# Rebuilding 'ethics' to govern AI:

How to re-set the boundaries for the legal sector?

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### **ABSTRACT**

Artificial intelligence (AI) has been transforming the legal sector and profession given every day enhancing AI-driven legal tech tools. Considering the far-reaching ethical implications of such tools and the disparate functionalities of 'AI ethics' and 'legal ethics', this paper puts into question the interplay between these ethical domains and their underlying rules. After fleshing out the governance of ethics under each domain, e.g. respectively professional conduct rules and self-regulatory principles, and signposting the unresolved ethical challenges of status quo, e.g. particularly concerning cross-domain issues, the paper discusses how they need to interact, based on the three policy options: 'revision of the conduct rules', 'individual (company level) collaboration' and 'higher-level collaboration'. It is concluded that 'higher-level collaboration' between the stakeholders is found to be the most sustainable and long-term option given the need to mitigate the ethical challenges concerning the legal sector from a holistic point of view.

#### CCS CONCEPTS

• Social and professional topics  $\to$  Professional topics; • Applied computing  $\to$  Law, social and behavioral sciences

# **KEYWORDS**

AI ethics, Legal ethics, transparency, fairness, accountability

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# 1 Introduction

Artificial Intelligence (AI) is used with an expanding scale and scope in the legal sector where professionals rely on legal tech tools for various purposes such as e-discovery, contract review, due diligence, case analysis and case outcome prediction. These tasks render AI increasingly critical for the *ethical* provision of legal services. This paper puts into scrutiny the ethical boundaries of AI-driven legal profession given the inherent risks and challenges within and across the domains of 'AI ethics' and 'legal ethics' looking into the extent to which domain-specific and cross-domain issues can be resolved under *status quo*.

Literature mostly discuss and elaborate on use of AI in the legal sector by revisiting the professional conduct rules and ethical responsibilities. They focus on the extent to which such conduct rules can respond to the ethical challenges when using AI tools [10][15][16][27] and what (additional) steps need to be taken for an ethical use [4][10][16][25]. Whereas few scholars point out the need for amendment of conduct rules [15][16] no research has been conducted to investigate ethical challenges arising from 'AI ethics' and 'legal ethics' and their implementation from a holistic viewpoint. Marking a distinction to the literature, this paper makes a broader investigation of ethical challenges, taking AI-driven legal tech from the design stage to their use by lawyers. It is aimed ethical domains, discourses and actors be overviewed, to shed light on holistic governance of ethical challenges. In this regard, ethical principles applied during design, development and deployment of AI ('AI ethics') and professional conduct rules that apply to use of AI by lawyers ('legal ethics') are explored, seeking to uncover the ethical challenges and discuss policy options to cope with them.

Structurally, after framing the commonly used legal tech tools and the AI life cycle, this paper examines how 'AI ethics' and 'legal ethics' function within their respective domains. Based on examination of each domain, attention has been paid to the extent to which AI-related ethical challenges remain (un)resolved within and across these domains. By signposting potential discrepancies and loopholes particularly under *cross-domain* challenges, this paper takes the discussion as a matter of AI governance based on three policy options: (i) 'revision of the codes of conduct', (ii)

'individual (company level) collaboration' and (iii) 'higher-level collaboration'.

Based on these options, it is discussed how the interplay between 'AI ethics' and 'legal ethics' needs to be shaped out to better mitigate the ethical challenges, particularly cross-domain issues. It is found each policy option has distinct merits and does not mutually exclude one another. In conclusion, the option of 'higher-level collaboration' is found to be the most sustainable and long-term option given the need for a holistic governance of ethical challenges concerning legal sector.

# 2 AI in the legal sector

# 2.1 General overview of AI-driven legal tech

AI has a key impact on legal research and practice, mostly built on machine learning (ML) and natural language processing (NLP). Whereas NLP is used to analyse the search terms and provide results based on the queries, ML recognizes patterns out of the case categories, case structures and (ir)relevant text units based on occurrence frequencies of index terms and the use of indicator phrases. Because the results driven by ML and NLP are based on a broad set of data analytics, rather than just a Boolean search based on the terms entered, they are intended to be more precisely aligned to the information that the user was seeking to obtain. AI in the legal sector incorporates several enhanced ML and NLP tools, as illustrated below:

2.1.1 E-discovery. E-discovery tools such as Relativity, EverLaw and Logikcull can sift through documents and drive useful insights for professionals concerning investigations or proceedings. Such tools can identify, collect and produce electronically stored information, including but not limited to e-mails, audio and video files, legal documents, social media and websites. Such processes are often based on the standardised electronic document discovery model consisting of 9 stages: information governance, identification, preservation, collection, processing, review, analysis, production, and presentation [24].

