ACCELERATING RESOLUTION: MITIGATING DELAYS IN THE IBC THROUGH ADVANCED DIGITAL TECHNOLOGIES

Febin P, LLM, National Law Institute University, Bhopal

Aswin P.S, LLM, National Law Institute University, Bhopal

ABSTRACT

The enactment of the Insolvency and Bankruptcy Code (IBC), 2016 marked a paradigm shift in India's corporate credit ecosystem, transitioning the framework from a fragmented, debtor-in-possession regime to a unified, creditor in possession model. However, the efficacy of the IBC's strict 330-day resolution timeline is frequently hindered by severe information asymmetry, error-prone manual diagnostic methods, and procedural resource wastage. This project comprehensively investigates the transformative role of advanced digital technologies in mitigating these systemic bottlenecks and securing optimal firm outcomes.

First, the research explores how Information Utilities (IUs), such as the National E-Governance Services Ltd. (NeSL), institutionalize a One Data, One Entry framework. By acting as centralized, authenticated digital ledgers, IUs rapidly verify claims and mathematically eliminate the informational asymmetry that historically caused protracted evidentiary litigation.

Second, the study evaluates the shift from traditional manual insolvency assessments to the diagnostic precision of Artificial Intelligence (AI) and Machine Learning (ML). AI-powered predictive analytics enable the proactive identification of corporate insolvency risks long before statutory default occurs. Concurrently, advanced digital forensic tools and Natural Language Processing (NLP) algorithms fundamentally upgrade the Corporate Insolvency Resolution Process (CIRP) by automating exhaustive legal due diligence and instantaneously tracing fraudulent or avoidable asset diversions.

Third, the project highlights how procedural streamlining achieved through the digital consolidation of Resolution Professional reporting forms, global digital public announcements, and tamper-proof e-auction platforms drastically minimizes administrative fatigue and maximizes the liquidation value of distressed assets.

Ultimately, the study concludes that piecemeal digitalization is insufficient. To fully realize the IBC's core mandates, the project recommends the deployment of a unified, comprehensive IT platform, the implementation of a mandatory national Resolvability Index, automated post-resolution clean slate clearances through ROC integration, and mandatory technological capacity building for Insolvency Professionals.

Introduction

The Insolvency and Bankruptcy Code, 2016, is conceived as a comprehensive economic reform measure with the objective of maximizing asset values, encouraging entrepreneurship, and achieving an appropriate balance between the interests of all stakeholders involved. Prior to the enactment of the IBC, the insolvency regime in India was a complex interplay of overlapping and conflicting provisions of the Sick Industrial Companies (Special Provisions) Act, 1985, the Recovery of Debts Due to Banks and Financial Institutions Act, 1993, and the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002. These enactments were marred by inefficiencies in the process, which resulted in an average resolution process taking more than four years with recovery rates substantially lower than the global benchmark.

The IBC has fundamentally changed the insolvency regime in India to a time-bound process with a 330-day timeframe mandated in Section 12 of the IBC. However, the institutionalization of the creditor in possession model requires an advanced information infrastructure to manage the complex data involved in corporate insolvency. Technology has therefore become the backbone of the IBC with the necessary infrastructure for facilitating the filing of claims in real time, sharing data, and transparently liquidating assets.

Information Infrastructure and the Mitigation of Asymmetry

The enactment of the Insolvency and Bankruptcy Code, 2016 (IBC) was conceptualized as a sweeping economic reform designed to shift India's corporate credit landscape from a highly fragmented, debtor-in-possession framework to a unified, creditor-in-possession model.[1] Prior to 2016, India's insolvency proceedings were governed by overlapping statutes including

[1] Sandhya Sharma, *Interplay of Artificial Intelligence and Technology in the Insolvency and Bankruptcy Ecosystem: An Analysis*, 105 (2023), https://lc2.du.ac.in/DJCL5/8.%20Sandhya%20Sharma%20Prof.%20(Dr).%20Versha%20Vahini.pdf (last visited Mar. 16, 2026).

