Page: 230-250 *URL: www.lijdlr.com*

LAWFOYER INTERNATIONAL JOURNAL OF DOCTRINAL LEGAL RESEARCH

ISSN: 2583-7753

LawFoyer International Journal of Doctrinal Legal Research

[ISSN: 2583-7753]

Volume 4 | Issue 2

2026

DOI: https://doi.org/10.70183/lijdlr.2026.v04.159

BLACK BOX LENDING: ALGORITHMIC CREDIT SCORING, THE EXPLANATORY DEFICIT, AND THE RIGHT TO FAIR CREDIT UNDER INDIA'S DIGITAL LENDING FRAMEWORK

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I. ABSTRACT

India's digital lending market is projected to reach USD 515 billion by 2030 and is increasingly spread by algorithmic credit scoring systems. These are the statistical models that ingest vast datasets and produce a single numerical decision outcome regarding the eligibility of the credit to the person. The convenience offered by these systems is real. However, these systems have raised the problem of the inability to justify adverse credit decisions and the inability of the lender's own staff to provide meaningful explanations for such decisions. This paper examines the consequential doctrinal question of whether India's existing legal framework, as provided in the Credit Information Companies (Regulation) Act 2005, the Reserve Bank of India (Digital Lending) Directions 2025, RBI's Fair Practices Code, and the Digital Personal Data Protection Act, 2023 has efficacy to enforce right to explanation for adverse algorithmic credit decisions. Through this doctrinal analysis of primary legal sources and comparative reference to the European Union's General Data Protection Regulation and the United States' Equal Credit Opportunity Act framework, the paper suggests that India suffers from a structural "explanatory deficit". This gap is between the frequency and consequence of automated credit decisions and the available legal remedy. The paper further argues on the deficit raises constitutional concerns. The denial of an intelligible reason for a credit refusal implicates the guarantee of non-arbitrariness under Article 14 and the right to have economic dignity and livelihood under Article 21 of the Constitution of India. The paper concludes with targeted legislative and regulatory recommendations, which

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includes the mandatory adverse action notice requirement, sectoral algorithmic auditability standards, and an independent credit grievance adjudicatory mechanism.

II. KEYWORDS

Algorithmic Credit Scoring; Right to Explanation; Fair Lending; Digital Personal Data Protection Act, 2023; Article 14.

III. INTRODUCTION AND RESEARCH PROBLEM

There is something deeply unsettling about being told no for the credit with justifying the reason. Earlier the Credit decisions were made across a desk by a human being who could be questioned, challenged, and held accountable. However, in the current scenario it delegates this decision to algorithmic credit scoring systems that operate, that is known in academic literature and regulatory discourse, as "black boxes". These systems ingest the data points ranging from repayment history and bank balance to mobile usage patterns, browsing behaviour, and social media activity, and produces a score determines the eligibility of the working capital for small businessman or the first-generation graduate higher education needs or low-income person can access housing finance or not. The score arrives on the screen however with not the explanation.[2]

India is in the middle of this transformation. The country's digital lending market is valued at approximately USD 270 billion in 2022 and is projected by the industry estimates to reach USD 515 billion by 2030. The growth will be driven by the fintech platforms, non-banking financial companies operating through digital channels, and regulated banks who outsource their credit scoring appraisal functions to algorithmic service providers.[3]

The Reserve Bank of India has not been indifferent to this shift. The RBI (Digital Lending) Directions, 2025 which was issued on 8 May 2025, represents the most comprehensive

[2] India's digital lending market figure: Reserve Bank of India, Report on Trend and Progress of Banking in India 2023-24, at 45 (2024).
[3] Experian India, Digital Lending in India: A ₹270 Billion Opportunity (Jan. 2023); see also Inc42, Indian Fintech Report Q3 2022 (2022).

regulatory framework on digital lending produced in India. It consolidated and replaced the 2022 Digital Lending Guidelines. The 2025 Directions introduce enhanced transparency requirements, consumer data protection measures, and grievance redressal mechanisms. This paper tries to highlight that this new framework is conspicuous silent on addressing address the specific challenges of algorithmic decision-making in credit scoring. It remains silent on the applicant's right to know the reasons for rejection of a credit application.[4]

The research problem this paper addresses is: does current India's regulatory and constitutional framework provide an enforceable right to explanation for adverse algorithmic credit decisions?

