

scientific editors Anna Hrycaj Bartosz Sierakowski



Social and Economic Aspects of Court and Out-of-Court Insolvency Proceedings

scientific editors Anna Hrycaj Bartosz Sierakowski

Projekt pt: "Konferencja międzynarodowa Społeczne i ekonomiczne aspekty restrukturyzacji pozasądowej" nr umowy KONF/SN/0143/2023/01 dofinansowany ze środków budżetu państwa, przyznanych przez Ministra Edukacji i Nauki w ramach Programu "Doskonała nauka II".

Project 'International Conference: Social and Economic Aspects of Court and Out-of-Court Restructuring,' Contract No.: KONF/SN/0143/2023/01

Co-funded from state budget funds allocated by the Minister of Education and Science under the 'Excellent Science II' Programme (Program 'Doskonała nauka II').



Social and Economic Aspects of Court and Out-of-Court Insolvency Proceedings

DOI 10.26399/978-83-66723-81-8



Warsaw 2025

$Social\ and\ Economic\ Aspects\ of\ Court\ and\ Out-of-Court\ Insolvency\ Proceedings$

scientific editors: Anna Hrycaj, Bartosz Sierakowski

Authors:

Anna Hrycaj

Bartosz Sierakowski

Aleksander Witosz

Agnieszka Cybulska-Bienioszek

Sjur Swensen Ellingsæter

Oleksandr Biryukov

Lina Dzindzelėtaitė-Šaltė

Neringa Gaubienė

Salvija Mulevičienė

Remigijus Jokubauskas

Rafał Adamus

Hubert Zieliński

Norbert Frosztega

Paweł Janda

Reviewers:

dr hab. Kinga Flaga-Gieruszyńska, prof. US dr hab. Tomasz Szczurowski

Executive editor:

Aleksandra Szudrowicz

Language editor:

Anna Zychowicz-Kaczyńska

Cover design:

Studio Grafpa, www.grafpa.pl

DOI 10.26399/978-83-66723-81-8 e-ISBN 978-83-66723-81-8 ISBN 978-83-66723-82-5



1st edition Lazarski University 2025

Lina Dzindzelėtaitė-Šaltė*, Neringa Gaubienė**

Al-Powered Restructuring Proceedings from a Lithuanian Perspective

1. Introduction

With the emergence of digital technologies such as artificial intelligence, blockchain, and the Internet of Things, the legal landscape is compelled to continuously adapt to new challenges and opportunities. The changes brought about by digitalisation encourage the creation of compensatory mechanisms based on scientific research into the factors determining these processes and the tools for managing them.

Digital technologies are gradually permeating many areas of society, and their potential appears unlimited. States invest heavily in the digitalisation of their justice systems, requiring national courts and other entities involved in the administration of justice to adapt to this paradigm. The use of new technologies can facilitate the resolution of cross-border disputes by making the administration of justice faster, more accessible, and more effective. Modern technology eliminates the distance between courts and litigants through

^{*} PhD candidate Lina Dzindzelėtaitė-Šaltė, Vilnius University Faculty of Law (Lithuania); ORCID: 0009-0006-7782-5766

Prof. assist. PhD Neringa Gaubienė, Vilnius University Faculty of Law (Lithuania); ORCID: 0009-0002-6756-2246

online hearings and proceedings. Digitalisation also enhances cross-border judicial cooperation, primarily by dematerialising the circulation of procedural documents between courts, legal professionals, and litigants.

Over the last decade, significant transformations have been observed in civil proceedings. In the digital age, a substantial proportion of assets exist in digital form, and many transactions are conducted electronically. Additionally, numerous procedural acts can now be carried out in an electronic environment. Despite digital advancements worldwide, the COVID-19 pandemic exposed significant gaps in the administration of justice, including in insolvency proceedings, where digitalisation was either absent or insufficient to function effectively when face-to-face interaction was not possible.

