

# INTERNATIONAL JOURNAL OF LAW MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

---

Volume 9 | Issue 2

---

2026

© 2026 International Journal of Law Management & Humanities

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com/>)

---

This article is brought to you for free and open access by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of **any suggestions or complaints**, kindly contact [support@vidhiaagaz.com](mailto:support@vidhiaagaz.com).

---

**To submit your Manuscript** for Publication in the **International Journal of Law Management & Humanities**, kindly email your Manuscript to [submission@ijlmh.com](mailto:submission@ijlmh.com).

---

# The Regulatory Imperative Addressing Algorithmic Opacity under the Consumer Protection Act, 2019

---

SHALVI KAPOOR<sup>1</sup>

## ABSTRACT

*The rapid growth of algorithmic systems across digital consumer markets has fundamentally transformed how products, services, and prices are delivered. Algorithms now determine creditworthiness, recommend goods, personalize prices, and even influence consumer choices often operating behind a veil of opacity. While these systems enhance efficiency and personalization, they also generate new forms of consumer vulnerability, rooted in what scholars describe as algorithmic opacity. The Consumer Protection Act, 2019 (CPA 2019), though a landmark legislative reform aimed at modernizing consumer rights, remains conceptually tied to traditional human-led decision-making and is largely silent on algorithmic governance. This paper adopts a doctrinal and analytical approach to examine how the CPA 2019 currently addresses, and fails to address, harms arising from opaque algorithmic decision-making. Through statutory interpretation and legal reasoning, it identifies key limitations in the Act's existing framework, including definitional ambiguities, procedural inadequacies, and institutional gaps. The paper concludes with doctrinal recommendations for integrating algorithmic transparency, fairness, and accountability within India's consumer protection jurisprudence, ensuring that the law evolves in step with the digital marketplace.*

**Keywords:** *Algorithmic Opacity, Consumer Protection Act, 2019, Algorithmic Accountability, Digital Consumer Rights, Transparency, Unfair Trade Practice.*

## I. INTRODUCTION

The digitization of consumer markets has ushered in a new era where algorithm-driven systems mediate nearly every aspect of consumer engagement from pricing and product recommendations to credit assessments and targeted advertising. These algorithms, often proprietary and complex, make autonomous decisions based on vast data inputs, frequently without human oversight or explanation. The average consumer seldom understands why a particular product is shown, why a specific price is offered, or why a loan application is accepted

---

<sup>1</sup> Author is a Student at Christ (Deemed to be University) University, Pune, Lavasa, India.

or rejected. This lack of transparency commonly referred to as algorithmic opacity poses significant challenges to fairness, informed consent, and equality in consumer interactions<sup>2</sup>.

Algorithmic opacity represents a new form of unfairness, distinct from traditional deception or misrepresentation by human actors. The harm arises not from deliberate intent but from the inscrutability of automated processes that influence consumer choice, pricing, and access<sup>3</sup>. Such opacity undermines the foundational principles of consumer protection autonomy, information symmetry, and accountability by obscuring the rationale behind market decisions that affect individuals directly.

The Consumer Protection Act, 2019 (CPA 2019) was a landmark legislative reform introduced to modernize India's consumer protection regime and address the realities of a digital and service-oriented economy<sup>4</sup>. It replaced the Consumer Protection Act, 1986, introducing new institutions like the Central Consumer Protection Authority (CCPA) and expanding coverage to include e-commerce platforms and digital marketplaces. While these developments signified progress toward regulating online consumer practices, the Act remains primarily designed for human-mediated commerce. It lacks explicit recognition of algorithmic systems as potential sources of consumer harm.

This doctrinal and analytical study examines how the CPA 2019 addresses and fails to address the challenges created by algorithmic opacity in consumer interactions. It relies on statutory interpretation, regulatory instruments, and relevant judicial developments to evaluate the Act's conceptual and practical adequacy in protecting consumers from harms arising in algorithmic environments. Unlike comparative or empirical analyses, this research situates its argument squarely within the Indian legal framework, engaging with the Act's structure, intent, and implementation to propose doctrinal reforms that can strengthen algorithmic transparency and accountability within India's consumer protection jurisprudence.