The answer searched through doctrinal analysis is based on the four primary instruments and comparative study of the EU and US frameworks. The research is evaluated on the knowhow of these regulatory frameworks and critical analysis on the absent provisions in the regulatory framework leading to failure and a constitutional problem. The paper terms this absence the "explanatory deficit" and argues that remedying it is both technically feasible and legally imperative.

A. Research Objectives

Following objectives below are taken for the research analysis:

1. To map and critically evaluate the existing Indian regulatory framework governing algorithmic credit scoring. This includes the CICRA 2005, the RBI (Digital Lending) Directions, 2025, the RBI Fair Practices Code, and the DPDP Act, 2023.
2. To identify and articulate the "explanatory deficit". It is termed as the structural gap between the volume and consequence of automated credit decisions and the legal tools available to challenge them.

[4] Reserve Bank of India (Digital Lending) Directions, 2025, issued May 8, 2025, replacing RBI Digital Lending Guidelines, 2022.

3. To assess the constitutional sustainability of the explanatory deficit against the guarantees of non-arbitrariness (Article 14) and right to have dignity and livelihood (Article 21) of the Constitution of India.
4. To analyze the comparative frameworks of the EU GDPR right to have explanation and the US Equal Credit Opportunity Act's adverse action notice requirement. Further to develop the learnings those are applicable to the Indian context.
5. To propose targeted legislative and regulatory reforms that can bridge the explanatory deficit while preserving the efficiency benefits of algorithmic credit scoring.

B. Research Questions

1. Does India's current regulatory framework with legislative support of the CICRA 2005, the RBI (Digital Lending) Directions, 2025, and the DPDP Act, 2023, provides an enforceable right to have explanation for adverse algorithmic credit decisions?
2. Does the "explanatory deficit" in algorithmic credit scoring constitute a violation of the constitutional guarantee of non-arbitrariness under Article 14 and the right to have livelihood with dignity under Article 21?
3. Comparative analysis and key learning from the EU's GDPR Article 22 right to have explanation and the US ECOA adverse action notice framework?

C. Research Hypotheses

1. India's existing regulatory framework does not provide an enforceable right to have explanation for adverse algorithmic credit decisions and hence creating a structural explanatory deficit that leaves applicants without adequate legal recourse.
2. The "explanatory deficit" causing the inability of a rejected credit applicant to receive an intelligible reason for an adverse algorithmic decision violates

Article 14's guarantee of non-arbitrariness and Article 21's protection of economic dignity and livelihood.

3. The EU's GDPR's Article 22 and the US ECOA's adverse action notice requirement offer workable doctrinal templates for India to address the issue of the right to algorithmic explainability, without dismantling the efficiency of the digital credit scoring.

D. Research Methodology

This paper employs a doctrinal research methodology. Doctrinal legal research is conducted based on traditional analytical jurisprudence. It involves systematic examination and interpretation of primary legal sources, statutes, subordinate legislation, judicial decisions, and regulatory directions, to identify, analyze, and resolve the legal issues under investigation. The analysis outlines the four sequential steps. First, it collectively maps the gaps in the primary Indian legal framework governing algorithmic credit scoring with respect to the CICRA 2005, the RBI (Digital Lending) Directions, 2025, the RBI Fair Practices Code, and the DPDP Act, 2023.

