

# The AI Turn in Asset Division: Reflections and Directions for Family Law, and Beyond

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## Abstract

This article explores the integration of artificial intelligence into the domain of family law, with a particular emphasis on asset division and the digitalisation of dispute resolution processes. Drawing on the collective findings of the CREA2 project and the prospective developments of CREA3, it reflects on the potential and limitations of deploying large language models, machine learning, and video-enabled legal tools in both national and cross-border contexts. The discussion is grounded in contributions from the CREA2 conference, which addressed themes ranging from remote marital recognition and AI-driven applications for victims (of domestic violence) support to data governance and disputes in virtual environments. Against this backdrop, the article advocates for a hybrid model of legal practice – combining computational precision with professional oversight – while emphasising the normative imperative of designing AI-based systems that respect procedural safeguards, data protection requirements, and the fundamental values of justice.

**Keywords:** artificial intelligence, access to justice, justice by design, digitalisation of family law, division of assets.

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## **1. CREA2 (2022–2024): Research Findings and Lessons Learned**

The Brussels-based CREA2 conference offered a crucial opportunity to consolidate our collective experiences, research findings and forward-looking ambitions. Each of the five papers published in this Special Issue demonstrates not only significant progress in harnessing technology for legal applications, but also the ongoing importance and inherent challenges of carefully maintaining core legal principles, particularly the principle of access to justice and human rights.

The first two papers focused specifically on the field of family law. The first paper, 'Enhancing Access to Justice via LLMs in the Field of Asset Division: CREA2 and the Digital Journey' (Giacalone, Hyder-Rahman, Fonista, Amato), engaged in a critical discussion on the integration of large language models (LLMs) in family law dispute resolution. This paper underscored how AI-driven tools can empower citizens within legal journeys and spaces. At the same time, it drew attention to the guardrails that are necessary to ensure advanced digital systems remain transparent, fair and user-centric.

The second paper on remote marriages and divorces, 'Recognition of Cross-Border Remote Marriages and Divorces in the Digital Age' (Chikoc Barreda), distilled the complexities of validating ceremonies celebrated online. Ensuring that a 'digital ceremony' is both formally recognised and anchored in due process is becoming an especially pressing concern for cross-border couples. The third paper, 'Addressing the Needs of Victims: the Design of a Multi-Role AI-Driven Application for Victims of Crime Access to Justice' (Lupo, Pacifico), put the spotlight on victim support. This paper showed the transformative power of technology in the context of criminal justice – provided that data protection, specialised training and cross-institutional protocols are built in from the outset.

The final two papers dealt with broader themes and issues that pervade the topic of AI in legal practice. The transversal theme of data sensitivity and privacy concerns emerged in various contexts throughout the conference discussions, and is directly addressed in 'The Challenges of Personal Data Processing in Developing AI-Driven Tools for Judicial Proceedings in the EU: The Example of CREA2' (Gotvan, Tičar, Zajc). The conference participants acknowledged that as justice systems evolve to accommodate AI, there must be a renewed focus on ensuring that the fundamentals of data minimisation, anonymisation and the right to be forgotten remain front and centre.

Lastly, the intricacies of property and dispute resolution in virtual spaces was captured in 'Redefining Dispute Resolution Mechanisms for Digital Assets in the Metaverse: Exploring the Role of Blockchain and Emerging Technologies' (Arnone, Giacalone). During the conference, discussions highlighted the rapid evolution of these markets and the urgent need to design dispute-resolution methods that can

adapt to blockchain environments and cross-jurisdictional ownership. Indeed, to bring this overview full-circle, we anticipate that as digital assets become more commonplace, they will invariably become the subject of family property disputes too. Thus, continuing to engage in these complex, cross-disciplinary discourses is essential.