## II. UNDERSTANDING ALGORITHMIC OPACITY IN THE CONSUMER CONTEXT

Algorithmic opacity refers to the inability of consumers, regulators, or even developers to fully understand how automated decision-making systems function particularly when such systems rely on complex machine-learning or artificial intelligence models that are neither transparent nor auditable<sup>5</sup>. These systems process vast amounts of personal and behavioral data to make

---

<sup>2</sup> Burrell, J., *How the Machine "Thinks": Understanding Opacity in Machine Learning Algorithms*, (2016) 3(1) *Big Data & Society*.

<sup>3</sup> *Consumer Protection Act, 2019*, No. 35 of 2019 (India).

<sup>4</sup> Ghosh, S., *Algorithmic Fairness and Consumer Rights in India*, (2022) 18(2) *Indian Journal of Law and Technology*.

<sup>5</sup> Narain, S., *Consumer Protection and Artificial Intelligence: Challenges of Algorithmic Governance*, (2023)

decisions that directly affect consumers, often without meaningful disclosure or accountability. The result is a digital marketplace in which crucial decisions are made, but their rationale remains obscured.

In the consumer domain, algorithmic opacity manifests in several tangible ways:

- **Opaque pricing mechanisms:** E-commerce platforms frequently employ dynamic pricing algorithms that adjust prices based on user profiles, browsing history, purchasing power, or location, without informing consumers about the underlying criteria<sup>6</sup>
- **Automated credit scoring:** Fintech applications use automated models to determine creditworthiness or eligibility for financial products. Such systems may reject applications or vary interest rates based on undisclosed variables, often embedding social or economic biases within their datasets.
- **Manipulative recommendation systems:** Online platforms utilize behavioural analytics and predictive algorithms to shape consumer preferences, presenting “personalized” options that subtly steer choices while maintaining an illusion of autonomy.

These manifestations reveal that algorithmic opacity directly undermines the foundational principles of consumer protection *fairness, transparency, accountability, and informed choice*. Traditional legal doctrines of *unfair trade practice* or *misleading representation* are ill-suited to address harms arising from the technical design of automated systems rather than human deceit or intent<sup>7</sup>

Moreover, algorithmic opacity introduces a deeper structural problem: it creates asymmetry of information so severe that consumers are not only unaware of how decisions are made but often cannot even identify when harm has occurred. This hidden layer of influence erodes trust in digital marketplaces and challenges the very premise of the *Consumer Protection Act, 2019*, which is built upon the visibility of the trader’s conduct.

In essence, algorithmic opacity represents a paradigm shift from visible unfairness to invisible inequity<sup>8</sup>. To address this new form of consumer harm, the legal system must evolve beyond its traditional focus on misrepresentation to encompass accountability in design, deployment, and decision-making of algorithmic systems. This doctrinal shift is central to aligning consumer

---

65(4) *ILI Law Review*.

<sup>6</sup> Burrell, J., *How the Machine “Thinks”: Understanding Opacity in Machine Learning Algorithms*, (2016) 3(1) *Big Data & Society*.

<sup>7</sup> Kumar, S. & Sonkar, A., *Legal Challenges and Consumer Protections in India’s Digital Lending Landscape*, (2025) 3(1) *Motherhood International Journal of Research and Innovation*, pp. 45–48.

<sup>8</sup> *Puttaswamy v. Union of India*, (2017) 10 SCC 1 (SC) (recognizing informational autonomy as a facet of Article 21).

protection law with the realities of a digital and data-driven economy<sup>9</sup>.