2.1.2 Legal research. AI is making legal research better and faster by searching through large volumes of case law and statutes and finding relevant materials across the legal databases such as BAILII, providing user-tailored results. For instance, ROSS Intelligence, Casetext, Judicata, Lex Machina and RaveLaw use ML and NLP algorithms to analyse the search terms entered and returns highly relevant and evidence-based answers including new court decisions that can affect a case.

2.1.3 Document analysis. AI tools can classify and analyse legal documents including contracts and case files, to uncover the key issues and most relevant precedents, ending up with type of information relevant to the underlying task. For instance, eBrevia uses NLP and ML to extract relevant textual data from legal contracts and other documents to guide lawyers in analysis and due diligence [34]. Luminance, another AI tool, enhances the entire

transaction process for law firms and their clients by modelling how solicitors think to draw out key findings without the need to be told what to look for [41].

2.1.4 Case outcome prediction. Case outcome prediction is a recently growing area of legal tech for which both ML and NLP is often combined. For instance, Casetext allows lawyers to forecast an opposing counsel's arguments by finding opinions previously used by lawyers in similar cases [27]. Lex Machina spots trends in judge's rulings, identifies legal strategies of opposing counsel and notes winning arguments based on NLP features [22]. Another company called 'Premonition' predicts the winner of a case based upon statistical analysis of judgements in similar cases using the slogan of "We Know Which Lawyers, Win Which Cases, In Front of Which Judges." [22].

# 2.2 Ethical concerns and AI life cycle

Current AI tools used for legal research, document analysis, etc. are not able to mimic adverse cognitive processes such as logical reasoning, comprehension, metacognition, or contextual perception of abstract concepts that are essential to legal thinking [26]. Various ethical issues would arise from this very nature of AI, specifically in relation to the processes of model selection, training, testing and validation. Furthermore, how AI is used by the lawyers should be noted as a potential source of ethical concerns that can affect the provision of legal services.

This initial framework suggests ethical challenges are not only peculiar to professional day-to-day usage but also can emerge out of the design, development and deployment stages which are echoed with the term 'AI life cycle'. While the professional conduct rules ('legal ethics') demarcate the ethical boundaries for legal practice, ethical norms are already imposed during AI life cycle, as are coined with 'AI ethics'. For their inter-dependent nature, ethics actors involved in respective processes should, in the simplistic form, interact towards trustworthy and ethical AI.

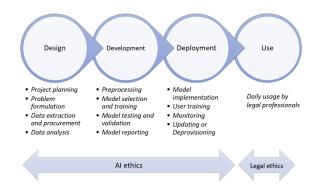


Figure 1: AI life cycle and lawyers' use of AI

AI life cycle, as illustrated in Figure 1, encompasses the stages of design, development and deployment [13] which are managed by the industry stakeholders such as AI developers and providers with little or no involvement of lawyers. Concerning the legal sector, all the AI stakeholders including lawyers have the role of 'ethics actors' charged with creation and/or implementation of the ethical rules and principles. This, given the 'inter-dependence' between ethical domains, needs to be factored in any review of the ethical boundaries for AI-driven legal tech.

Ethics actors should hence be taken as broad as one could consider within the meaning of AI life cycle and associated processes. For instance, IEEE develops standards and specifications, e.g. IEEE P7000 series, to advance transparency, accountability, and reduction in algorithmic bias in autonomous and intelligent systems aiming at ethically driven process models [19]. Not only the IEEE but also other SSOs, e.g. ISO and IEC, seek certification of AI systems based on their respective standards and processes [30]. Given the fact that such standards and processes eventually shape AI in the legal sector, ethics actors should comprise SSOs as well as AI developers, manufacturers, providers and users.

#### 3 Ethical domains and their boundaries

#### 3.1 AI Ethics

AI ethics emerges from the need to address the individual and societal harms AI systems might cause during and after the AI life cycle [9]. It refers to a set of values, principles, and techniques that employ widely accepted standards to guide moral conduct in the development and use of AI systems [9]. While ethical concerns come afloat in this context, the most characteristic and common ones include 'transparency', 'fairness' and 'accountability' as widely acknowledged in the policy documents [12][20][43][9]. While standards such as IEEE P7000 series entail broader issues incorporating privacy, safety and trust, these are of a more independent nature and are examined across various disciplines under which ethics is subordinated.