the Sick Industrial Companies Act (SICA), 1985, the Recovery of Debts Due to Banks and Financial Institutions Act (RDDBFI), 1993, and the SARFAESI Act, 2002.[2] These fragmented legislations resulted in systemic procedural inefficiencies, creating an environment where the average resolution timeline stretched beyond 4.3 years, and creditors recovered a dismal 25 to 30 cents on the dollar compared to 70 to 80 cents in developed jurisdictions.[3] By 2016, stressed assets in the banking system had crossed ₹8 trillion, severely restraining the flow of credit and deterring global investors who cited insolvency delays as a primary investment roadblock.[4]

The Core Roadblock: Persistent Information Asymmetry

A critical factor driving these delays was profound information asymmetry. When a Corporate Debtor (CD) enters the Corporate Insolvency Resolution Process (CIRP), the newly appointed Resolution Professional (RP) and the Committee of Creditors (CoC) typically lack immediate access to reliable, verified financial records. Because the former management is often uncooperative, insolvency professionals are forced to run from pillar to post merely to determine the financial position of the debtor and verify the existence of claims.[5] This informational bottleneck historically led to protracted litigation over the exact quantum of debt, effectively derailing the strict 330-day resolution timeline mandated under Section 12 of the IBC.

The Institutionalization of Information Utilities (IUs)

To permanently resolve this bottleneck, the IBC introduced a groundbreaking technological innovation: Information Utilities (IUs).[6] Serving as centralized, regulated digital ledgers, IUs such as the National E-Governance Services Ltd. (NeSL) function as secure repositories of authenticated financial data. They are designed to institutionalize the principle of One Data, One Entry, meaning that once a loan agreement, security interest, or default record is digitally authenticated and logged, it becomes mathematically indisputable.[7]This technological interface undergoes rigorous annual audits to ensure total data integrity, creating a single source of truth

[2] Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, No. 54, Acts of Parliament, 2002 (India).
[3] Pradeep Kabra, *The Role of Technology in Insolvency Proceedings: Driving Efficiency, Transparency and Access in the IBC Era*, *The Resolution Professional* 28 (2023), https://www.iiipicai.in/wp-content/uploads/2026/01/IIIPI-Journal-January-2026.pdf (last visited Mar. 17, 2026).
[4] *Id.* at 28.
[5] Sharma, *supra* note 6, at 108.
[6] *Id.* at 14.
[7] Kabra, *supra* note 3, at 30.

for all stakeholders.

The practical impact of this digital infrastructure is monumental in mega-insolvencies. In the highly complex resolution of Videocon Industries which involved claims surpassing an astronomical ₹64,000 crore spread across hundreds of group entities NeSL played a pivotal role. By rapidly validating cross-entity data and financial obligations, the IU infrastructure saved months of potential litigation, mitigating the risk of widespread creditor disputes and providing the CoC with immediate clarity.

Digital Initiation Across Statutory Provisions

The initiation of insolvency proceedings under the IBC is strictly governed by statutory triggers that have become increasingly reliant on digital evidence. Under Section 7[8] (applicable to Financial Creditors), the Adjudicating Authority (AA) no longer needs to conduct exhaustive evidentiary hearings to establish the merits of a debt; instead, the AA can simply review the digital records stored within the IU to objectively satisfy itself that a default has occurred. Similarly, for Sections 8[9] and 9[10] (Operational Creditors), digital platforms facilitate the seamless submission of claim forms, supply chain invoices, and evidence of unpaid debts, vastly accelerating the admission process. Section 10 further utilizes digitalization by allowing the corporate debtor to self-initiate insolvency through the immediate online submission of audited financial statements and lists of creditors[11].