### III. LEGAL FRAMEWORK UNDER THE CONSUMER PROTECTION ACT, 2019

#### A. Legislative Intent and Scope

The *Consumer Protection Act, 2019* (CPA 2019) was enacted to replace the *Consumer Protection Act, 1986* with the intent of strengthening consumer rights and addressing the challenges of an increasingly digital and service-driven economy<sup>10</sup>. The Act represents a significant legislative reform aimed at safeguarding consumers from unfair trade practices, product liability, and deficient services in the context of rapid technological change.

Section 2(47) defines *unfair trade practice* expansively to include deceptive, misleading, or fraudulent conduct by traders or service providers that may affect consumer choice or interest<sup>11</sup>. Section 94 further empowers the Central Government to regulate e-commerce and direct selling through subsidiary rules.

Pursuant to this mandate, the Consumer Protection (E-Commerce) Rules, 2020 were introduced to impose obligations of transparency, grievance redressal, and fair disclosure on online marketplaces and sellers<sup>12</sup>. Rule 4 mandates that every e-commerce entity disclose complete information regarding return, refund, exchange, and warranty policies, while Rule 5 requires the appointment of grievance officers to address consumer complaints in a timely manner.

Additionally, the Act established the Central Consumer Protection Authority (CCPA) under Chapter III, tasked with promoting, protecting, and enforcing the rights of consumers against unfair trade practices and misleading advertisements. The CCPA is empowered under Section 18 to conduct inquiries, recall goods, and issue corrective directions against deceptive practices.

While these provisions collectively demonstrate legislative foresight in adapting to digital commerce, they stop short of explicitly addressing the role of algorithmic systems in shaping consumer experiences. The statute continues to conceptualize the trader or service provider as a human actor capable of intent, leaving algorithmically induced harm outside its direct purview<sup>13</sup>

Consequently, although the CPA 2019 provides a robust framework for ensuring fairness and

---

<sup>9</sup> Srivastava, A., *Algorithmic Accountability and Indian Law: Doctrinal Gaps and the Path Forward*, (2024) 4(1) *Journal of Indian Law & Policy Review*, p. 37.

<sup>10</sup> *Consumer Protection Act, 2019*, No. 35 of 2019, Statement of Objects and Reasons (India).

<sup>11</sup> *Consumer Protection Act, 2019*, §2(47) (India).

<sup>12</sup> *Consumer Protection (E-Commerce) Rules, 2020*, Ministry of Consumer Affairs, Government of India, Gazette Notification G.S.R. 462(E) (23 July 2020).

<sup>13</sup> Narain, S., *Consumer Protection and Artificial Intelligence: Challenges of Algorithmic Governance*, (2023) 65(4) *ILI Law Review*, pp. 212–214.

transparency in conventional consumer transactions, it lacks the necessary doctrinal expansion to recognize the *non-human agency* of algorithmic decision-making systems that increasingly mediate consumer interactions.

### **B. Digital Consumer Protection and Emerging Jurisprudence**

Judicial engagement with digital consumer protection in India has evolved incrementally, with courts gradually acknowledging the complex nature of online transactions. Indian consumer jurisprudence has traditionally interpreted the concept of deficiency in service and unfair trade practice liberally to accommodate emerging challenges in commerce<sup>14</sup>. However, algorithmic harms such as automated bias, discriminatory pricing, or opaque decision-making remain largely untested within this legal framework.

A significant judicial precedent in this regard is *Amazon Seller Services Pvt. Ltd. v. Amway India Enterprises Pvt. Ltd.*,<sup>15</sup> where the Delhi High Court examined the role of e-commerce intermediaries in ensuring consumer trust and transparency. The Court emphasized that digital marketplaces must operate with fairness and disclosure obligations toward both consumers and brand owners. Although the case did not involve algorithmic systems directly, it reflects judicial recognition of the structural risks posed by digital platforms in shaping consumer choice.