3.1.1 Transparency. ML systems are often opaque in the sense that lawyers and clients affected by them can hardly ever comprehend how or why inputs have been categorised and produced a certain output. This is echoed with the 'black box' problem, which makes it difficult to trace the ML/DL algorithms and their internal workings. On the other hand, transparency is key to leveraging ethical AI as having important ramifications for the legal sector.

One can argue the extent to which lawyers can rely on AI is closely related to making sure the systems are transparent. This relates to their professional responsibilities given the need for explainability of a course of action to the clients, and in view of potential bias and discrimination that would affect legal representation. However,

<sup>1</sup> For instance, to prevent bias and discrimination, it is suggested that four overlapping strategies must be in place, including: (i) controlled distortion of training data, (ii) integration of anti-discrimination criteria into classifier into the classifier algorithm, (iii) post-processing of classification models and (iv) modification of predictions and decisions [5].

professional conduct duties, e.g. duty of competence, duty of supervision, cannot find any sustainable solution regarding opacity which emerges as an issue of AI ethics. Given this, to eliminate unpredictable or unreliable consequences arising from opacity, ethics actors involved in AI ethics and legal ethics would have to work out appropriate and ideal solutions.

Whereas ethical boundaries as to AI use and reliance practically need to be set by lawyers who have the responsibility and liability vis-à-vis clients, their duty of care and other obligations would not suffice for the intended fully-fledged transparency. Their prowess and awareness do not create a sufficient level of competence to effectively evaluate, operate or measure the efficacy of algorithmic tools [23]. This fact makes intricacy and opacity of AI a key issue that needs revisiting from a holistic point of view.

3.1.2 Fairness. Fairness connotes that AI-driven decisions need to be unbiased and non-discriminatory. Bias is a dimension of the decision making itself, whereas discrimination describes the effects of a decision in terms of adverse disproportionate impact resulting from algorithmic decision making [4]. Features of fairness emerges as a priority from the 'design' stage and onwards representing a key aspect of 'AI ethics', for which a more design-level obligation can be implicated.<sup>1</sup>

On the other hand, fairness within the meaning of 'legal ethics' is concerned with the ethical challenges out of legal practice. Various circumstances would risk a lawyer's fairness when they involve in a business transaction, occupation or activity with a client that is likely precede over the client's interest, or acquire an ownership, a financial, possessory or security interest adverse to the client [21].<sup>2</sup> Lawyers are often not intrinsically interested in nor are they expected to be diligent to work out any potential bias and discrimination that are potentially caused by AI tools. Nor are they obliged to detect and report such issues until they recognise when using such tools having normal skills and behaviours expected of them as a technology user, e.g. on the face of any discrepancy or inconsistency against their past experience and know-how. This would raise questions on how fairness is (ought) to be re-construed in legal practice and to what extent lawyers need to interact with industry stakeholders to ensure bias and discrimination is not a concern with the AI tools they use.

3.1.3 Accountability. AI can be applied to make predictions about case outcomes, identify legal strategies of opposing counsels and find out the best possible route for a lawyer to follow in a particular case. By connecting computational models of legal reasoning directly with the past decisions and precedents, AI would generate arguments for and against certain legal settings and scenarios. All of these may affect the rights and obligations of those for whom AI-enabled results are applied. Given this, accountability can be

<sup>&</sup>lt;sup>2</sup> Under ABA's Model Rules, 'fairness' has a more distinctive meaning being referred to concerning the attitude to the opposing party as regards the evidence to be provided or accessed before the court [2].

deemed as a pre-requisite to develop and use AI for the legal services. A holistic perspective calls into question accountability concerning AI tools not only when it comes to legal practice but also design and development of AI.

To ensure accountability, decisions should be (i) derivable from, and explained by, the decision-making mechanisms used and (ii) be in harmony with the moral values and societal norms that inform the purpose of the AI system as well as its operation [44].

From this point of view, AI tools need to be checked out with respect to whether they respond to the ethical, moral and legal norms that are widely acknowledged and whether any guidance is derivable in AI-driven contexts. This embodies revisiting of the system and software developers' reasoning behind their decisions, to which all the stages of AI life cycle can be attributed. In fact, some ethical issues are related to whether a lawyer should rely on AI in legal work and representation, yet many of them relate to model selection, training, testing and/or validation stages. Overall, inter-dependence across these stages demonstrates the need for a holistic governance of accountability in relation to AI.