Enhancing Diagnostic Precision Through AI and Digital Forensics

The modern corporate landscape generates data at an unprecedented scale, transforming the assessment of corporate financial health into a highly complex data management challenge. Under the Insolvency and Bankruptcy Code, 2016 (IBC), the mandate for time-bound resolution (strictly 330 days under Section 12)[12] heavily relies on the speed and accuracy with which a Corporate Debtor's (CD) financial distress can be diagnosed and its assets traced.[13] Historically, insolvency professionals and judicial authorities relied exclusively on traditional

[8] Insolvency and Bankruptcy Code, 2016, § 7, No. 31, Acts of Parliament, 2016 (India).
[9] Insolvency and Bankruptcy Code, 2016, § 8, No. 31, Acts of Parliament, 2016 (India).
[10] Insolvency and Bankruptcy Code, 2016, § 9, No. 31, Acts of Parliament, 2016 (India).
[11] Insolvency and Bankruptcy Code, 2016, § 10, No. 31, Acts of Parliament, 2016 (India).
[12] Insolvency and Bankruptcy Code, 2016, § 12, No. 31, Acts of Parliament, 2016 (India).
[13] Sandhya Sharma, *Interplay of Artificial Intelligence and Technology in the Insolvency and Bankruptcy Ecosystem: An Analysis*, 108 (2023).

manual assessments a methodology fundamentally ill-equipped to handle the immense volume, rapid velocity, and vast variety of Big Data characteristic of modern enterprises.[14] The integration of advanced technologies, specifically Artificial Intelligence (AI) and Machine Learning (ML), is driving a paradigm shift in this domain, replacing error-prone human auditing with mathematically precise diagnostic capabilities.[15]

Predictive Analytics: Overcoming the Limitations of Manual Diagnosis

Traditional methods of predicting and diagnosing corporate insolvency rely primarily on human experts evaluating historical financial statements to assess liquidity and balance sheet strength. However, this manual approach suffers from an inherent rear-view limitation: it diagnoses insolvency only *after* the financial collapse has reached a critical stage of default.[16] Furthermore, manual analysis requires a massive investment of human hours to parse through diverse data sets, leading to severe delays in initiating the Corporate Insolvency Resolution Process (CIRP).

Artificial Intelligence entirely transcends these limitations by deploying sophisticated machine learning techniques such as logistic regression, support vector machines, lasso regression, bagging, and decision trees to proactively predict insolvency risks. These ML algorithms are specifically engineered to handle massive corporate databases within a significantly reduced timeframe, bypassing the extensive resource allocation required by human agents. By continuously evaluating Key Performance Indicators (KPIs) and identifying hidden, non-linear correlations between subtle financial shifts and insolvency risk, AI functions as a highly precise early warning system. This technology alerts organizations, creditors, and investors to an impending collapse long before a statutory default occurs, allowing for proactive risk management.[17]

Internationally, the use of AI for diagnostic precision is already highly advanced. In Western

[14] *Id.* at 109.
[15] Pihu Mishra & Amit Dhall, *Investigating the Potential of Digital Technologies, AI, and Blockchain in Transforming Insolvency Procedures*, 44(3) *Library Progress International* 29162, 29167 (2024), https://bpasjournals.com/library-science/index.php/journal/article/view/3732 (last visited Mar. 17, 2026).
[16] M. P. Ram Mohan, *The Role of Insolvency Tests: Implications for Indian Insolvency Law*, Working Paper No. 2021-04-01, at 4 (2021), https://www.iima.ac.in/publication/role-insolvency-tests-implications-indian-insolvency-law (last visited Mar. 17, 2026).
[17] Pradeep Kabra, *The Role of Technology in Insolvency Proceedings: Driving Efficiency, Transparency and Access in the IBC Era*, *The Resolution Professional* 28 (2023), https://www.iiipicai.in/wp-content/uploads/2026/01/IIIPI-Journal-January-2026.pdf (last visited Mar. 17, 2026).

jurisdictions, insolvency frameworks actively utilize AI technologies such as Data 61, Data Lex AI, and ROSS. These platforms are trained to conduct sophisticated analytics, complex financial modelling, and scenario planning based on historical performance data, forecasting potential recovery rates with a level of precision that traditional manual forecasting cannot achieve. By leveraging these ML models, the Committee of Creditors (CoC) is empowered to make data-driven decisions when evaluating competing resolution plans, ensuring that the chosen plan is rooted in objective, algorithmic reality rather than speculative human optimism.