It identifies the internal gaps of the regulatory framework. Second, it applies to constitutional doctrine based on the precedents from the established Supreme Court jurisprudence on Articles 14 and 21. This concerns on to assessing whether the explanatory deficit raises constitutional concerns. Third, it conducts a comparative analysis of the EU GDPR and the US ECOA framework, not to transplant foreign law wholesale, but to draw and suggest adapting the principled lessons for Indian reform. Fourth, it formulates recommendations that are grounded and based on the identified doctrinal gaps that are constitutionally anchored.

Secondary sources considered are peer-reviewed journal articles, RBI working group reports, policy documents, and comparative regulatory literature which are used to situate the doctrinal analysis in its broader socio-legal context.

E. Literature Review

The academic literature on algorithmic credit scoring and fair lending is rich and has predominantly originating in the United States and Europe. It is still in nascent stage in the Indian legal context. The foundational contribution in the field is Pasquale's foundational work on algorithmic opacity, which argued that the systematic "secrecy" of algorithmic decision-making systems in credit scoring undermines accountability and concentrates power in the hands of those who deploy the systems.[5]

In the specific context of credit scoring, Barocas and Selbst's article documented the mechanisms by which facially neutral data inputs in machine learning models can operate as proxies for protected characteristics such as race and gender, producing "disparate impact" discrimination without any discriminatory intent on the part of the lender.[6]

O'Neil further demonstrated in the case-study analysis, that algorithmic scoring systems in credit and insurance tend to reinforce existing socioeconomic disadvantage by penalizing applicants for the aggregate statistical profile of the zip code, caste cluster, or demographic group to which they belong. It not even considers the individual risk profile.[7]

In the Indian context, the NLS Forum's analysis of the CICRA 2005 framework identified the statute's fundamental limitation. It identified that it is framed based on the traditional credit information and framework however is structurally ill-equipped to address the alternative data-driven, algorithmically complex reality of contemporary credit scoring. The analysis recommended a comprehensive data protection framework against the shortcomings.[8]

[5] Frank Pasquale, The Black Box Society 14, 21 (2015).
[6] Solon Barocas & Andrew D. Selbst, Big Data's Disparate Impact, 104 Calif. L. Rev. 671, 677 (2016).
[7] Cathy O'Neil, Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy 149 (2016).
[8] Credit Scoring in India, NLS Forum — Indian Journal of Law and Technology (Apr. 30, 2025),

The Vidhi Centre for Legal Policy's work on algorithmic citizenship and the published research on AI bias under Article 14 which has begun to it is impact on the constitutional scaffolding. It argues that algorithmic decision-making that produces systematically unequal outcomes without rational justification violates the constitutional guarantee of non-arbitrariness.[9]

In the regulatory space, the RBI's Working Group Report on Digital Lending (2021) was the first major official acknowledgement of the specific risks posed by fintech credit scoring models and included the data privacy violations, lack of transparency, and potential risk of discriminatory algorithmic bias. However, the subsequent 2022 Guidelines were replaced by the 2025 Directions, did not address these concerns into specific algorithmic regulation.[10]

International comparative research documented on the EU GDPR's Article 22, right to have explanation has generated a significant debate and the precise scope of that right. It argues whether it encompasses a 'thick' explanation of the model's internal logic or merely a 'thin' post-hoc rationalisation of the output. This paper relates on that debate to argue for a contextually appropriate "middle-ground" right for Indian law.[11]

IV. RESEARCH AND ANALYSIS

A. The Architecture of Algorithmic Credit Scoring in India

To understand the legal problem, one must first understand the technical landscape. India's credit scoring ecosystem operates through a layered architecture. At its base sit the Credit Information Companies like TransUnion CIBIL, Equifax, Experian, and CRIF High Mark, all of these licensed by the RBI under CICRA 2005. These entities collect credit

[9] Algorithmic Citizenship, Vidhi Centre for Legal Policy (Apr. 7, 2026), https://vidhilegalpolicy.in/blog/algorithmic-citizenship/.
[10] Reserve Bank of India, Report of the Working Group on Digital Lending Including Lending Through Online Platforms and Mobile Apps, para. 5.3 (Nov. 2021).
[11] Sandra Wachter, Brent Mittelstadt & Luciano Floridi, Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation, 7 Int'l Data Privacy L. 76 (2017).