## **2. CREA3 (2024-2026) as a Continuation of CREA2: Scope, Objectives and Innovation Potential**

In the coming year we enter the final phase of CREA3. This project builds on CREA2 to refine and expand our AI-driven family law tool that uses game-theoretical algorithms to help EU citizens resolve national and cross-border family property disputes more efficiently. Digitalised access to justice and predictive justice are the overarching themes of CREA3. Our strategy focuses on harmonising digital solutions within both national and European legal frameworks: on the one hand, by employing text-mining and machine-learning techniques to examine how well the six selected EU legal systems that are part of CREA3 comply with the new Regulation on the digitalisation of judicial cooperation and access to justice in cross-border civil, commercial and criminal matters;<sup>1</sup> and on the other hand, by enabling e-communication, e-signatures and secure videoconferencing for family hearings. Furthermore, as Arnone and Giacalone showed in their paper, we prepare to address emergent domains like virtual property disputes, ensuring that the new platform accommodates the expanding digital ecosystems where property rights also need robust dispute-resolution pathways.

A crucial component of CREA3 is widening access to justice across all social groups, including those with limited digital access and skills, as well as those whose personal or socio-economic conditions make it difficult to engage in protracted, in-person legal processes. The project, thus, reinforces the theme – explored by Lupo and Pacifico – that the core function of digitisation in the legal sphere is not just speed and efficiency, but also inclusivity and protection of fundamental rights. Moreover, Chikoc Barreda's findings illustrate the practical complexities of validating digital ceremonies across different jurisdictions, underscoring the broader significance of e-communication and mutual recognition procedures that CREA3 seeks to further harmonise. At the same time, Giacalone, Hyder-Rahman, Fonista and Amato remind us that the deployment of LLMs must be carefully managed, especially in light of the evolving AI Act requirements regarding transparency, accountability and bias prevention. Similarly, as Gotvan, Tičar, and Zajc emphasise, robust GDPR compliance must remain a central pillar throughout CREA3's digital transformation efforts.

Succeeding CREA2, CREA3 aims to put the finishing touches to a robust platform to enable citizens' 'digital justice journey' in family patrimonial law, particularly asset division. Specifically, the project will:

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<sup>1</sup> OJ L 2023/2844, 27 December 2023.

- implement e-communication and e-signatures for user groups such as lawyers, judicial bodies, and individuals;
- facilitate court hearings, negotiation and mediation via videoconferencing, especially where cross-border complexities arise; and
- guarantee technological assistance for citizens who lack digital literacy or hardware access, thereby expanding the project's inclusivity.

By the end of CREA3, we expect to have tested and validated these AI- and video-assisted services in six different Member States, delivering a harmonised but flexible platform that accommodates each jurisdiction's idiosyncrasies. The user-friendly interface, integrated chatbot and advanced algorithms will be made interoperable, with knowledge-sharing planned for all participating jurisdictions.

The Brussels conference both concluded the CREA2 journey and launched CREA3. Discussions left us with cautious optimism: while these technologies have yielded promising results, they cannot advance without robust procedural guarantees, thorough comparative research, and persistent collaboration among legal scholars, developers and policymakers. CREA2 proved how AI-driven methods can revolutionise asset division and the management of negotiating cross-border agreements. CREA3 will be the capstone, showing how a broader range of family law disputes – and, indeed, justice more generally – can be migrated online responsibly and equitably.

### **3. Justice by Design: Embedding Human Values in AI-Powered Legal Processes**

Each of the five papers in this Special Issue, as well as the ongoing expansions under CREA3, converge upon a central lesson: modern technology can transform access to justice and legal certainty across Europe if – and only if – we remain faithful to due process, privacy protections and the principle of human oversight.

In our view, the integration of generative AI into dispute resolution can unlock new levels of efficiency and user-friendliness, especially when coupled with robust data protection measures. This perspective reflects a broader shift in AI-driven private dispute resolution, whereby tools like machine learning and natural language processing (NLP) have evolved beyond automating repetitive tasks to enabling genuinely transformative approaches to negotiation and even arbitration.

As highlighted throughout this Special Issue, generative AI can reduce the cost burden and allow legal professionals to concentrate on complex, strategic or highly nuanced parts of a case. Indeed, advanced language models, capable of digesting significant volumes of textual information, can sift through precedents, identify recurring patterns, and propose potential solutions more quickly than humanly possible. However, only a hybrid model can ensure legitimacy – one in which technology augments, rather than replaces, legal practice.

Nonetheless, we must be transparent about the risks. Generative AI systems are still prone to ‘hallucinations’ – the presentation of plausible but incorrect statements. The illusions of machine intelligence have been well documented throughout history, from the Eliza chatbot<sup>2</sup> to current LLMs. These risks, well acknowledged at the CREA2 conference, reinforce the importance of professional supervision, training and explainability protocols. We believe we can ensure trust and adoption by educating legal practitioners, training them to recognise these shortcomings, and establishing high standards of algorithmic transparency.