In *K.S. Puttaswamy v. Union of India*,<sup>16</sup> the Supreme Court further articulated the constitutional basis for informational autonomy under Article 21 of the Constitution, reinforcing the need for transparency and accountability in data-driven systems. The principles emerging from this decision particularly those concerning privacy and fairness bear strong relevance to algorithmic governance, even if not yet operationalized under consumer law.

Despite these developments, there remains an absence of judicial recognition of algorithmic decision-making as a distinct source of consumer harm. Neither the CPA 2019 nor existing case law provides procedural or doctrinal clarity on whether automated systems fall within the ambit of *unfair trade practice* or *deficiency in service*. Consequently, issues of algorithmic opacity and automated consumer harm remain beyond the effective reach of both consumer tribunals and the CCPA<sup>17</sup>.

This doctrinal gap suggests a pressing need for interpretative evolution or legislative amendment to explicitly recognize algorithmic practices as actionable conduct under consumer

---

<sup>14</sup> Ghosh, S., *Algorithmic Fairness and Consumer Rights in India*, (2022) 18(2) *Indian Journal of Law and Technology*, pp. 225–230.

<sup>15</sup> *Amazon Seller Services Pvt. Ltd. v. Amway India Enterprises Pvt. Ltd.*, (2019) SCC Online Del 10717.

<sup>16</sup> *K.S. Puttaswamy v. Union of India*, (2017) 10 SCC 1 (SC).

<sup>17</sup> Kumar, S. & Sonkar, A., *Legal Challenges and Consumer Protections in India's Digital Lending Landscape*, (2025) 3(1) *Motherhood International Journal of Research and Innovation*, pp. 47–49.

protection law. Without such recognition, algorithmic decision-making despite its profound impact on fairness, autonomy, and transparency continues to elude the regulatory net envisioned by the *Consumer Protection Act, 2019*.

### C. Literature Review

The doctrinal analysis of algorithmic opacity within consumer protection frameworks has attracted significant scholarly attention in recent years. The growing reliance on algorithms in digital marketplaces has produced new forms of consumer vulnerability that traditional legal doctrines built on notions of human agency and intent struggle to address. Scholars across jurisdictions have converged on the view that technological opacity has created regulatory blind spots which voluntary disclosure or self-regulation cannot effectively remedy.

The following works provide three leading perspectives that inform the present study: the inadequacy of corporate self-regulation, the multidimensional nature of algorithmic opacity, and the feasibility of embedding explainability rights within consumer protection law.

#### **S. Lu (2020): Algorithmic Opacity, Private Accountability, and Corporate Disclosure**

In her seminal work *Algorithmic Opacity, Private Accountability, and Corporate Disclosure* (2020), S. Lu examines the inherent limitations of voluntary transparency in ensuring algorithmic accountability<sup>18</sup>. She argues that corporate disclosure mechanisms, often portrayed as acts of goodwill, are structurally incapable of mitigating the risks arising from opaque decision-making systems. According to Lu, algorithmic opacity constitutes a governance problem rather than a mere information gap it reflects a power imbalance that can only be addressed through statutory regulation.

Lu's argument is particularly relevant in the Indian context, where the *Consumer Protection Act, 2019* (CPA 2019) and its subsidiary *E-Commerce Rules, 2020* rely heavily on voluntary compliance and good-faith disclosure by online platforms<sup>19</sup>. The absence of explicit statutory duties to disclose algorithmic logic or decision criteria allows opacity to persist unchecked. Her analysis underscores that consumer protection must evolve from reactive complaint-based mechanisms to proactive legal mandates for algorithmic transparency.

#### **Simon Chesterman (2020): Through a Glass, Darkly - AI and the Problem of Opacity**

Simon Chesterman's *Through a Glass, Darkly: AI and the Problem of Opacity* (2020) provides

---

<sup>18</sup> Lu, S., *Algorithmic Opacity, Private Accountability, and Corporate Disclosure*, (2020) *Yale Journal on Regulation*, 37(2), pp. 417–453.