information from member credit institutions and generate traditional credit scores based on repayment history, credit utilization, and outstanding debt.[12]

On top of this traditional architecture, is a rapidly expanding ecosystem of fintech Alternative Credit Scoring ("ACS") service providers. These entities ingest not only conventional credit data but also alternative datasets like mobile usage patterns, e-commerce transaction histories, utility payment records, social media activity, GPS location data, and behavioral psychometric scores. These are processed by them through machine learning models to generate credit scores for "thin-file" applicants who lack conventional credit histories. The appeal for financial inclusion is advocated obviously for the ACS models which has potential to extend formal credit to the estimated 190 million Indians who are credit-invisible under traditional scoring systems.[13]

The problem lies in the opacity of these models. Unlike the traditional scoring systems, whose weightings can be disclosed, and outputs can be roughly back-calculated, modern ACS models employing deep learning or ensemble methods operate in ways that are frequently opaque even to their own developers. The algorithm's "features" data inputs and its result algorithm may not be interpretable in human terms. These models constitute the intellectual property of the service provider and are shielded from external scrutiny. All of this results in a credit applicant who is denied a loan on the basis of an ACS score cannot be reasoned because in many cases nobody knows.[14]

B. The Regulatory Framework: What the Law Currently Provides

1. Credit Information Companies (Regulation) Act, 2005

The CICRA 2005 is the primary statute governing the credit information ecosystem in India. Under Section 22, credit institutions are required to submit credit information to licensed Credit Information Companies. Section 30 provides that a credit institution must, upon a borrower's request, furnish a copy of the credit information report that

[12] Credit Information Companies (Regulation) Act, No. 30 of 2005, § 22 (India).
[13] 190 million credit-invisible Indians estimate: Niti Aayog, India's Digital Lending 2030 Outlook (2023).
[14] Barocas & Selbst, supra note 5, at 693-95 (on opacity and alternative data).

informs us of an adverse credit decision. This is the provision in the existing Indian law that comes close to a right to have explanation.[15]

But the provision is structurally inadequate for the ACS context. First, it entitles the applicant only for the credit information report document and not to an explanation of how the algorithm processed or arrived at the score. Second, the obligation runs only to CICs and credit institutions and it does not consider the ACS service providers. Third, the CICRA's conception of 'credit information' is anchored in traditional financial data and does not capture the alternative datasets that ACS models deploy. The statute, enacted in 2005 to regulate a fundamentally different credit information environment, is simply not designed for the problem relevant in current period.[16]

2. RBI (Digital Lending) Directions, 2025

The RBI (Digital Lending) Directions, 2025, represent the most significant regulatory development in this space since the CICRA. Paragraph 7 requires Regulated Entities to assess creditworthiness based on disclosed factors including age, occupation, and income. Paragraph 12 mandates explicit borrower consent before personal data is used in credit assessment. Paragraph 13 restricts Lending Service Providers from storing personal data beyond specified purposes. These provisions represent real advances in consumer protection.[17]

Conspicuously, under the Directions it does not contain any provision specifically addressing the use of AI or machine learning in credit assessment. There is no requirement to disclose algorithmic model that was used. There is no obligation on the lender to provide an intelligible reason for an adverse algorithmic decision. There is no audit requirement for algorithmic models. There is no prohibition on the use of proxy variables that correlate with protected characteristics. For all the regulatory progress, the

[15] Credit Information Companies (Regulation) Act, No. 30 of 2005, § 30 (India).
[16] NLS Forum analysis, supra note 7 (on CICRA's conceptual limitations).
[17] Reserve Bank of India (Digital Lending) Directions, 2025, paras. 7, 12, 13.