# 3.2 Legal ethics

Lawyers' conduct duties mostly comprise their ethical responsibilities as well. Conduct rules are established by a bar association, law society or court setting forth rules respecting matters such as competent representation, keeping client confidences, refraining from representing clients with conflicting interests, charging reasonable fees, not introducing false evidence at trial, and not communication with the opposing party outside of the presence of her lawyer [45]. Crucially, such rules including ethical responsibilities are often mandated by particular laws.<sup>3</sup> This makes lawyers' codes of conduct as the backbone of 'legal ethics' for the purpose of this study and would lead any debate over AI usage in legal practice. Given this, lawyers are priorly subject to 'legal ethics' than they are subject to any other ethical rules, and in the case of conflict, the former prevails.

Lawyers' professional conduct rules focus on integrity of the existing legal system rather than AI design and development. Whether issued by a regulator such as the Solicitor Regulation Authority (SRA) setting out the Codes of Conduct in the United Kingdom (UK) [38] or by a bar association such as the American Bar Association (ABA) adopting the Model Rules in the USA [1] or by a law society such as Law Council of Australia issuing the Solicitors' Conduct Rules (SCR) in Australia [28], conduct rules respond to the ethical issues incorporating technology related matters. They essentially mean professional duties assumed by lawyers including but not limited to 'duty of competence' 'duty to act in the best interests of the client', 'duty of confidentiality',

<sup>3</sup> For instance, in the UK, there are two codes of conduct adopted by SRA: SRA Code of Conduct for Solicitors, RELs and RFLs, and SRA Code of Conduct for Firms. These came into effect on 25 November 2019 under sections 31 and 32 of the Solicitors Act 1974, section 89 of the Courts and Legal Services Act 1990 and section 57(2) and (8) of the Legal Aid, Sentencing and Punishment of Offenders Act 2012. Likewise, in South Africa, the Code of Conduct for Legal Practitioners, Candidate Legal

'reasonable fee', 'independence' 'integrity' and 'fairness to the opposing party' and 'duty of supervision'. As such, these duties are invoked to cope with the ethical concerns in relation to AI tools and how to use them for legal services.

Using AI tools on a daily basis requires certain capabilities and skills to accommodate a client's needs and decide whether or to what extent AI should be relied upon. This primarily relates to the 'duty of competence' which lies at the heart of lawyers' responsibilities, as established by the US ABA Model Rules [1], the Singapore Legal Profession Rules [36], the Canadian Model Code of Professional Conduct [7] and the European CCBE's Model Code of Conduct [8] to name a few. As per the modified (2012) version of ABA Model Rules, a lawyer should maintain the requisite knowledge and skill and "keep abreast of changes in the law and its practice, *including the benefits and risks associated with relevant technology*."[1]. <sup>4</sup> Likewise, according to the codes of conduct in Singapore and Canada, a legal practitioner must have the requisite knowledge, skill and attributes to provide competent advice and representation to his or her client [36][7].

AI-related responsibilities of lawyers can originate from other conduct duties. For example, ABA Model Rule 1.6 (Confidentiality) requires lawyers to "make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client". While enforceable regardless of AI use or reliance, this rule can create a conflict of interests considering AI is usually trained on vast datasets and can process the clients' confidential information. Needless to say, in such instances, privacy policies would be at stake in particular when AI compromises personal data with no clear justification. Absent consent or compelling reason, "legitimate interest" enshrined under Article 6 (1)(f) of the GDPR is always controversial as a legal basis for processing [32].

Likewise, ABA's Model Rules 1.4(b) (Communications) or 1.5 (Fees) are triggered when a lawyer explains how AI-enabled software may affect client representation or fees [23]. In fact, using AI may cause reduced wholesale costs as often results in less recruitment of lawyers, and in such a case there is a need for adjusting the fees and communication of the details to the client. Last but not least, informing the court and opposing counsel of completeness of e-discovery and outputs of other AI tools implicates Rules 3.3 (Candor to the Tribunal) and 3.4 (Fairness to Opposing Party & Counsel) [23]. Not only in such instances but also in wider scenarios of AI use and reliance, lawyers would have to reach out to inner workings of AI, which however can be hardly uncovered for the opaque ML and DL algorithms.