<sup>19</sup> *Consumer Protection (E-Commerce) Rules, 2020*, Ministry of Consumer Affairs, Government of India, Gazette Notification G.S.R. 462(E) (23 July 2020).

a conceptual framework for understanding opacity as a systemic phenomenon rather than a technical flaw<sup>20</sup>. Chesterman identifies three interrelated forms of opacity technical, structural, and intentional. *Technical opacity* arises from the inherent complexity of machine learning models; *structural opacity* results from information asymmetries between corporations and consumers; and *intentional opacity* stems from deliberate secrecy under the guise of proprietary protection.

Chesterman maintains that any meaningful regulatory response must address all three simultaneously through legal standards for disclosure, institutional oversight, and explainability requirements. Applied to the Indian scenario, his framework suggests that Section 2(47) of the *Consumer Protection Act, 2019*, which defines “unfair trade practice,” could be doctrinally interpreted to include algorithmic unfairness or manipulative design, provided the *Central Consumer Protection Authority (CCPA)* is empowered to demand algorithmic audits and explanations<sup>21</sup>

Chesterman’s model broadens the doctrinal understanding of opacity from individual deception to systemic inequality, offering a theoretical foundation for embedding algorithmic accountability within the structure of consumer protection law.

### **M. Grochowski (2021): Algorithmic Transparency and Explainability for EU Consumer Protection**

In *Algorithmic Transparency and Explainability for EU Consumer Protection* (2021), M. Grochowski examines how the European Union has begun integrating algorithmic explainability within its consumer protection framework<sup>22</sup>. He introduces the idea of the “right to explanation,” which enables consumers to understand the rationale behind automated decisions that affect their interests. Grochowski demonstrates that legally enforceable transparency obligations enhance both consumer trust and market efficiency without stifling innovation.

His findings have direct doctrinal implications for India. The *Consumer Protection Act, 2019* and the *E-Commerce Rules, 2020* already contain provisions empowering the government to prescribe disclosure obligations for online entities under Section 94.<sup>6</sup> By adapting Grochowski’s approach, India could introduce a rule-based framework mandating algorithmic disclosure and

---

<sup>20</sup> Chesterman, S., *Through a Glass, Darkly: AI and the Problem of Opacity*, (2020) *Singapore Journal of Legal Studies*, pp. 1–22.

<sup>21</sup> *Consumer Protection Act, 2019*, §2(47) (India).

<sup>22</sup> Grochowski, M., *Algorithmic Transparency and Explainability for EU Consumer Protection*, (2021) *European Consumer Law Journal*, 14(3), pp. 213–230.

explainability, thereby ensuring that consumers retain agency in automated decision environments.

### **Synthesis and Relevance**

Together, these three works form a coherent theoretical and doctrinal foundation for analyzing algorithmic opacity under the *Consumer Protection Act, 2019*. Lu (2020) exposes the weakness of relying on self-regulation and argues for statutory compulsion; Chesterman (2020) conceptualizes opacity as a layered phenomenon requiring systemic regulatory oversight; and Grochowski (2021) provides a workable legislative model demonstrating how algorithmic explainability can be integrated into consumer law.

Collectively, their insights reinforce the central thesis of this paper: that algorithmic opacity cannot be effectively mitigated through voluntary ethics or ad hoc industry codes but requires formal legal recognition, institutional capability, and enforceable duties of algorithmic transparency. These works thus provide the intellectual backbone for reforming India's consumer protection framework to align with the realities of the algorithmic age.

## **IV. THE NEED FOR LEGAL REFORM AND DOCTRINAL INTEGRATION**

### **A. The Case for Doctrinal Expansion**

The Consumer Protection Act, 2019 (CPA 2019) embodies the principle that consumers must be protected from unfair, deceptive, or exploitative practices. However, its effectiveness depends on the law's ability to adapt to emerging forms of harm. Algorithmic opacity represents one such frontier that requires doctrinal expansion<sup>23</sup>. The Act's definitions of unfair trade practice, misleading advertisement, and deficiency in service are broad enough to be interpreted purposively, yet they remain grounded in human agency.

