Digitalisation of IBC: Pros and Cons

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ABSTRACT

In the developing environment of a fast-paced global economy, adaptability and efficiency have been essential, especially in the context of the financial challenges faced by corporations. India's Insolvency and Bankruptcy Code (IBC), which was introduced in 2016, has brought a huge and significant change in society to distress the financial conditions and offers a structured way to deal with time-sensitive systems to resolve debts. However, in the olden days, when the loopholes were the procedural delays of the cases, the IBC came with a bang in society, which dealt with faster solving of insolvency cases and effectiveness. When IBC came to notice, it highlighted the huge need for innovative solutions that address these bottlenecks and helped society to deal with the cases in the quickest form. One of the most promising reform that came into notice was digitalization, which transformedlegal systems globally. The various tools available in society have made the process very quick, which in previous times wasn't possible as the process was more paperwork, leading to delay in the cases. Through the digital tools, it will be possible to look over the status. This will enable smooth accessibility to the stakeholders, creating more transparency in the society. By integrating technologies like online portals, blockchain, and artificial intelligence (AI); the IBC could greatly benefit from improved efficiency, reduced costs, and transparency in managing the insolvency process.

This Research Paper will furtherdelve into how IBC came into notice and will deal in detail about the various Pros and Cons of the Digitalisation of the IBC in society.The reader will be able to understand the background and why does the system needs to adapt the digitalization of the IBC.The author has tried to put forward the pros and cons of the digitalization along with a comparison of Singapore and United Kingdom to understand why Digitalisation of IBC is needed in our country.

Keywords: Digitalisation, IBC, Blockchain, AI.

BACKGROUND AND THE NEED FOR DIGITALISATION OF IBC

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The insolvency and bankruptcy code came into notice in 2016 before which various other legislations were followed to resolve the cases, causing a delay in resolving the cases. This delay and inability led to various hindrances in economic growth, and, when it comes to investment specific to foreign countries, it was deterred. IBC addresses the issues by creating a time-bound process to address the insolvency proceedings, prioritize the creditors, and maximize the asset's value. This will help to mark a significant growth of the system in the society. Despite these improvements, procedural delays remain a significant hurdle, limiting the IBC's intended impact. Delays, primarily caused by heavy caseloads and manual processes, can erode the value of distressed assets and prolong financial distress for companies.[215]To address these hard blocks, digitalization has emerged as a key strategy, which offers tools to optimize the process, enhance transparency, and increase accessibility. The digital transformation of the IBC could bring multiple advantages. For instance, online portals could be utilized to manage creditor claims and facilitate communication among stakeholders, significantly reducing the time and costs associated with insolvency proceedings. Blockchain technology presents another promising application, providing a secure and immutable ledger for transaction records and claims, which would mitigate issues related to data tampering and improve the integrity of the process.[216] In addition, using AI for data analysis would help aid the resolutions in analyzing case histories and even speed up the resolution process.

However, a digitalized IBC ecosystem must be implemented cautiously. Heavy reliance on technology introduces cybersecurity vulnerabilities, and the sensitive nature of financial data necessitates robust data protection protocols. Thus, the government must establish a regulatory framework to safeguard digital insolvency processes, with cybersecurity and privacy management protocols [217]. Furthermore, advanced technology tools like blockchain will offer a secure way to store records, which will ensure that there is no data leak. It will act as a tamper-proof tool, and will also be readily accessible to those who need it. This kind of transparency will help people to gain trust and confidence in the country's system as it will create a more reliable and streamlined system for whoever is involved. This kind of system will help people to analyze the dashboards and online portals, which will ensure the stakeholders remain updated with the real-time status and it will help to eliminate all sorts of delays which were

[215] M. AYILYATH, ROADBLOCKS UNDER INSOLVENCY AND BANKRUPTCY CODE 45 (Thomson Reuters 2019).
[216] Ankit S. & Arun Sharma, *Blockchain and AI: Legal Reform and Future Potential*, 5 J. INDIAN LEGAL STUD. 89, 95 (2023).
[217] Priyanka Mukherjee, *Digital Transformation and Cybersecurity Risks in Legal Processes*, 6 CYBER L.J. 65, 70–72 (2023).

caused when the IBC was not digitalized. This will also give a huge push to the digital transformation, which has already been adopted by the United Kingdom (UK) and Singapore. The two countries have shown a great positive impact in society. Similar models can enhance India's framework which will hold the system to perform more effectively.