Digitalisation has been, and continues to be, a crucial issue globally and, of course, at the EU level. The need for digitalisation is underscored by the European Commission in its proposal for a preventive restructuring directive¹ and in a later proposal for a directive harmonising certain aspects of insolvency law.²

Insolvency and restructuring proceedings must be conducted in accordance with standard rules and procedures established by law, which apply to circumstances that vary from one debtor to another and require the analysis of a vast amount of data and documentation. Given the significant technological advancements in both the private and public sectors aimed at assisting in this complex process, the need for further development remains evident. Artificial intelligence (AI), and by extension, generative AI, has gained momentum for its ability to offer a variety of applications. However, its necessity, potential benefits, and associated risks must be carefully considered. These

The European Commission indicated digitalisation as a means to reduce the length of procedures and increase their efficiency (Proposal for a Directive of the European Parliament and of the Council on preventive restructuring frameworks, second chance, and measures to increase the efficiency of restructuring, insolvency and discharge procedures and amending Directive 2012/30/EU, COM(2016) 723 final 2016/0359 (COD) https://ec.europa.eu/information_society/newsroom/image/document/2016-48/proposal_40046.pdf accessed 17 February 2025).

The European Commission indicates the need for digitalisation, mentioning a higher degree of process automation in the simplified winding-up proceedings for microenterprises (Proposal for a Directive of the European Parliament and of the Council harmonising certain aspects of insolvency law, COM(2022) 702 final, 2022/0408(COD) https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52022PC0702 accessed 17 February 2025).

considerations are particularly relevant in the context of corporate restructuring, which involves not only debtors and creditors but also serves the public interest, necessitating the involvement of courts and insolvency practitioners.

2. The Need for AI in restructuring proceedings

2.1. Digital infrastructures in restructuring proceedings in Lithuania

Before analysing the potential features of AI in restructuring proceedings, it is first worth reviewing the digital solutions already implemented in these legal processes. Examining the practice in Lithuania, the main digital solutions applied in restructuring proceedings should be highlighted.

The State Enterprise Centre of Registers collects and publicly provides information on the legal status of companies, indicating whether they are undergoing restructuring or liquidation due to bankruptcy.³

The Information Portal for Insolvency Processes⁴ (hereinafter referred to as 'the Information Portal'), as part of the Audit, Valuation, and Insolvency Information System (hereinafter referred to as 'AVIIS'), serves as the primary tool for all insolvency and restructuring proceedings. It is used by insolvency practitioners and provides public notices for the sale of property, as well as guidance for businesses considering restructuring proceedings. Within the insolvency section, the Information Portal offers detailed information, including the company name, contact details, the status of insolvency or restructuring proceedings, key dates such as the commencement of the process and liquidation termination, the court handling the case, and the appointed insolvency practitioner along with their contact information. The system also provides statistical data on bankruptcy and restructuring proceedings, including the number of cases initiated, ongoing, and concluded – both in total and on an annual basis.

The Information Portal, along with other components of AVIIS, also serves as a tool for electronic case administration. It is utilised by administrators,

^{3 &}lt;www.registrucentras.lt/jar/index_en.php> accessed 17 February 2025.

^{4 &}lt;a href="https://nemokumas.avnt.lt/public/home/main">https://nemokumas.avnt.lt/public/home/main accessed 17 February 2025.

courts, and creditors whose claims have been confirmed by the court. The system manages datasets related to restructuring proceedings, including notifications about creditor meetings and committee sessions, decisions, restructuring plans and implementation reports, administration costs, asset information, financial claims, and their levels of satisfaction.

The Information Portal includes a section called Insolvency Guide, which provides a digital tool enabling companies to draw up a restructuring plan that complies with the legal framework. This tool simplifies the process by clearly directing companies on the required information, the questions that must be answered, and the necessary financial projections. As a result, the plan is generated, with the option to supplement it later. Although the tool is primarily tailored to small and medium-sized enterprises (SMEs), it is suitable for companies of all sizes. The Information Portal also features a section for consultations with interested parties. Its structure includes a question-and-answer tool, categorised according to the main topics of restructuring proceedings and based on human-written responses.

The Early Warning System, which implements provisions of the EU Directive on restructuring and insolvency,⁵ is designed to assist businesses facing financial difficulties in avoiding insolvency and ensuring their continued viability. The risk of insolvency is determined through statistical methods using data provided by taxpayers, including value-added tax (VAT) returns, VAT invoice data, financial reports, and other information available to the State Tax Inspectorate, as well as data received from third countries. Statistical estimates of insolvency risk are based on annual, quarterly, and monthly data, along with derived data (coefficients), with the dataset covering the last 48 months.⁶

Although not all possible functionalities of the aforementioned systems have been detailed, it can be argued that the digitalisation of restructuring

Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency) [2019] OJ L172/18 (hereinafter 'the Restructuring Directive' or 'the Directive'.