Directions amount to a missed opportunity to address the central challenge of algorithmic credit scoring.[18]

3. RBI Fair Practices Code and DPDP Act, 2023

The RBI's Fair Practices Code for Lenders, issued as a Master Circular, requires regulated entities to communicate in writing the main reasons for rejecting loan applications. This is a procedural transparency obligation, but in practical the algorithmic decisions are unclear. The reason for rejection is a score produced by a machine learning model, as "the main reason". It requires a degree of algorithmic interpretability that the Code does not mandate lenders to develop.[19]

The Digital Personal Data Protection Act, 2023 establishes data principal rights including the right to access personal data and to seek correction of inaccurate data. However, critically, it does not include a right to have explanation for automated decisions. The gap that distinguishes remarkably from the EU's GDPR. The DPDP Act's silence on algorithmic decision-making in the credit context means that it provides no independent basis for a credit applicant to demand an explanation for an adverse algorithmic credit decision.[20]

C. The Explanatory Deficit: Mapping the Legal Gap

Reading the four instruments together reveals a consistent pattern. Each instrument addresses aspects of the credit information ecosystem, however none provides an enforceable right to have explanation for adverse algorithmic credit decisions. The CICRA gives access to the data but not to the algorithm's reasoning. The 2025 Directions require consent for data use but not an explanation on it applications. The Fair Practices Code requires reasons in writing but without any obligation of algorithmic

[18] IRCCL analysis, supra note 2 (identifying 2025 Directions' failure to address AI).
[19] Reserve Bank of India, Fair Practices Code for Lenders (Master Circular), para. 2(i) (2015).
[20] Digital Personal Data Protection Act, No. 22 of 2023 (India) (notably absent right to explanation for automated decisions).

interpretability. The DPDP Act protects the data but not the decision made from it. This is the explanatory deficit.

The deficit has practical consequences and not abstract in nature. An applicant denied a housing loan on the basis of an ACS score cannot identify whether the denial was based on an inaccurate data point (which could be corrected), a proxy variable that correlates with caste or religion (which would be discriminatory), or a genuine assessment of creditworthiness (which might be accepted). Without the ability to identify the basis of the decision, the applicant cannot exercise any of the other rights which law notionally provides. Hence it takes away the right to data correction, right to complain, and the right to have judicial review.[21]

V. CONSTITUTIONAL DIMENSIONS: ARTICLES 14 AND 21

A. Article 14: The Non-Arbitrariness Standard

Article 14 of the Constitution guarantees equality before the law and equal protection of the laws. The Supreme Court's articulation of the non-arbitrariness doctrine in *E.P. Royappa v. State of Tamil Nadu* established that Article 14 is not merely a formal equality guarantee but a substantive protection against arbitrary state action. Justice Bhagwati, in his concurring opinion, observed: From a positivistic point of view, equality is antithetic to arbitrariness. In fact, equality and arbitrariness are sworn enemies; one belongs to the rule of law in a republic while the other, to the whim and caprice of an absolute monarch. Where an act is arbitrary, it is implicit in it that it is unequal both according to political logic and constitutional law and is therefore violative of Art. 14."[22]

The immediate application of Article 14 is to state action. But in this case of algorithmic credit decisions private lenders are challenged. However, these are also subject to regulations indirectly since the same is regulated by the state through the RBI. The constitutional argument has two dimensions. First, the state's failure to mandate lenders

[21] O'Neil, supra note 6, at 157-60 (on cascading harms of algorithmic opacity).
[22] *E.P. Royappa v. State of Tamil Nadu*, (1974) 4 SCC 3, ¶ 85 (India) (Bhagwati, J., concurring).

to provide an intelligible reason for an adverse algorithmic credit decision is itself arbitrary regulatory inaction. The regulation produces a regime that tolerates opaque, unjustified decisions affecting fundamental economic interests. Second, in the context of public sector banks, which remain significant participants in the digital lending market, the constitutional obligation applies directly. When a public sector bank that delegates a credit decision to an algorithm and refuses to explain the outcome is acting arbitrarily in a constitutionally cognizable sense.[23]