Doctrinal integration demands that these terms be reinterpreted to include algorithmic conduct. For instance, unfair trade practice can be expanded to cover algorithmic unfairness a situation where automated systems produce discriminatory or manipulative outcomes<sup>24</sup>. Similarly, misleading advertisement can be extended to include algorithmic targeting that conceals critical information from consumers. The goal is to ensure that the spirit of consumer protection fairness, transparency, and accountability transcends the limits of human intention and extends

---

<sup>23</sup> Narain, S., *Consumer Protection and Artificial Intelligence: Challenges of Algorithmic Governance*, (2023) 65(4) *ILI Law Review*, p. 208.

<sup>24</sup> Srivastava, A., *Algorithmic Accountability and Indian Law: Doctrinal Gaps and the Path Forward*, (2024) 4(1) *Journal of Indian Law & Policy Review*, p. 43.

to automated systems<sup>25</sup>.

### **B. The Importance of Algorithmic Transparency**

Transparency is a cornerstone of consumer protection law, but algorithmic systems operate with minimal transparency by design. Most algorithms are protected as proprietary trade secrets, leading to what legal scholars describe as “informational asymmetry by default”. The lack of transparency not only inhibits regulatory oversight but also deprives consumers of their ability to make informed decisions.

To bridge this gap, India can draw inspiration from the concept of *algorithmic explainability* adopted in European law<sup>26</sup>. Under this model, businesses must provide consumers with meaningful explanations of how automated decisions are made when these decisions significantly affect consumer rights. Embedding such a duty in the CPA 2019 either through an amendment or the *E-Commerce Rules, 2020* would transform consumer protection from a reactive framework to a proactive, preventive mechanism.

Doctrinally, this aligns with the *purposive interpretation* principle endorsed by the Supreme Court of India, which mandates that consumer law be interpreted in light of technological developments and the need to ensure substantive justice.

### **C. Institutional Reform: Strengthening the CCPA**

The establishment of the Central Consumer Protection Authority (CCPA) under Chapter III of the CPA 2019 was a progressive step toward centralized oversight. However, the CCPA’s current mandate and structure are insufficient for addressing algorithmic harms. The Authority lacks technical expertise and statutory power to examine or audit algorithmic systems.

Reform must therefore focus on institutional capacity building. The CCPA should create a specialized Algorithmic Accountability Division (AAD) composed of legal, technical, and ethical experts capable of investigating automated consumer harms<sup>27</sup>. This body could perform algorithmic audits, issue codes of conduct for digital platforms, and recommend policy changes to the Ministry of Consumer Affairs.

Further, inter-agency cooperation between the CCPA, Reserve Bank of India (RBI), and the Data Protection Board under the Digital Personal Data Protection Act, 2023 is essential for

---

<sup>25</sup> *Consumer Protection Act, 2019*, Preamble (India).

<sup>26</sup> Grochowski, M., *Algorithmic Transparency and Explainability for EU Consumer Protection*, (2021) *European Consumer Law Journal*, 14(3), pp. 213–230.

<sup>27</sup> Narain, S., *Consumer Protection and Artificial Intelligence: Challenges of Algorithmic Governance*, (2023) 65(4) *ILI Law Review*, p. 210.

coherent governance<sup>28</sup>. Algorithmic decision-making frequently intersects with data protection, financial regulation, and competition law; hence, institutional collaboration ensures that regulatory actions are harmonized rather than fragmented.

#### **D. Embedding a Right to Algorithmic Explanation**

Drawing from M. Grochowski's framework on the "right to explanation," India can embed a statutory right allowing consumers to request meaningful explanations for algorithmic decisions affecting their interests such as loan rejections, price discrimination, or service denials.