Order No VA-55 of 21 April 2004 of the Head of the State Tax Inspectorate on approval of the rules of procedure for the processing and submission of data in the registers of increased value tax invoices, para 6.

cases and their administration, as well as creditor involvement, is already leveraging the benefits of technology to a significant extent. This has resulted in considerable added value, significantly improving communication, transparency, cost efficiency, and the overall speed of restructuring proceedings.

2.2. Why do we need to think more about?

Existing digital systems for insolvency and restructuring cases are highly promising and provide an excellent example of the digitalisation of complex legal processes. Current technological tools significantly enhance the transparency, efficiency, and promptness of legal proceedings. Creditors now benefit from quicker and easier access to case documents and decisions, leading to improved communication and decision-making. Digital platforms facilitate faster access to documents and more efficient information retrieval, increasing cost efficiency and reducing administrative expenses. However, these systems have not yet fully exploited the maximum potential of new technologies. The increasing complexity of financial processes, combined with sophisticated business models and economic systems, calls for more advanced digital solutions. These solutions should provide deeper and faster insights, enable the identification of fraud and other malpractices, improve predictive analytics, and offer comprehensive support to all stakeholders involved in restructuring processes.

Insolvency practitioners must manage complex financial and legal procedures while acting in the interests of both creditors and debtors. They are required to analyse vast amounts of data, identify patterns, evaluate debtor transactions, and understand business models and their economic viability. Additionally, they must oversee the restructuring process in a timely manner, maintain communication with creditors and the court, draft procedural and communication documents, prepare reports, and present positions based on professional judgment.

As parties that may lose the right to recover the full amount of their claims due to the debtor's financial difficulties, creditors are granted important rights in the restructuring process. These include the right to decide on the implementation of the restructuring plan, the right to challenge unlawful decisions that infringe their rights, and the right to appeal against actions taken by parties to the proceedings. In order to make well-informed and calculated decisions, creditors must have access to sufficient information, be able to

assess that information effectively, and possess adequate legal knowledge to protect their rights when necessary. These steps are time-consuming. Furthermore, creditors often lack the expertise required to navigate these stages independently. If a creditor is unable to handle these processes on their own, seeking professional assistance results in additional costs — an unwelcome burden in a situation where the creditor is already at a financial disadvantage. This issue becomes even more pressing in cases where restructuring is carried out without the appointment of an insolvency administrator.

To ensure fairness in restructuring cases, courts are also required to analyse complex financial schemes and assess whether the measures proposed in the restructuring plan will result in a lower level of satisfaction for dissenting creditors compared to an insolvency scenario. Courts must determine whether the new financing measures outlined in the restructuring plan are necessary for its implementation and whether they impose undue restrictions on the interests of creditors who have not approved the plan. Additionally, courts must evaluate whether the proposed measures will enable the debtor to overcome financial difficulties, maintain viability, and avoid bankruptcy.

Finally, it is often difficult for a debtor facing financial difficulties to assess the feasibility of restructuring. For large debtors, the complexity of business models presents a challenge, while for small businesses, the lack of expertise and, in times of financial distress, the limited resources to hire a professional to assess restructuring options and prepare a plan are significant obstacles.

Restructuring procedures, therefore, require a holistic approach to address the complex challenges faced by all stakeholders. The current process necessitates sophisticated tools to accurately identify a company's financial and economic situation, conduct a thorough analysis of its assets and liabilities, and effectively manage the administration process. This becomes even more crucial in cases of cross-border restructuring or potential fraud, where the complexity of valuation increases significantly. A sound restructuring plan must reflect the company's current financial situation, provide forward-looking projections, and offer an accurate assessment of the likely satisfaction of creditors' claims in alternative scenarios, such as liquidation. It is, therefore, necessary to evaluate which existing technologies can address these challenges and to what extent they can be utilised.

