce, and effectively non-substitutable. This creates an entry barrier for new entrants, making it structurally prohibitive.[19] Meanwhile, incumbents accumulate vernacular data through consumer apps. The AI market study missed an opportunity to identify vernacular datasets as an essential facility for India's AI markets.[20]

iii. Remedy Design that Outsources Enforcement to the State

The remedies proposed in the study rely on the public infrastructure, such as IndiaAI's compute mission and state-backed data repositories. This shifts the burden of lowering the entry barrier from the regulator to industrial policy.[21] The study assumes that the state capacity will match the pace of growth of Big Tech's entrenched infrastructure, an assumption that is more aspirational than regulatory. The study anchors solutions in future public provisioning while completely sidesteps the harder question of whether the private infrastructure requires regulatory unlocking through tools like mandatory access orders or functional unbundling.[22]

iv. The Absence of Defined Enforcement Thresholds

The study encourages soft compliance but does not specify when these soft compliance tools, like advocacy, self-audits and voluntary disclosures, become necessary regulatory intervention. There is no clarity on what level of algorithmic bias, cloud-spend lock-in, or data-access asymmetry triggers a Section 4 investigation.[23] In the absence of articulated red lines, the firms can engage in procedural compliance. without facing any substantive scrutiny. It is easy for a market study to diagnose risks, but without a defined enforcement threshold, the regulator's

[18] OECD, Competition in Artificial Intelligence Infrastructure (Global Forum on Competition, 2025).
[19] Pradeep S. Mehta & Pallavi Malik, AI Markets and Competition in India (ICRIER Working Paper, 2023).
[20] IndiaAI & Office of the Principal Scientific Adviser, Towards Responsible AI for All (2021).
[21] Competition Commission of India, Market Study on Artificial Intelligence and Competition (Oct. 6, 2025) (recommendations referring to IndiaAI and public compute/data platforms).
[22] Press Information Bureau, Cabinet Approves IndiaAI Mission to Strengthen AI Ecosystem in India (Mar. 7, 2024).
[23] Competition Act, 2002, No. 12 of 2003, § 4 (India).

poster shifts into an advisory rather than an actionable insight.[24]

6. Conclusion: Anticipating the Next Five Years

As the Competition Commission of India shifts from studying the AI stack to actively regulating it, the next five years will be shaped by the way the commission translates its theories

of harm into concrete Section 3 and Section 4 enforcement rather than mere policy pronouncements.[25] The centre of gravity for legal practitioners and market participants will move from consulting papers to case laws and from abstract concerns about AI to specific doctrines on market power and exclusion in AI-enabled markets.[26]

Against this backdrop, the first conjugating point will be the opening of an investigation under Section 4 in an AI-specific abuse of dominance that moves beyond traditional search bias. The case to watch will be one that squarely addresses algorithmic self-preferencing or discriminatory AI pricing and tests whether an AI model's "hallucination" or "optimization" is treated as a neutral technical artefact or as a deliberate exclusionary design[27] choice that steers toward proprietary downstream services. The precedent that emerges from this first matter will determine the functionality of AI as a mere product design or as a conduct lever capable of foreclosing rivals in adjacent markets.

Within this emerging enforcement landscape, a second shift will follow from the Digital Competition Act and the designation of Systemically Significant Digital Enterprises. Once in force, the real contest will lie not in the existence of the SSDE regime but in the methodology for selecting providers of Core Digital Services, especially cloud infrastructure and foundation models. The core question will be whether designation is based primarily on turnover and user benchmarks, or whether the CCI also incorporates qualitative factors that reflect the unique gatekeeping authority of AI intermediaries that oversee access to data, compute and model deployment layers. [28]

[24] Competition Commission of India, Market Study on Artificial Intelligence and Competition (Oct. 6, 2025), (recommendations).
[25] Competition Act, 2002, No. 12 of 2003, §§ 3, 4 (India).
[26] Competition Commission of India, Market Study on Artificial Intelligence and Competition (Oct. 6, 2025),
[27] OECD, Artificial Intelligence and Competitive Dynamics in Digital Markets (Global Forum on Competition, 2025).
[28] Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law (Feb. 27, 2024).