PERKS OF DIGITALISATION OF THE IBC ECOSYSTEM

I. Enhanced transparency: When it comes to digitalization of the IBC, it will be more transparent if it is digitalized by the integration of blockchain, online portals and electronic documentation. Whenever any sort of change is made to the case file, the blockchain will allow it to track the record and help people keep track of it through the portals. This will enhance reliability and prevent unauthorized changes in the case. Through the portal, all the parties such as creditors, debtors, and legal professionals, can keep track of case updates and the essential documents that are uploaded in the portals related to the case, in a real-time basis. . This will help the parties to have great communication by mitigating the risk of miscommunication. It will also help in increment of trust between the parties. The use of electronic documentation will also help to simplify the record-keeping and reduce the paperwork. It will also help to eliminate the human errors that can be made if the electronic documentation is not done. This shift will not only enhance and improve the risk of human errors but also help in increasing the speed and retrieving the information as soon as possible. By integrating these digital tools, it will help to enhance efficiency from a transparency and a dependable framework, which will further promote accountability and adherence to regulations.

II. Efficiency and speed: One of the advantage of the digitlalization of IBC framework is that, it will give a kickstart in speed and efficiency, it brings along with it. Automation plays a huge roll when it comes to handling insolvency cases. In the olden times, the process suffered with huge delays due to labour work and complexity of the bureaucracy. Therefore, when integration of technology in the field is the need of the hour as it will help to escape the hurdle of the delays and aid courts, regulatory bodies to better managing of the cases, leading to the quicker resolutions and more efficient use of the resources across the system. When it comes to e-filling systems, the submission of applications and supporting documents will help to escape the hurdle of the delays which persists in a paper-based process. The introduction of a digitalized framework will ensure a consistent and streamlined data entry process, reducing labor dependency and minimizing the risk of errors.. The automated systems will help to

reduce the risk of mistakes, validation of data and to track the case progress. This will help us to faster the operations while improving the accuracy as documents can automatically be checked to verify the correctness and completeness.

III. Accessibility: Digital platforms have made the operating and accessibility of IBC process much easier and simple., enabling it easier for the people to engage regardless of their location. Historically, traditional methods were inefficient and less accessible due to their reliance on extensive manual processes. The adoption of the digital tools will help people to bridge the gap which were common in traditional methods. By Digitalization, a person can have smooth access through online portals. Digitalization of the IBC will also help the people who are residing outside India allowing them to be present without any delay and by showing their presence online. Video conferencing tools will help to conduct a free flow of virtual meetings and hearings, which will ensure that stakeholders can present their cases, submit documents, or even track the updates without the constraint of traveling or logistical barriers. This type of development will not only reduce travelling but also encourage participation, which is crucial for comprehensive assessments and fair representation. Moreover, digitalization enables small investors to participate without incurring prohibitive expenses, thereby facilitating effective engagement while minimizing both costs and time investments,

IV. Cost Reduction: The digitalization of the IBC will substantially reduce operational costs associated with physical paperwork, including expenses related to paper, printing, and storage facilities. Maintaining such physical infrastructure often proves financially burdensome, particularly when funds are limited. By transitioning to a digital framework, these costs can be significantly minimized as all records will be converted into digital formats and systematically stored within secure platforms. Shifting to digitalization will help decrease the expenditure related to production and handling. Additionally, the cost of labor will significantly reduce since there will be limited labor to work physically. By leveraging digital tools, the funds allocated to administrative functions can be channeled for more strategic areas such as case management, which would give a kick-start to the case in hand. Online portals and automated workflows reduce the need for intermediaries and lower the cost of case processing. Moreover, it helps the stakeholders, debtors, and creditors to lessen the cost of legal and administrative expenses. Consequently, digitalization enables stakeholders to access case proceedings and participate remotely, thereby eliminating ancillary expenses associated with physical participation.

V. Data Analytics and Monitoring: Using advanced tools for analysis will help the digitalized ecosystem offer substantial benefits for monitoring and optimizing the insolvency process. These digital tools will further assist insolvent individuals in monitoring case progress in real-time while enabling identification of systemic inefficiencies within judicial processes. Through data analysis, stakeholders may track procedural developments with greater transparency. Such insights prove invaluable for informing strategic decisions and optimizing resource allocation, analytics can prioritize cases requiring expedited review or in-depth examination, thereby facilitating timely resolution. Furthermore, it will also help the predictive analytics to forecast the outcomes and risks, allowing the stakeholders to adjunct their strategies accordingly. This continuous evaluation will help to promote accountability and transparency of the insolvency framework, which enables improvement that benefits the entire ecosystem over time.

VI. Improved Security and Reduced Risk of attacks: It will help people to communicate cross-chain interactions. Traditionally, blockchain network are isolated from one another whereas digitalization will manually bridge these networks from cross-chain transactions. In the absence of standardized automated systems, critical assets and sensitive data remain vulnerable to security breaches. A digitalized IBC framework, leveraging advanced technological safeguards, would effectively mitigate these risks. This structure will help to prevent tampering of data by creating a secure and tamper-proof channel for data and asset transfers.