2.3. What measures can be taken to improve restructuring proceedings?

Restructuring proceedings can be divided into four critical stages: the preventive period, where early warning signs of financial distress are identified; the assessment of restructuring grounds, involving comprehensive financial diagnostics; the formal initiation of the restructuring case, including the preparation of a detailed restructuring plan; and finally, the implementation of the restructuring plan.

At the initial stage, it is crucial to assess potential financial difficulties in a timely manner and to be well-informed. The early warning system mentioned above already serves the primary objectives of the Directive on restructuring and insolvency. However, to ensure consistency and provide assistance on a larger scale, the advantages of technology, particularly generative AI, can be utilised to an even greater extent. Tools that help assess and structure such agreements can be instrumental in reaching settlements with creditors. This is particularly relevant for the debtor to prevent the loss of access to preventive restructuring measures, including judicial restructuring processes, as well as for other parties to clearly define the conditions and consequences of the debtor encountering financial difficulties and contractual obligations.

In the second stage of the analysis, during preparation for restructuring, all stakeholders – the debtor (whether or not pre-restructuring measures have been exhausted), insolvency practitioners, and the court – must be prepared to assess whether there is a sufficient basis for opening restructuring proceedings. Defining these criteria is a complex task, as it requires the evaluation of vast amounts of data and various factors influencing business performance. Technological solutions, particularly AI-driven analytics, can

According to the LILP, two necessary criteria for the company to be eligible for restructuring are that the legal person is in financial difficulties and is viable (Article 21(1)(1) and (2) LILP). Financial difficulties are defined as a situation in which a legal person is insolvent or there is a likelihood of its insolvency (Article 2(5) LILP). Insolvency of the legal person is described as the state of a legal person in which it is unable to meet its obligations in a timely manner, or its liabilities exceed the value of its assets (Article 2(7) LILP). The likelihood of insolvency is described as a situation in which it is realistically probable that a legal entity will become insolvent within the next three months (Article 2(7) LILP). The viability of a legal person is the state of a legal person in which it carries out an economic, commercial activity that will enable it to fulfil its obligations in the future (Article 2(6) LILP).

significantly enhance this process by processing complex datasets, identifying subtle financial patterns, and providing objective assessment frameworks that traditional methods might overlook.

The third stage is the most complex and requires the active involvement of all interested parties in the process. Although, as mentioned above, a number of support tools based on the integration of technologies are in place in Lithuania and facilitate the process, further improvements remain of some importance. At this stage, the financial, legal, and economic analysis of the debtor and its transactions, the forecasting of future activities, and the risk assessment become particularly significant. At the same time, the final result is the restructuring plan. If the proceedings are initiated by a company experiencing financial difficulties, a draft of the restructuring plan must be submitted with the application to the court for the opening of insolvency proceedings (Article 17(3)(3) LILP). This draft must later be confirmed by the creditors and shareholders in the groups affected by the restructuring plan. If the restructuring proceedings are initiated by a creditor, the restructuring plan is subsequently prepared by the debtor's manager and approved by the creditors and the court. The preparation of the plan must be based on historical financial data, the company's liabilities, a plan for future business activities, liabilities to creditors, the company's liquidation value, and other relevant factors. Therefore, during this process, historical data and future activities must be evaluated, and forecasts must be calculated, as these will later be assessed by creditors, insolvency practitioners, and the courts. This typically requires specific expertise across a wide range of fields, is time-consuming, and entails significant costs.

The final stage involves the proper implementation and administration of the restructuring plan. The entire restructuring process requires continuous administration over an extended period. The LILP also permits debtor-in-possession situations, presenting two possible approaches. In one scenario, an insolvency practitioner is appointed. In the other, the debtor's management retains full control, meaning that creditors are forced to be able to monitor the debtors' activities. This should not pose significant challenges for major creditors, such as banks, which are typically the primary creditors. However, for smaller unsecured creditors, this could impose a disproportionate burden, potentially relegating them to a passive role in the proceedings.

Once the stages of restructuring have been identified and the potential for the use of technology within them has been recognised, they can be specified. The following applications of artificial intelligence are particularly useful in the restructuring process: automated document analysis, predictive analytics, fraud detection, and consultation based on specific areas of legal acts and case law.