Practitioners and Juristic Entities was mandated under the Section 97(1)(b) of the Legal Practice Act 28 of 2014.

<sup>&</sup>lt;sup>4</sup> ABA Model Rules of Professional Conduct, Rule 1.1. To clarify its standpoint, the ABA has adopted a resolution in 2019 highlighting the needs and expectations concerning AI [3].

Drawing attention of the lawyers to wider ethical issues, the CCBE, by referring to the European Ethical Charter on the Use of AI in Judicial Systems developed by the CEPEJ [17], stresses the importance of verifying and checking the outputs of ML algorithms, particularly to ensure that the quality of the information and check for potential bias in algorithms, and recommends obtaining professional training in this field and to actively be involved in the design of AI tools [11]. While CCBE's recommendations stretch the outer boundaries of 'legal ethics' in relation to AI, the inner boundaries or state-of-affairs fall limited with the professional responsibilities focused on *risks and benefits of using AI*. In other words, conduct rules predominantly conceive legal professionals as users rather than implementors of AI as a technological means used for legal services.

# 4 Status quo regarding ethical domains and their boundaries

# 4.1 Interplay between AI ethics and legal ethics

As demonstrated above, 'AI ethics' and 'legal ethics' signify disparate regulatory landscapes comprising of different rules of applied ethics. This does not mean different moral values or norms; rather, it denotes how ethics is applied differently during AI life cycle and when AI is used by lawyers. Although this reflects the practical implications of ethics in distinct domains, some ethical risks are inherent in such domains which can be categorised as domain specific challenges. Furthermore, lack of interfaces between AI ethics and legal ethics can potentially cause crossdomain challenges that can threaten both domains and broadly speaking, sustainability and trust in AI-driven legal tech.

While domain specific challenges, e.g. regarding data governance, choices of model and/or variables, are rather well-known, cross-domain challenges originate from the insufficient or lacking interfaces between these domains. Absent interfaces do often mean lack of *inter-operation* between these ethical domains although they might intersect as demonstrated in Figure 2.



Figure 2: Interplay between 'AI ethics' and 'legal ethics'

Under *status quo*, three factual points can be implicated from their interplay. Firstly, they both respond to the ethical concerns which are inter-dependent. Secondly, they operate based on their

distinctive sets of rules which are determined following separate procedures and by different actors. Thirdly, given the nature and functionalities of such domains, such actors do not interact with each other to fulfil their roles and duties. Finally, although there exist some points of intersection between such domains, actors' behaviours often result in lack of interfaces between the two domains. Overall, ethical challenges might arise from 'AI ethics' and 'legal ethics' and their implementation with no interface(s).

# 4.2 Revisiting the ethical challenges

4.2.1 AI ethics (domain) specific challenges. These mean challenges taking place during AI life cycle being faced by the relevant stakeholders, e.g. AI developers, manufacturers and providers. Such stakeholders are subject to voluntarily run standards and soft law measures which are neither binding nor reinforced with oversight and enforcement mechanisms. As a result, the way such stakeholders implement governing principles, e.g. transparency, fairness and accountability, would pose loopholes or discrepancies against the holistic understanding of ethics. Within the domain of AI ethics, various challenges can in fact arise from diverse standards and numerous implementations. Such challenges are concerned with the stages of AI life cycle, e.g. for the chosen model or quality of training data, and could affect fairness, transparency, accountability and overall sustainability of AI driven legal tech. While soft law drives governance of such challenges under AI ethics, EU's Proposed AI Act [12] illustrates a hard law example that can have a significant impact on AI ethics and how domain-specific challenges can be resolved thereby.

4.2.2 Legal ethics (domain) specific challenges. These would mean or arise from the practical challenges related to the legal profession, e.g. regarding the circumstances under which a lawyer's duty to act in the best interest of clients is prevailed by their duty to uphold public trust and confidence. Challenges for using AI in legal practice are largely resolved via implementation of conduct rules. Such rules, being built upon hard law measures and reinforced with binding oversight and enforcement mechanisms, e.g. disciplinary panels and rulings, would minimise the loopholes and discrepancies in legal ethics. However, decisions made by the courts or disciplinary panels are limited to the boundaries of conduct rules and do not delve into AI ethics. While the challenges in the domain of legal ethics do not usually remain unresolved, one cannot extend this to the cross-domain issues from a holistic viewpoint.