This right can be incorporated under Section 94 of the CPA 2019 or operationalized through amendments to the *E-Commerce Rules, 2020*. Such an inclusion would not require platforms to disclose proprietary code but would obligate them to provide sufficient rationale for automated outcomes. This aligns with global regulatory trends where explainability is viewed as a procedural safeguard ensuring fairness and accountability.

#### **E. Mandatory Algorithmic Impact Assessments (AIA)**

A preventive approach to consumer protection requires that algorithmic systems undergo *Algorithmic Impact Assessments (AIAs)* prior to deployment. These assessments evaluate the potential for discrimination, bias, and unfair treatment. Under Section 101 of the CPA 2019 (through an amendment), the government could authorize the CCPA to develop AIA guidelines for high-risk algorithmic systems.

This mechanism parallels environmental impact assessments in environmental law anticipating and mitigating harm before it occurs. Such a measure would not only safeguard consumers but also protect businesses from reputational and legal risks associated with algorithmic failures.

#### **F. Integrating Data Protection and Consumer Rights**

Algorithmic opacity often arises from excessive data collection and unregulated profiling. The *Digital Personal Data Protection Act, 2023* introduces safeguards for data processing but does not explicitly address algorithmic accountability<sup>29</sup>. A coordinated reading of the two statutes the CPA 2019 and the DPDP Act 2023 could enable a holistic framework where data protection ensures privacy, and consumer law ensures fairness.

Such integration could be achieved through cross-referencing provisions in the CPA's subordinate rules, mandating that algorithmic systems used in consumer contexts comply with data minimization and transparency principles outlined in data protection law.

---

<sup>28</sup> RBI, *Guidelines on Digital Lending through Online Platforms and Mobile Apps*, (2022).

<sup>29</sup> *Digital Personal Data Protection Act, 2023*, Ministry of Electronics and IT, Government of India.

## G. Legislative Pathways for Reform

Legal reform can occur through three principal pathways:

1. **Statutory Amendment:** Introducing explicit definitions of *algorithmic system*, *algorithmic unfairness*, and *automated decision-making* within Section 2 of the CPA 2019.
2. **Subordinate Legislation:** Empowering the Central Government under Section 94 to prescribe detailed algorithmic transparency and explainability obligations for e-commerce entities.
3. **Judicial Interpretation:** Encouraging courts and consumer fora to adopt a purposive interpretation that treats algorithmic opacity as an unfair trade practice under existing provisions.

By combining these mechanisms, India can construct a robust regulatory model that safeguards consumers while promoting innovation and trust in digital markets.

## V. CONCLUSION

Algorithmic opacity challenges the foundational assumptions of consumer protection law by shifting control from visible human actors to invisible computational systems. The *Consumer Protection Act, 2019*, while forward-looking in its recognition of e-commerce and digital practices, remains ill-equipped to regulate algorithmic decision-making. Its silence on algorithms, absence of procedural mechanisms for transparency, and lack of institutional capacity within the CCPA collectively hinder its effectiveness.

From a doctrinal standpoint, the CPA 2019 contains the seeds of adaptability through its flexible definitions and consumer-centric objectives. However, realizing this potential requires a combination of interpretative evolution, legislative amendment, and administrative innovation. As India's digital economy expands, algorithmic systems will increasingly mediate not just consumer choice but also access to opportunity. Without transparency and accountability, such systems risk entrenching inequality and eroding consumer autonomy. The *Consumer Protection Act, 2019* must therefore evolve into a forward-looking statute capable of addressing the invisible harms of the algorithmic era.

By embedding principles of algorithmic transparency, fairness, and accountability within consumer protection law, India can ensure that technological progress remains aligned with constitutional values of justice, equality, and dignity. The regulatory imperative is thus not merely to react to algorithmic harms but to anticipate and prevent them transforming consumer

protection into a robust pillar of digital democracy.

\*\*\*\*\*