3. Benefits of Al-powered restructuring proceedings

If we take Bork's explanation that legal rules link back to basic principles,⁸ the benefits of AI in insolvency can similarly be linked to the implementation of key principles. While the identification of specific principles within the legal framework of insolvency law may vary, the LILP establishes several core insolvency principles that are also relevant in the context of technological advancements, particularly AI.

Principle of efficiency. Article 3(1) LILP states that efficiency is a key principle of insolvency proceedings, requiring a balance between the interests of debtors in financial difficulties and those of creditors to maximise the satisfaction of creditors' claims within a reasonable minimum period. This principle also encompasses cost minimisation and promptness in restructuring proceedings. AI can significantly enhance efficiency by facilitating and accelerating the collection and analysis of information, simplifying administrative processes, reducing insolvency-related costs, and shortening procedural timeframes. The integration of AI tools, therefore, plays a crucial role in upholding the principle of efficiency.

Principle of equality of creditors. Article 3(2) LILP indicates that the principle of equality of creditors means that creditors with similar claims shall be given equal opportunities to participate in the insolvency process in order to satisfy their claims and to protect their other rights and legitimate interests. This principle, which is also referred to as *pari passu*, can be seen both as a substantive principle, ensuring that each creditor receives a proportionate share of their claim, and, at the same time, as having a procedural dimension,

⁸ Reinhard Bork, *Principles of Cross-Border Insolvency Law* (Intersentia Ltd 2017).

ensuring that all creditors are granted the same procedural rights. With asset tracking as an important benefit, especially in cross-border insolvency proceedings or cases involving fraudulent transactions, the substantive dimension of this principle can be strengthened, as AI helps to ensure a greater satisfaction of claims and, equally important, an equitable satisfaction of creditors' claims relative to one another. When considering the benefits of AI tools for the procedural dimension of the principle of equality of creditors, we can assert that such tools make a substantial contribution to promoting equal opportunities for all creditors to participate in the proceedings and to protect and defend their rights and legitimate interests effectively.

Principle of transparency. Article 3(3) LILP states that the principle of transparency requires that information about insolvency proceedings be made available in a timely manner to all persons involved in order to ensure the protection of their rights and legitimate interests, except where it is necessary to protect personal data as required by law or information constituting a commercial (industrial) secret. The principle of transparency, which is enshrined in restructuring proceedings, encompasses not only the disclosure of sufficient information to enable the parties involved to adequately represent their rights and legitimate interests but also the comprehensibility of that information. AI tools can therefore play a key role in implementing this principle.

Principle of judicial leading. Article 3(4) LILP states that the principle of judicial leading means that the court may, of its own motion, obligate participants in the insolvency process to conduct procedural actions, collect evidence, and oversee the actions of the parties to the insolvency process to ensure the effective course of in-court insolvency proceedings and the public interest. This principle requires the court to be proactive, which in turn necessitates appropriate and sufficient means to identify and decide on cases requiring *ex officio* court involvement. Thus, AI tools can be crucial to the implementation of this principle as well.

Principle of professionalism. Article 3(5) LILP states that the principle of professionalism requires that persons administering insolvency

⁹ Reinhard Bork and Michael Veder, *Harmonisation of Transactions Avoidance Laws* (Intersentia Ltd 2022) 45–46.

proceedings perform their duties in a professional manner, ensuring a high level of professional knowledge and abilities while maintaining an impeccable reputation as representatives of the profession. On the one hand, it can be argued that an insolvency practitioner, by ensuring a high level of expertise, is empowered by technology, thereby enhancing the benefits derived from the implementation of the principle of professionalism. On the other hand, it can also be contended that refusing to use technology, including AI, which can significantly contribute to professionalism in the insolvency process, could constitute a breach of this principle. As a comparison, what would happen if an administrator did not use email? Could such an individual be considered to be acting professionally if they were unable to ensure prompt communication?

Although not limited to these principles,¹⁰ the frequent identification of the above-mentioned principles as the most important demonstrates that AI tools contribute significantly to reinforcing each of them.

4. Ethical and regulatory risks in AI integration

AI demonstrates emerging capabilities every day; therefore, its responsible and thoughtful integration will be essential for achieving sustainable improvements in insolvency and restructuring practices. However, advancements in digitalisation come with significant risks and considerations. Principles of justice, fairness, and procedural transparency are fundamental when implementing AI technologies. Only when AI systems meet these requirements can they be considered suitable for use in the legal sphere.