Carrying this logic into remedies, the clearest marker of regulatory maturity will be how the CCI calibrates its remedial toolkit. The central test is whether enforcement stays limited to monetary penalties or moves toward functional measures that require data access and interoperability. If the commission refrains from directing access to training data, model interfaces, or interoperability with competing services, its interventions may address specific misconduct but still leave market structure and barriers for new AI providers largely unchanged.[29]

Taken together, these developments point to a single operational pivot that will define the effectiveness of India's AI competition regime. The real test of CCI's AI strategy is whether it can convert its layered understanding of the AI stack into equally layered remedies that reconfigure data access and technical interfaces, rather than merely adding another round of penalties to the same set of firms.

[29] Standing Committee on Finance, 25th Report, Digital Competition Bill, 2024 (Aug. 11, 2025).

References:

Competition Commission of India. (2025). Market Study on Artificial Intelligence and Competition. Competition Commission of India.https://www.cci.gov.in/images/marketstudie/en/market-study-on-artificial-intelligence-and-competition1759752172.pdf CCI+1

Competition Commission of India. (2025). Competition Commission of India releases Market Study Report on Artificial Intelligence and Competition conducted through Management Development Institute Society (MDIS). Press Information Bureau, Government of India. https://pib.gov.in/PressReleasePage.aspx?PRID=2175607 Press Information Bureau+1

Khaitan & Co. (2025). Indian antitrust authority publishes report on AI and Competition. https://www.khaitanco.com/thought-leadership/Indian-antitrust-authority-publishes-report-on-AI-and-Competition Khaitan & Co+1

Economic Laws Practice. (2025). CCI publishes a market study on Artificial Intelligence and Competition. ELP Competition Update, October 2025.https://elplaw.in/wp-content/uploads/2025/10/CCI-publishes-a-market-study-on-Artificial-Intelligence-and-Competition.pdf Economic Laws Practice

Ministry of Corporate Affairs, Government of India. (2024). Draft Digital Competition Bill, 2024 (Annexure IV to the Report of the Committee on Digital Competition Law).https://prsindia.org/policy/report-summaries/digital-competition-law and https://www.medianama.com/wp-content/uploads/2024/03/DRAFT-DIGITAL-COMPETITION-BILL-2024.pdf PRS Legislative Research+2MEDIANAMA+2

Government of India. (2023). Digital Personal Data Protection Act, 2023 (Act No. 22 of 2023). Gazette of India. https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf MeitY+1

Press Information Bureau, Government of India. (2025). DPDP Rules, 2025 notified-full operationalisation of the Digital Personal Data Protection Act, 2023. Press note. https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=156054&id=156054 Press Information Bureau+2The Times of India+2

Matrimony.com Limited and Consumer Unity & Trust Society v. Google LLC & Others. (2018). Case Nos. 07 and 30 of 2012, Order dated 8 February 2018, Competition Commission of India. https://www.cci.gov.in/antitrust/orders/details/746/0 CCI+2IndiaCorpLaw+2

Google LLC & Others v. Competition Commission of India & Others (Google Play Billing). (2025). Competition Appeal (AT) No. 04 of 2023, Judgment dated 28 March 2025, National

Company Law Appellate
Tribunal.https://efiling.nclat.gov.in/nclat/order_view.php?path=L05DTEFUX0RvY3VtZW50cy9DSVNfRG9jdW1lbnRzL2Nhc2Vkb2Mvb3JkZXJzL0RFTEhJLzIwMjUtMDMtMjgvY291cnRzLzEvZGFpbHkvMTc0NDgwNzE1OTk1Mzk0MjI1NzY3ZmZhNGY3MmQ1YzEucGRm efiling.nclat.gov.in+2competitionlawyer.in+2

OECD. (2024). Artificial intelligence, data and competition. OECD Competition Policy Papers. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/05/artificial-intelligence-data-and-competition_9d0ac766/e7e88884-en.pdf OECD

OECD. (2025). Artificial Intelligence and Competitive Dynamics in Downstream Markets (DAF/COMP/GF(2025)4). OECD Artificial Intelligence Papers. https://one.oecd.org/document/DAF/COMP/GF%282025%294/en/pdf OECD+1

Carugati, C. (2024). The generative AI challenges for competition authorities. Intereconomics, 59(1), 14–21. https://www.intereconomics.eu/contents/year/2024/number/1/article/the-generative-ai-challenges-for-competition-authorities.html Intereconomics+2Intereconomics+2