CHALLENGES OF DIGITALISING THE IBC ECOSYSTEM

I. Cybersecurity Risks: Digitalizing the IBC brings new vulnerabilities, leading to threat on the security of the data, which poses a significant risk to the system. The primary objective of digitalization involves the storage of confidential data within centralized systems, which inherently introduces cybersecurity risks, including data breaches, unauthorized access, and fraudulent activities. Inadequate data management protocols may significantly compromise system integrity, resulting in severe consequences such as unauthorized disclosures. Such incidents could erode public confidence in the insolvency framework.In past, a similar threat was observed where aadhar card, having a broad database, faced the issue of exposing sensitive information. To escape from such a threat in the IBC ecosystem, there is the need of stringent

cybersecurity protocols, which must include end-to-end encryption and multi-factor authentication, assisting IBC to avoid cybersecurity risks.[218]

II. Equitable Access and Digital Divide: Whenever it comes to digitalization, though it is a very significant step, it comes with its own set of challenges. In urban and developed places, digitalization will be very easily accessible as the people residing in such places have a decent level of digital literacy. When it comes to rural areas, a significant development needs to be done. In rural areas, there is persistent network issues faced by small business people and individual from under privileges background. Although the rural people and the small business people have less digital literacy alone, that it creates a barrier to their full participation in the IBC process and it can also lead to inequalities in how effectively different entities can navigate the systems.

III. High Initial Investment and Maintenance Costs: Implementing digitalization will involve long-term costs. Implementing a comprehensive digital platform for IBC ecosystem will require a huge investment in terms of investing in software. A structured process will be needed to train people, which will require huge expense. After the establishment of the digitalized platform for IBC, it will continuously need to be brushed up on updation of its software, maintenance of such software. Such expenditure will burden the public sector and the stakeholders. In addition to infrastructure and technology, personnel training represents a significant portion of initial investment. Transitioning to a digital platform requires training, not only restricted to professionals but including various other people to make them aware of how the platform works, leading to its effectiveness. This training must often be customized to different groups, making it time-consuming and costly. Furthermore, it also requires costs for developing accessible, multilingual training materials, which is essential in a diverse country like India, where stakeholders may have varying levels of digital literacy and language needs.

IV. Risk of System Downtime and Technical Glitches: Whenever it comes to technical challenges, it comes with different challenges and loopholes. Reliance on the digital system brings the risk of system failure, downtimes, or glitches. While India continues to develop its technological infrastructure for IBC digitalization, implementation challenges persist, particularly in regions with inadequate network connectivity. Such technical limitations may

[218] NIEUWS360, http://www.nieuws360.com (last visited Apr. 17, 2025).

create systemic inefficiencies, potentially delaying case proceedings and hindering stakeholders' ability to file claims. For instance, during critical virtual hearings involving time-sensitive resolution plans, connectivity failures could disrupt proceedings and compromise case outcomes. If the digital platform faces technical problems such as video or audio failure or if the document is not being accessed, then in such a scenario, the case will need to be postponed, which will just lead to a delay in the case for a few weeks.

V. Legal and Regulatory Challenges: One of the huge demerits can be the various guidelines and frameworks that need to be framed when the digitalization of the IBC is done. It will take a significant amount of time, which can further lead to various problems. With digitalisation, there is huge risk involved related to financial risk and data breaches. Legal framework, such as Digital Personal Data Protection Act, 2023 ("DPDP Act") will also be required to work in conjunction with the IBC.[219] This conjunction or integration will also require additional regulatory measures which can even include data access controls, cybersecurity protocols, accountability and the feasibility mechanism for handling the data within the IBC ecosystem. It is a well-known fact that there has already been a lot of fear amongst the people giving rise to threat on what if there is a data breach. To counter such scenarios, there is presence of dual verification method to escape the threat which will build a great reputation of the body amongst the people. A digital IBC ecosystem will be heavily dependent on electronic signatures and digital identities, however, without a proper standardized regulation for these methods, the system would face huge challenges if the digital signatures are disputed or if verification procedures are insufficient.

VI. Cross-Jurisdiction Consistency: While digital platforms will facilitate cross-border insolvency cases, harmonizing the digital insolvency process across jurisdictions become essential. Different countries across the world have adopted various standards and protocols that need to be followed while dealing with insolvency cases. Aligning them under one platform can create various regulatory challenges. When it comes to cross-border insolvency cases in a digital model, it raises regulatory compliances issues. A digital platform needs to adhere to each country's unique data privacy, regulatory protocols, and reporting mechanism. For instance, one country may only stick to the mandatory requirements of creditors to submit claims whereas the other country may mandate only minimal documentation. A digital

[219] EXPRESS COMPUTER, https://www.expresscomputer.in (last visited Apr. 17, 2025).

platform will have to handle this variation which would lead to complication of the IBC. In this sense, digitalization of the IBC ecosystem would necessitate a mechanism for recognizing and enforcing foreign judgments and insolvency proceedings. Countries with differing rules and regulations regarding recognition of foreign judgments and digital systems could further complicate it.