One prominent concern is algorithmic bias. AI tools, relying on historical data, may replicate and even amplify existing disparities, potentially

Both doctrine (Bork, Veder (n 9)) and soft law instruments (UNCITRAL, *Legislative Guide on Insolvency Law* (United Nations 2005) 28–30 https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/05-80722_ebook.pdf accessed 24 November 2024; World Bank, *Principles for Effective Insolvency and Creditor/Debtor Regimes* (The World Bank Group 2021) 27 https://documents1.worldbank.org/curated/en/391341619072648570/pdf/Principles-for-Effective-Insolvency-and-Creditor-and-Debtor-Regimes.pdf accessed 24 November 2024; European Bank for Reconstruction and Development, 2021) point to a number of principles in laying the foundations for an effective insolvency system.

leading to discriminatory outcomes. In insolvency and restructuring contexts, this could disproportionately affect smaller creditors or particular debtor profiles. The risk of bias necessitates rigorous auditing, testing, and ongoing oversight to ensure equitable outcomes. As highlighted in broader discussions on AI ethics, multidisciplinary teams — including legal and technical experts — should be engaged to enhance the reliability of AI systems and mitigate inherent biases.

A related challenge is the opacity of many AI systems, commonly referred to as the 'black box' problem. These systems often operate through algorithms that are not easily interpretable, creating potential barriers to understanding and contesting decisions. Explainability is critical; AI systems should be designed to offer clear, understandable rationales for their decisions. In restructuring cases, where procedural fairness is paramount, a lack of transparency could undermine trust in the system. Explainable AI frameworks, which make algorithmic decision-making comprehensible, must be integrated into insolvency and restructuring technologies. Lessons from jurisdictions such as Colombia, where AI is used in bankruptcy courts to process and verify submissions, suggest that transparency can be improved through user-friendly interfaces and clear procedural guidelines.¹¹

Accountability is another pressing concern. Determining responsibility when AI makes errors or produces unjust outcomes remains a complex issue. Should accountability rest with developers, operators, or the entities relying on AI systems? Clear delineations of responsibility are essential, along-side mechanisms for recourse and appeal. Legal frameworks should ensure that individuals affected by AI-driven decisions in insolvency proceedings have the right to challenge and review outcomes. Countries such as the United Kingdom, which has prioritised regulatory clarity and accountability in digitised legal processes, provide valuable insights into how this can be managed effectively. 12

Data privacy and security are also paramount. Restructuring proceedings involve the handling of vast amounts of sensitive financial and personal

Akshaya Kamalnath, 'The future of corporate insolvency law: A review of technology and AI-powered changes' (2024) 33(1) International Insolvency Review 40–54.

¹² ibid.

information, making them attractive targets for cyberattacks. Ensuring robust security measures, compliance with data protection laws, and clear data handling responsibilities is essential to minimise risks. Privacy considerations should be central to the design and deployment of AI systems in restructuring proceedings. Finland's adoption of the KOSTI portal demonstrates how digitised systems can streamline processes while adhering to stringent data security protocols. The system's success underscores the importance of embedding privacy-by-design principles into any technological platform used for insolvency and restructuring proceedings.

Despite the sophistication of AI systems, systemic errors remain a significant concern. Algorithms may fail when faced with unique or non-standard cases, and the consequences in insolvency proceedings can be severe. Overreliance on AI without adequate human oversight risks exacerbating such issues. A more balanced approach involves adopting hybrid models, where AI manages routine, non-discretionary tasks, while human professionals oversee complex decision-making. Colombia's use of AI for non-discretionary decision-making, such as verifying the completeness of submissions, provides a useful model for balancing automation with human judgment.¹⁴

The ethical dimension of AI integration in insolvency proceedings requires close attention. Non-substitution of human rationality remains a cornerstone of ethical AI use. Restructuring proceedings often require nuanced legal and financial judgment that considers individual circumstances and broader societal implications. Over-reliance on automation risks reducing the nuance and empathy that legal professionals provide. While AI excels in handling repetitive and data-intensive tasks, ensuring that human professionals retain the ultimate decision-making authority is essential to preserving holistic and context-sensitive justice. Encouragingly, many jurisdictions are exploring AI-assisted processes that maintain human oversight, ensuring that ethical considerations remain central.