Digital Forensics: Tracing Fraudulent and Avoidable Transactions

One of the most arduous tasks during the CIRP is conducting forensic audits to uncover financial mismanagement. As a corporate entity approaches insolvency, distressed management frequently engages in unethical practices to preserve their wealth, such as concealing asset transfers, artificially inflating operational expenses, or systematically diverting funds into complex networks of shell companies.

Traditional manual forensic auditing is a gruelling, sequential process. Human auditors must physically cross-reference thousands of bank statements, ledger entries, and invoices, a process that can take months or even years. This manual lag severely threatens the IBC's 330-day timeline and often allows misappropriated assets to become completely unrecoverable. In stark contrast, AI-driven digital forensic tools instantly map labyrinthine fund flows across hundreds of bank accounts to locate hidden assets and identify related-party transactions.

Firms like LDM Global have pioneered the use of AI analytics and digital forensics to unravel the mysteries of insolvent entities, leveraging technology to build instant chronologies of events and perform rapid tracing exercises to uncover fraud. AI algorithms are trained to automatically flag unusual transaction patterns that human auditors routinely miss. For example, the software can instantly detect anomalies that may constitute preferential transfers (Section 43 of the IBC)[18], undervalued transactions[19], or fraudulent and wrongful trading.[20]

The sheer superiority of digital forensics over manual assessment was profoundly demonstrated during the IL&FS crisis. The IL&FS insolvency was a labyrinthine disaster involving over 300

[18] Insolvency and Bankruptcy Code, 2016, § 43, No. 31, Acts of Parliament, 2016 (India).
[19] Insolvency and Bankruptcy Code, 2016, § 45, No. 31, Acts of Parliament, 2016 (India).
[20] Insolvency and Bankruptcy Code, 2016, § 66, No. 31, Acts of Parliament, 2016 (India)

subsidiary entities and a staggering quantum of debt. Relying on traditional accounting methods to untangle this web would have been impossible within any reasonable judicial timeframe. Instead, specialized digital forensic software was deployed to seamlessly reconstruct complex webs of inter-company loans and pinpoint precise instances of fund diversion and mismanagement. By automating the discovery searches on critical email servers and vast storage repositories, AI algorithms continuously improve their capacity to identify smoking-gun documents, hastening case development and providing irrefutable digital evidence for the Adjudicating Authority.

Algorithmic Due Diligence via Natural Language Processing (NLP)

Beyond numerical data, the diagnostic phase of insolvency requires the exhaustive review of textual data. During the resolution and liquidation phases, due diligence requires the analysis of thousands of pages of deeply complex legal contracts, employment agreements, and financial covenants. Traditional manual due diligence requires armies of lawyers and analysts reading through documentation line-by-line, a process that is not only extraordinarily expensive but highly susceptible to human fatigue and error.

Natural Language Processing (NLP), a specialized branch of AI, revolutionizes this aspect of diagnostic precision. NLP-driven software can ingest thousands of documents simultaneously and intelligently extract critical legal clauses such as corporate guarantees, restrictive covenants, and complex change-of-control provisions in a matter of hours. Furthermore, NLP tools instantly identify inconsistencies or hidden compliance risks within contracts that could jeopardize a potential corporate acquisition.[21]

The transformational impact of NLP was prominently highlighted during the resolution of Bhushan Steel (now Tata Steel BSL). During this mega-insolvency, digital due diligence and contract review tools empowered the resolution applicant to swiftly scan thousands of compliance documents. By replacing manual legal review with algorithmic precision, Tata Steel was able to conduct a flawless risk assessment and submit a highly compliant, winning resolution plan well within the statutory deadlines.[22]

[21] Kabra, *supra* note 3, at 31.
[22] Id.