COMPARATIVE ANALYSIS: UK AND SINGAPORE

When it comes to the process of digitalizing the insolvency and bankruptcy frameworks, the experience of UK and Singapore plays huge role by providing insights for India. Both countries have shown great impact by implementing comprehensive digital tools to streamline their insolvency processwhich has resulted in a very high efficient, transparent, and accessibile system.

I. United Kingdom (UK): Since the time, government has adopted the digital portals for insolvency processes, it has enabled a quicker resolution and reduced the dependency of physical documentation, which has helped the country to have quick and enhanced transparency. UK's insolvency service provides services such as online filing systems for insolvency documents and digital access to case information. This system does not only cut off the administrative cost but also enhances the speed of functioning in society. It also minimizes the errors that are often committed by humans. Physical document storage carries inherent risks of loss or misplacement, whereas digital repositories through online portals enable immediate retrieval and secure archival of records. Most importantly, when it comes to the UK, it has always focused on the robustness of the securities through cybersecurity protocols and data protection laws, which helps to mitigate the risk of data breach and unauthorized access to sensitive financial data.

II. Singapore: On the other hand, Singapore has integrated advanced technologies such as artificial intelligence and blockchain, which have helped manage insolvency cases.[220] It allows the AI to access the case trends, which assists them to resolve the cases and aid in making quick decisions. Blockchain technology in Singapore ensures a very secretive and secured tamper-proof record-keeping system, enhancing the transparency and trust in the process by the

[220] Zuber Peermohammed Shaikh, *Leveraging Artificial Intelligence for Digital Actionable Transformation of Business: Strategies for Integrating Intelligent Technologies*, in BUSINESS TRANSFORMATION IN THE ERA OF DIGITAL DISRUPTION.

citizens. Additionally, Singapore's digital framework focuses mostly on the digital framework which emphasizes accessibility, providing resources and online support to facilitate digital literacy among stakeholders, ensuring a wide range of users who can navigate the systems effectively.

CONCLUSION

The digitalization of India's IBC represents a very huge role, which is a great initiative towards modernizing the legal and financial system of the country. Digital tools will play a significant role in terms of improvement in transparency, efficiency, accessibility, and cost reduction, which play a crucial role in ensuring that insolvency cases are handled promptly and in an equitable manner. This shift will align with global trends, where countries like Singapore and the UK have embraced digital insolvency solutions to reduce procedural delays. It will also help to optimize the usage of resources. By incorporating such advanced tools into the system, it will help incorporate the online portals and AI. It will help to manage the case and improve the integrity, enabling smooth functioning and accountability in the legal system.

However, when it comes to the transformation of the IBC, it does not escape the challenges. Cybersecurity risks have always been a threat to technology systems. They are present as a substantial threat to the confidentiality and integrity of financial data. They emphasize the need for solid data protection protocols, including encryption and double-factor authentication. Equitable access remains a critical challenge in the digitalization of the IBC. Significant disparities in digital literacy and infrastructure persist, particularly among economically disadvantaged groups and rural populations. The lack of reliable network availability in these regions exacerbates existing inequalities, creating barriers to effective participation in the digital insolvency framework. High initial investments and maintenance cost can also act as a barrier, especially when it comes to the public sector entities since the public sector still, to date, faces financial and budget issues. These issues become an impediment in the gradual progress and development of the country. The sustainability of the digital framework necessitates both operational continuity and guaranteed investment, supported by robust policy measures. To address the mentioned challenges, a well and appropriately defined framework needs to be incorporated. Legislations such as the DPDP Act must work simultaneously with the IBC to provide a robust cybersecurity measure that will help the system to overcome the fear of hacking and data leakage. Additionally, when it comes to the training and support to be

given to the users from the underprivileged or rural side of the country, it will be a huge and crucial proposition to bridge the digital divide and bring equality in the system. Harmonizing India's digital insolvency ecosystem processes with global standards could facilitate cross-border cases, positioning India as a leader in digital insolvency solution. Conclusively, while digitalization may not counter all challenges, it represents a transformative approach capable of significantly enhancing India's insolvency ecosystem and framework. By striking a balance between innovation and regulation, this shift can establish a resilient, efficient, and transparent IBC framework. Such a system would not only foster greater trust in India's financial infrastructure but also promote long-term economic stability.