Crucially, as we scale these platforms in family law settings and cross-border disputes, we must not lose sight of fundamental justice values: fairness in outcomes; transparency and predictability in legal procedures; meaningful user participation; and the preservation of each participant’s dignity. These are not ancillary concerns; they constitute the normative core of what is increasingly referred to as ‘access to justice by design’,<sup>3</sup> a principled commitment to embedding ethical safeguards and procedural protections at every stage of the system’s technological architecture in order to enhance fairness, transparency and user empowerment across diverse legal contexts. This focus on designing for accessibility and equity in justice systems emerged as a consistent theme throughout the conference discussions, and it continues to serve as a central compass for ongoing and future developments in this field.

Indeed, the ‘Kasparov’s law’ principle,<sup>4</sup> which highlights the synergy between human insight and computational precision, reminds us that optimal results arise from a collaboration in which each party’s strengths augment the other. This hybrid model, we believe, should be integrated into any generative AI-based dispute resolution framework: the technology flags patterns, analyses large datasets and generates an array of potential paths forward, while human professionals validate, refine and adapt these strategies to the specificities and sensitivities of each case. Without this mechanism of partnership and mutual reinforcement, advanced algorithms risk becoming opaque instruments detached from the ethical, empathetic and context-sensitive imperatives of justice.

Of equal importance is the question of responsible governance – at both the procedural and regulatory levels. As indicated by ongoing developments in the EU

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<sup>2</sup> Joseph Weizenbaum, ‘ELIZA—a Computer Program for the Study of Natural Language Communication between Man and Machine’ (1966) 9(1) *Communications of the ACM* 36; Joseph Weizenbaum, ‘Contextual Understanding by Computers’ (1967) 10(8) *Communications of the ACM* 474.

<sup>3</sup> Margaret D Hagan, ‘A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly’ (2018) 6(2) *Indiana Journal of Law and Social Equality* art 2; Ayelet Sela, ‘Diversity by Design: Improving Access to Justice in Online Courts with Adaptive Court Interfaces’ (2021) 15 *The Law & Ethics of Human Rights* 125.

<sup>4</sup> Garry Kasparov, *Deep Thinking: Where Machine Intelligence Ends and Human Creativity Begins* (PublicAffairs, 2017).

and by emergent ethical charters worldwide, generative AI in law must be deployed according to consistent standards that protect user data and ensure confidentiality. Family and patrimonial disputes intensify these concerns due to the sensitive nature of the data and matter at hand. These concerns were repeatedly discussed at the CREA2 conference, particularly in relation to encryption, anonymisation and robust data-handling protocols. In our opinion, these measures are not mere technicalities, but cornerstones that ensure digital platforms do not compromise the very people they were meant to serve.

Looking forward, we foresee two pressing areas of development. First, the field needs continuous empirical studies on user trust in AI-led solutions, given that acceptance and perceived legitimacy are as decisive as algorithmic accuracy. Second, we see an urgent need for interdisciplinary education – lawyers, mediators, notaries, and technical developers must cross-train and collaborate, adopting a legal design approach to co-create systems that centre user needs, legal fairness and procedural adaptability from the outset. These teams must jointly design digital procedures that embed fairness-by-design and provide meaningful pathways for appeal or revision when algorithmic suggestions or outcomes appear questionable.

Ultimately, the success of digitalising our courts and employing generative AI in private dispute resolution hinges on how well we accommodate human values within such systems. If we ensure that AI not only accelerates processes but also upholds fundamental legal principles, we can set a precedent that resonates far beyond family law disputes. Our conviction is that this rebalancing, in synergy with human supervision, including ethical oversight, can uplift entire segments of the legal landscape – empowering citizens, reducing costs and making justice more accessible to all.

From virtual property conflicts to digital family status recognition and AI-based family dispute resolution, our collective challenge is to build a future where justice is not just faster, but fairer, more secure and more widely accessible to all.

## **Acknowledgments**

This special section was made possible by funding from the European Union (under CREA2 Project, Grant Agreement no. 101046629). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.