Enhancing Judicial Efficiency and Optimal Auctions

The diagnostic precision of AI extends beyond the Resolution Professional to the Adjudicating Authorities and the liquidation process itself. As noted by the President of the National Company Law Tribunal (NCLT), Justice Ramalingam Sudhakar, the integration of artificial intelligence is a critical focus for standardizing processes and reducing the massive backlog of cases, acting as a facilitative tool for judges to quickly evaluate evidence and extract relevant case law.[23]

Furthermore, if a company fails to achieve resolution and enters liquidation, maximizing asset value becomes the absolute priority. Currently, more than 79% of all active liquidation processes under the IBC breach their allotted timeframes, heavily degrading asset value. Traditional manual auctions suffer from opacity, geographical limitations, and the severe risk of bidder collusion. To solve this, advanced AI tools utilizing ML can perform optimal auctions. By analysing market trends, buyer behaviour, and the intrinsic value of the distressed assets, AI-powered e-auction platforms ensure transparent, tamper-proof bidding environments that globally maximize the liquidation value of the corporate debtor.

In conclusion, the application of Artificial Intelligence and Machine Learning fundamentally upgrades the insolvency ecosystem from a reactive, manual, and error-prone framework to a proactive, automated, and hyper-precise digital infrastructure. By detecting early insolvency risks through predictive analytics, tracing complex fraudulent transactions via digital forensics, and automating exhaustive due diligence with NLP, advanced technologies are the primary catalyst ensuring the IBC achieves its core mandates of asset value maximization and time-bound resolution.[24]

Procedural Streamlining and the Elimination of Resource Wastage

While the IBC mandates a strict 330-day window for resolution, empirical data reveals that this timeline is frequently breached. Research by the Insolvency and Bankruptcy Board of India (IBBI) demonstrates a non-linear relationship between the time taken to resolve and the cost of the resolution process; administrative friction and judicial delays severely inflate

[23] Sharma, *supra* note 1, at 110.
[24] Mishra & Dhall, *supra* note 3, at 29168.

professional fees and lead to steep asset value erosion.[25] To combat this immense resource wastage, comprehensive digitalization across reporting, public communication, and asset liquidation is paramount.

Consolidating RP Reporting

From CIRP to CP Forms The role of the Resolution Professional (RP) is the linchpin of the CIRP; however, RPs have historically been bogged down by severe administrative fatigue due to redundant compliance requirements. A major technological milestone recently achieved by the IBBI is the consolidation of these reporting forms. Previously, RPs were mandated to manually file nine disparate forms (IP-1 and CIRP-1 through CIRP-8) to various regulatory bodies, resulting in overlapping data entries and a massive wastage of professional resources.

The revised digital framework seamlessly integrates these requirements into five standardized, automated forms (CP-1 to CP-5), strictly aligned with critical procedural milestones. For example, CP-1 captures data upon the constitution of the CoC, CP-2 tracks the issuance of the Request for Resolution Plan (RFRP), CP-3 monitors the Adjudicating Authority's approval or rejection, CP-4 is dedicated specifically to avoidance transactions (Sections 43, 45, 66), and CP-5 provides comprehensive monthly updates on litigation and expenses.[26] This digital transition heavily utilizes automated data population to drastically reduce manual entry errors. Furthermore, every submission is legally authenticated via Digital Signature Certificates (DSC), establishing an unalterable, transparent audit trail that regulators can monitor in real-time.[27]

Digital Announcements, E-Auctions, and Liquidation Value

Traditional methods of soliciting resolution applicants or liquidating assets relied heavily on localized physical newspaper publications and manual auctions, which suffered from geographic limitations and high costs. The transition to digital public announcements and electronic Requests for Resolution Plans (RFRP) via virtual data rooms (VDRs) now