B. Article 21: Dignity, Privacy, and Economic Livelihood

The Supreme Court's decision in K.S. Puttaswamy v. Union of India held that the right to privacy is a fundamental right under Article 21.The majority of the judgments explicitly identified informational privacy which is the right of an individual to control the collection, processing, and use of information about themselves as protected dimension of the constitutional privacy.[24]

The relevance to algorithmic credit scoring is direct. A credit applicant's mobile usage patterns, e-commerce history, and behavioural data are ingested into an opaque algorithm that produces a verdict about their economic trustworthiness, and verdict cannot be explained or challenged, along with the denial of information is a privacy harm as described in the Puttaswamy case.[25]

Additionally, the Supreme Court's reading of Article 21 to encompass the right to have livelihood established in Olga Tellis v. Bombay Municipal Corporation and affirmed in subsequent decisions, provides a second constitutional foothold. When algorithmic credit scoring systematically excludes applicants on the grounds that cannot be explained, and when those applicants have no legal mechanism to challenge or contest that exclusion

[23] AI, Bias, and the Constitution: A Jurisprudential Analysis of Algorithmic Inequality Under Article 14, Indian J.L. Rev. (2025), https://ijlr.iledu.in/ai-bias-and-the-constitution.
[24] K.S. Puttaswamy v. Union of India, (2017) 10 SCC 1 (India) (Chandrachud, J., concurring, paras. 169–175).
[25] Puttaswamy, (2017) 10 SCC 1, para. 169 (informational autonomy as a dimension of constitutional privacy).

and affect the economic livelihood or the ability to fund a business, purchase a home, or whether a medical emergency is tangible and constitutionally void.[26]

VI. COMPARATIVE FRAMEWORK: WHAT OTHER JURISDICTIONS HAVE DONE

A. EU General Data Protection Regulation: Article 22 and the Right to Explanation

Article 22 of the EU General Data Protection Regulation provides the data subjects have the right "not to be subject to a decision based solely on automated processing, which produces legal effects concerning him or her or similarly affects him or her." Recital 71 elaborates that data subjects should have the right to "obtain an explanation of the decision reached after such assessment and to challenge the decision."[27]

The GDPR model is significant for three reasons. First, it creates an opt-out right. Unless any one of three limited exceptions applies (consent, contractual necessity, or specific EU/member state law) on the automated-only decisions having significant effects are prohibited. Second, it requires that a human review mechanism be available. Third, and most importantly for present purposes, it creates a right to have explanation. It is not limited to the right on algorithm's source code, but a right to have an intelligible account of the logic of the decision as applied to the applicant.[28]

Indian law contains no equivalent provision. The DPDP Act, 2023, which had the opportunity to incorporate a comparable right, declined to do so. The explanatory deficit is therefore not accidental however it reflects a deliberate legislative choice to protect data without protecting decision subjects from the consequences irrespective of the data processing logic.[29]

[26] Olga Tellis v. Bombay Municipal Corporation, (1985) 3 SCC 545, para. 32 (India) (right to livelihood as part of Article 21).
[27] Council Regulation 2016/679, art. 22, 2016 O.J. (L 119) 1 (EU) [hereinafter GDPR].
[28] GDPR, recital 71.
[29] Digital Personal Data Protection Act, No. 22 of 2023 (India), ss. 11-14 (data principal rights — no right to explanation for automated decisions).