Building trust in AI systems within insolvency proceedings relies on ensuring transparency in both process and outcomes. This requires making

¹³ ibid.

¹⁴ ibid.

training data, operational parameters, and the decision-making criteria of AI systems accessible and comprehensible to all relevant stakeholders. For instance, if an AI tool is used to assess restructuring plans, it should disclose the data sources and underlying assumptions that inform its recommendations. This level of transparency enables creditors, debtors, and judicial authorities to assess the system's reliability and fairness.

Stakeholders must also have the ability to audit and understand how AI systems function to ensure alignment with legal standards and ethical principles. For instance, an AI tool used to prioritise creditor claims must clearly explain the criteria it applies – such as claim size, statutory priority, or other weighting factors. Without this clarity, there is a risk that stakeholders may perceive the system as arbitrary or biased, which could undermine confidence in its recommendations.

The regulatory framework governing AI integration into insolvency proceedings presents additional challenges. Rapid technological advancements often outpace regulatory development, creating governance gaps. To address these, it is essential to establish clear guidelines for the use of AI in insolvency processes, including mechanisms for accountability and dispute resolution. Within the European Union, the Artificial Intelligence Act (AI Act) provides a cross-sectoral regulatory framework for AI usage. While it covers AI applications in the justice sector, it lacks provisions specifically tailored to insolvency proceedings.

The AI Act recognises both the opportunities and risks associated with AI. On the one hand, it highlights AI's ability to deliver economic, environmental, and societal benefits, such as enhancing business restructuring prediction models, optimising resource allocation in debt recovery, and streamlining procedural tasks. These capabilities can improve efficiency and fairness in insolvency cases, offering competitive advantages to businesses while promoting broader societal benefits.

On the other hand, the Act identifies significant risks, particularly in judicial contexts. AI systems used for tasks such as assessing creditor claims or evaluating restructuring plans are categorised as 'high-risk' under the Act, reflecting concerns over bias, errors, and lack of transparency. These risks could compromise procedural fairness, making it imperative that AI remains a support tool for human decision-making rather than a replacement.

Maintaining human oversight is essential to ensuring justice, fairness, and procedural integrity in insolvency proceedings.

The high-risk classification does not apply to administrative AI systems that handle tasks such as data anonymisation or document processing, as these do not directly influence substantive outcomes. This distinction reinforces the principle that AI should complement rather than replace human judgement in critical decision-making. For example, AI can streamline creditor notifications or automate routine administrative tasks, while essential decisions remain in the hands of human practitioners.

Ultimately, regulatory frameworks emphasise the importance of transparency, auditability, and accountability in AI systems. In the context of insolvency and restructuring, this means implementing safeguards against AI-related biases or errors, maintaining human oversight, and fostering trust among all stakeholders. By balancing AI's efficiencies with the principles of justice and fairness, insolvency proceedings can benefit from both operational improvements and stakeholder confidence.

5. Conclusion

As the restructuring process plays a crucial role in protecting of both the debtor's and the public interest in general, without prejudice to the creditors' interests, it can be promoted by using technology such as AI. It can bring significant benefits at all stages of the restructuring process, including the identification of the need to assess the debtor's potential restructuring, the evaluation of the feasibility of restructuring, the drafting and approval of the restructuring plan, as well as its monitoring, and the assessment of the debtor's financial and economic situation, and the reasonableness and fairness of transactions. Despite the fact that AI technologies pose a number of challenges due to the risks they entail, the uncertainty that still exists regarding their proper integration, and the limitations of their use in judicial proceedings, the significant contribution they make to ensuring important principles in restructuring proceedings, such as transparency, accountability, and efficiency, leads to the conclusion that a strong focus should be placed on the development, implementation, and regulation of these technologies

at all levels, as a tool for the debtor, the creditor, the insolvency administrator, and the courts.

At the same time, it is important to support the view that technology provides not only opportunities but also obligations to use it. Insolvency practitioners and the insolvency community, who provide services in restructuring cases recognised as being in the public interest, as well as the courts and insolvency supervisors, must take advantage of the benefits of technology to make the process and the provision of individual services better, faster, and less costly.