[25] Insolvency and Bankruptcy Board of India, *Report of Study on Effectiveness of the Resolution Process: Firm Outcomes in the Post-IBC Period* (IBBI 2024), https://ibbi.gov.in/uploads/whatsnew/59f737b213b4700cc16428aefd62869a.pdf (last visited Mar. 13, 2026).
[26] Id.
[27] C. Choubey & V. Gupta, *Corporate Insolvency Resolution and Liquidation: Measuring Effectiveness of the IBC Framework*, 6(2) *ShodhKosh: Journal of Visual and Performing Arts* 1 (2025), https://doi.org/10.29121/shodhkosh.v6.i2.2025.6286 (last visited Mar. 23, 2026).

guarantees global participation, allowing overseas investors to engage directly with distressed Indian assets.[28]

In the liquidation phase, time-bound execution is a severe crisis, with IBBI data showing that over 79% of active liquidation processes breach their allotted timeframes. Implementing dedicated e-auction portals like BAANKNET and MSTC replaces opaque manual auctions with transparent, tamper-proof bidding environments featuring complete digital audit trails. In the liquidations of Amtek Auto and Electrosteel Steels, these transparent e-auctions entirely mitigated the risks of bidder collusion, attracting a wider pool of buyers and historically realizing significantly higher asset values than traditional methods.[29]

Empirical Outcomes and Asset Consolidation

The ultimate proof of technology's impact lies in empirical performance data. A comprehensive study on the effectiveness of the IBC reveals that resolved firms undergo a massive financial revival post-resolution, average sales increase by an astounding 76% in the three years post-resolution, operating margins improve from deep negatives to +4%, and Capital Expenditure (CAPEX) surges by 130%, indicating a massive build-up of tangible assets for future growth. Overall, creditors realize an average recovery rate of 33.2% of admitted claims (38.5% for financial creditors and 23.8% for operational creditors), which equates to 168% of the firm's liquidation value.

However, the study also highlights a severe post-resolution hurdle. 54.8% of successfully resolved firms continue to face immense regulatory friction and disputes from entities like the Income Tax department, Customs, and the RBI due to outdated physical records. To resolve this, India must transition to full asset consolidation via the Registrar of Companies (ROC) portal. Integrating the NCLT and IBBI platforms directly with the MCA 21 / ROC database would enable real-time data sharing. Once an NCLT approval order is uploaded, the system could automatically generate no dues certificates from all governmental departments, ensuring the incoming management genuinely inherits a clean slate free from the shadow of legacy liabilities.[30]

[28] Insolvency and Bankruptcy Board of India, *IBBI Quarterly Newsletter: July – September 2023*, Vol. 28 (2023), https://ibbi.gov.in/uploads/publication/9c50c058448f106687259695d86289d0.pdf
[29] Kabra, *supra* note 3, at 30.
[30] Insolvency and Bankruptcy Board of India, *IBBI Quarterly Newsletter: July – September 2023*, Vol. 28

Suggestions

While the IBC has driven a remarkable turnaround in India's corporate credit culture, the current integration of technology remains piecemeal and siloed. To bridge the gap between legislative intent and operational reality, the following technological reforms are highly recommended:

1. Development of a Unified, Comprehensive IT Platform: The current digital infrastructure operates in deep isolation across the NCLT e-Courts, the IBBI portal, Information Utilities (NeSL), Insolvency Professional Agencies (IPAs), and the Ministry of Corporate Affairs (MCA 21).[31] The Government of India must deploy a comprehensive, end-to-end IT platform that serves as a single source of truth.[32] This unified platform would eliminate massive data duplication, allow regulators to view the precise real-time status of any insolvency case, and host anonymized public data analytics portals to help policymakers continuously refine regulations based on empirical trends.[33]

2. Implementation of a National Resolvability Index: Following the conceptual frameworks discussed in IBBI reports, a mandatory digital Resolvability Index should be introduced for all large corporate entities and Systemically Important Technological Institutions (SITIs). This index would act as a digital Living Will, pre-packaging transparent corporate structures, related-party data, and unencumbered asset lists on a secure ledger, ensuring that massive corporate failures do not trigger systemic financial contagion.