B. United States: The ECOA Adverse Action Notice Requirement

The United States Equal Credit Opportunity Act and its implementing Regulation B require creditors to provide applicants with specific, written reasons for adverse credit decisions. The Consumer Financial Protection Bureau's Circular 2022-03 extended this obligation explicitly to algorithmic models. Creditors using AI or machine learning systems cannot escape the adverse action notice requirement by citing the complexity or opacity of their model. The creditor must provide intelligible reasons, and "technology complexity" is not a permissible excuse.[30]

This approach is functionally pragmatic. Instead of requiring the full algorithmic transparency which would conflict with intellectual property protection and may not always be technically achievable, the US framework focuses on the output. The applicant must be told, in plain language, which factors most significantly contributed to the adverse decision. This "output-level explanation" requirement is achievable through model-agnostic explainability tools, which can identify the most influential features of a model's decision without requiring the disclosure of the underlying model architecture.[31]

India could adapt this approach. An Indian adverse action notice requirement would not require the RBI to mandate the disclosure of proprietary algorithms. It would require that lenders develop the interpretability capacity to tell an applicant which factors most significantly drove the adverse scoring outcome, in terms the applicant can understand and potentially contest.

C. European Union Artificial Intelligence Act, 2024: High-Risk AI and Credit Scoring

The European Union's Artificial Intelligence Act ("EU AI Act"), Regulation (EU) 2024/1689, which entered into force on 1 August 2024, represents the most

[30] Consumer Financial Protection Bureau, Circular 2022-03: Adverse Action Notification Requirements in Connection with Credit Decisions Based on Complex Algorithms (May 26, 2022); Equal Credit Opportunity Act, 15 U.S.C. § 1691(d) (2018); Regulation B, 12 C.F.R. § 202.9 (2022).
[31] Scott M. Lundberg & Su-In Lee, A Unified Approach to Interpreting Model Predictions, 30 Advances in Neural Info. Processing Sys. 4765 (2017) (on SHAP values as explainability tool).

comprehensive regulatory framework specifically governing artificial intelligence systems. Unlike the GDPR, which primarily addresses personal data processing and automated decision-making rights, the AI Act adopts a risk-tiered regulatory architecture directed at the design, deployment, and governance of AI systems themselves.

Annex III of the AI Act expressly classifies AI systems intended to assess the creditworthiness of natural persons or establish credit scores as "high-risk AI systems." This classification is legally significant because it triggers a set of mandatory obligations under Articles 9–15 of the Regulation. Article 9 requires providers of high-risk AI systems to establish continuous risk management systems throughout the AI system's lifecycle. Article 10 mandates data governance and training-data quality standards intended to reduce discriminatory or biased outputs. Article 13 imposes transparency and documentation obligations sufficient to enable deployers and affected people to interpret the system's operation and use its output appropriately. Article 14 requires meaningful human oversight mechanisms to minimize the risk of automated harm, while Article 15 establishes obligations concerning accuracy, robustness, and cybersecurity.

The AI Act is particularly relevant to algorithmic credit scoring because it moves beyond the GDPR's "right to explanation" framework and directly regulates the institutional conditions under which high-risk AI systems may lawfully operate. The regulatory focus is not merely post-decisional transparency but ex ante governance, auditability, and accountability. The framework therefore addresses the precise "explanatory deficit" identified in this paper by imposing affirmative compliance obligations on AI system providers and deployers before algorithmic systems can be used in sensitive sectors such as credit allocation.

For the Indian context, the EU AI Act offers two important lessons. First, it demonstrates that algorithmic credit scoring can be regulated through a sector-specific risk-based model without prohibiting technological innovation. Second, the Act's emphasis on documentation, human oversight, and auditability provides a more operationally concrete framework than the GDPR's comparatively abstract rights-based approach

under Article 22. India's existing regulatory framework under the RBI (Digital Lending) Directions, 2025 and the DPDP Act, 2023 currently lacks any equivalent classification of high-risk AI systems or corresponding compliance obligations.

The EU AI Act therefore provides a persuasive comparative model for future Indian reform, particularly in relation to mandatory algorithmic audits, explainability obligations, human review safeguards, and regulatory supervision of alternative credit scoring systems.

VII. SUGGESTIONS AND RECOMMENDATIONS

The explanatory deficit in India's algorithmic credit scoring framework is remediable. The following five targeted reforms are proposed, calibrated to achieve within the existing constitutional and statutory architecture without requiring root-and-branch legislative overhaul:

1. **Mandatory Adverse Action Notice Requirement:** ***The*** RBI should amend the (Digital Lending) Directions, 2025, to regulated entities to provide adverse action notices for algorithmically determined credit decisions. These notices should identify, in plain language, the principal factors that contributed to the adverse scoring outcome. This requirement should be model agnostic. The lenders should not be permitted to cite algorithmic complexity as a ground for non-compliance. This reform does not require disclosure of the algorithm.it requires the development of interpretability capacity sufficient to produce intelligible outputs, consistent with existing model-agnostic explainability already deployed in the industry.
2. **Algorithmic Audit Standards for ACS Service Providers:** ***The*** RBI, in coordination with the Ministry of Electronics and Information Technology, should formulate sectoral algorithmic audit standards applicable to ACS service providers. These standards should require:
    - periodic independent audits for discriminatory proxy variables and disparate impact across demographic groups;

- documentation of model architecture, training data, and known limitations; and
- board-level certification of the audit findings. Audit reports should be filed with the RBI in confidence, preserving intellectual property and ensuring regulatory oversight.

3. **Amendment to the DPDP Act, 2023-Right to Explanation for Significant Automated Decisions:** Parliament should amendment DPDP Act, 2023, and amend the right to have explanation model similar to Article 22 of the EU GDPR. It should extend the same to automated decisions that significantly affect access to financial services. The right should entitle the data principle to a human review of the decision and a written explanation of the key factors that produced the adverse outcome.
4. **Prohibition on Proxy Discrimination:** The RBI's Fair Practices Code should be amended to explicitly prohibit the use of data variables that correlate with constitutionally protected characteristics like caste, religion, gender, place of birth as inputs to credit scoring algorithms, directly or indirectly. Lenders are required to conduct and document regular disparity testing to identify and remove such variables.
5. **Independent Credit Grievance Adjudicator:** India should establish a dedicated credit grievance adjudicatory mechanism, within the RBI Ombudsman framework, with jurisdiction over complaints about algorithmic credit decisions. The adjudicator should have the power to direct lenders to disclose the factors underlying an adverse decision, to commission independent algorithmic audits, and to award compensation where discriminatory or arbitrary algorithmic decision-making is established. This provides an accessible, non-judicial enforcement route for the rights proposed above.
6. The proposed auditability and human oversight reforms may also draw structural guidance from the European Union AI Act's regulation of high-risk AI systems used in creditworthiness assessment under Annex III and Articles 9–15.

VIII. CONCLUSION

Algorithmic credit scoring is not going away. Its advantages like speed, scalability, potential for financial inclusion are real, and India's financial system will continue to rely on it. The question this paper has not referred to whether algorithmic scoring should exist, but whether, when it produces an adverse decision, the person affected has legal right to understand why. The answer is no, under India's current framework.

The explanatory deficit identified in this paper is not a minor technicality. It means that millions of credit decisions that determine whether people can build businesses, buy homes, or survive financial shocks are made by systems whose outputs cannot be explained, challenged, or corrected. It means that discriminatory proxy variables can operate undetected. It means that data inaccuracies, which could not be corrected if identified, quietly damages the credit profiles without the subject's knowledge or recourse.

The constitutional framework of India is capable of addressing this deficit. Articles 14 and 21 as interpreted by the Supreme Court's jurisprudence on non-arbitrariness, informational privacy, and economic livelihood, provides the foundational doctrine for a right to explanation. The comparative frameworks of the EU and the United States demonstrate that the practical mechanics of such a right are achievable without disabling the algorithmic credit system. All that remains is the regulatory and legislative will to build it. The explanatory deficit is a solvable problem. The people waiting for an explanation deserve a solution.

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