3. Automated Clearances for a Guaranteed Clean Slate: Post-resolution regulatory friction remains a massive deterrent to potential investors, with over half of resolved firms facing legacy disputes from government authorities.[34] The proposed unified digital portal must feature an automated, cross-departmental clearance mechanism. The moment a final NCLT resolution order is uploaded, the system should automatically notify the RBI, Income Tax, and Customs departments, instantly generating and issuing digital no dues certificates to ensure

(2023), https://ibbi.gov.in/uploads/publication/9c50c058448f106687259695d86289d0.pdf (last visited Mar. 23, 2026).

[31] *Digitalisation of IBC*, *IBBI Chairperson's Desk* 3 (2023).

[32] Id.

[33] Kabra, *supra* note 3, at 34.

[34] Insolvency and Bankruptcy Board of India, *Report of Study on Effectiveness of the Resolution Process: Firm Outcomes in the Post-IBC Period* (IBBI 2024), https://ibbi.gov.in/uploads/whatsnew/59f737b213b4700cc16428aefd62869a.pdf (last visited Mar. 13, 2026).

the new management can immediately access credit markets without the defaulter stigma.

4. Statutory Recognition of Emerging Technologies (Blockchain & AI): There is a critical, urgent need for clear legislative amendments and judicial guidelines regarding the evidentiary admissibility of blockchain ledgers, AI-driven forensic audit reports, and the enforceability of smart contracts embedded within approved resolution plans. Without explicit statutory recognition, resolution applicants and professionals carry immense legal risk when relying on these advanced digital tools to verify claims or execute automated fund disbursements.[35]

5. Mandatory Technological Capacity Building for IPs: The vast majority of Resolution Professionals hail from traditional legal, accounting, or company secretary backgrounds, often entirely lacking the specialized technical expertise required to manage complex modern corporate data architectures, Big Data analytics, or Virtual Data Rooms (VDRs). The IBBI must mandate continuous professional education focused strictly on digital forensics, machine learning tools, and cybersecurity standards to ensure IPs can proficiently navigate and secure distressed corporate networks.[36]

Conclusion

The enactment of the Insolvency and Bankruptcy Code, 2016 represented a profound paradigm shift in Indian jurisprudence, rescuing the economy from a fragmented, debtor-centric regime that actively rewarded defaults, and replacing it with a rigorous, time-bound, creditor-in-possession framework. However, as empirical data emphatically proves, legislative mandates alone cannot cure systemic inefficiency. The technological transformation of the IBC ecosystem is not merely a supplemental or administrative achievement it is the foundational prerequisite for fulfilling the Code's core mandates of maximum asset value realization and time bound resolution.

The integration of digital infrastructure has already yielded undeniable dividends. The evolution of Information Utilities like NeSL has mathematically eradicated the information asymmetry that previously plagued claim verification. Advanced AI algorithms and digital forensic tools are moving the needle from retroactive litigation to proactive diagnosis, rapidly

[35] Pihu Mishra & Amit Dhall, *Investigating the Potential of Digital Technologies, AI, and Blockchain in Transforming Insolvency Procedures*, 44(3) *Library Progress International* 29162, 29166 (2024).
[36] Kabra, *supra* note 3, at 34.

tracing fraudulent funds and scanning thousands of pages of complex legal contracts via Natural Language Processing in a fraction of the time it takes human agents.

Yet, as delays continue to non-linearly erode asset values, the journey is far from over. By bridging the remaining technological silos, mandating a national Resolvability Index, and adopting global best practices like the US PACER system and Singapore's e-Litigation portals, India can eliminate the friction of post-resolution regulatory disputes. Ultimately, a seamless, end to end technology-driven interface is the primary engine that will propel the IBC from its current operational status into a world-class resolution infrastructure, aligning perfectly with India's aspiration to become a $5 trillion economy and the premier global investment destination.