4.2.3 Cross-domain challenges. Against the above background, ethical challenges that remain unresolved should be sought within the cross-domain issues rather than domain-specific ones. Given the binding solutions in legal ethics and the fact that rulings ensure a unity, a significant degree of converge can exist concerning legal ethics (domain) specific solutions. By contrast, AI ethics is an emerging area whereby a great many actors are actively involved and make an effort to search and find out effective solutions to cope with ethical issues, ending up disunified and even divergent solutions. Broadly speaking, this can be welcomed from the

viewpoint of finding out the best practice(s) within this domain. Nevertheless, implications of this towards legal ethics should not be overlooked as they can affect legal profession unpredictably. By the same token, implications of legal ethics towards AI ethics need to be considered, as trustworthy and ethical AI lies at the capability of AI-driven legal tech to provide cross-domain as well as domain specific solutions.

Cross-domain challenges across AI ethics and legal ethics involve the issues that require holistic solutions for they can be resolved differently in each domain posing a risk towards trustworthiness and ethical nature of AI. For instance, clients' data would be treated differently under AI ethics than under legal ethics. The former would take it as an issue to be resolved under data protection and copyright law [35] and permit training of AI based on clients' data were necessary precautions e.g. consent obtained for this. Furthermore, transparency of model details would be mandated under limited circumstances, e.g. when using biometric identification system [46], for which AI ethics would need to adapt. On the other hand, lawyers' duty of confidentiality requires them to protect their clients' information from disclosure to third parties, unless otherwise required by law or court decision. This duty applies to all information about client's personal and business affairs irrespective of the source of the information [39].

A similar conflict can be mentioned when it comes to 'fairness' which emerges as an issue of both AI ethics and legal ethics. Under the former, diverse opinions exist on fairness such as concerning whether to use demographic categories as a way to measure bias, or whether to focus more on the fairness of outcomes or the process [33]. Should outcome-based approach be followed predominantly, this can contradict the way how fairness is treated under the latter (legal ethics), e.g. mandating disclosure of relevant evidence to the opposing party under certain circumstances, regardless of the outcome. Conversely, AI ethics would defend an outcome based on a well-trained AI, e.g. through diverse and representative data from relevant sources, to provide equitable and unbiased solutions.<sup>5</sup>

Last but not least, accountability can be taken quite differently under AI ethics and legal ethics. Under the former is not a certain rule as to accountability in relation to AI-driven decisions and their consequences, whereas lawyers take full responsibility in the provision of legal services under the latter. In fact, lawyers' ethical responsibilities are clearly drawn under the conduct rules, leaving no controversy concerning the circumstances under which a lawyer assumes accountability in the case of any harm or unethical situation. Clear lines of responsibility or accountability cannot yet be mentioned within the boundaries of AI ethics where diverse actors are involved. This gap can turn into a conflict not only for the 'many hands' problem but also given the likely consequences

<sup>5</sup> AI models trained on proportionately selected data may result in more accuracy, e.g. when a AI-based healthcare treatment actually works better for one gender or race than another, yet consequences of this training would conflict with any expectation of equitable and fair outcome. In case combined accuracy rate that is low or when the

of diverse solutions as they can interfere with the legal ethics resulting in potential distrust against AI-driven legal tech [18].

Against this background, governance of cross-domain challenges has yet to be handled from a holistic viewpoint. If domain-specific ethical rules continue to work with no or little interface as currently, achievement of the intended outcomes from each ethical domain cannot be secured fully. Furthermore, creation of trustworthy and ethical AI concerning legal sector can be risked overall. Absent no overarching principles to govern both domains, the need for holistic governance particularly regarding cross-domain challenges cuts across the need to make the two ethical domains inter-operate via well-functioning interfaces.

# 5 Re-building the boundaries: How to make the ethical domains inter-operate?

As far as AI-driven legal tech is concerned, ethics has different dimensions, comprising of domain specific challenges and cross-domain challenges. To respond both, a holistic viewpoint is crucial especially in coping with cross-domain challenges that can otherwise threaten trust in AI tools. Having said that, inter-operation between AI ethics and legal ethics via good interfaces appears to be the key issue that needs to be ensured for a sustainable solution. To enable well-functioning interfaces through which these domains can inter-operate, three policy routes are discussed below. While the first two policy routes reflect so-far implemented policies and business models, the third one is configured on top of the first two, taking the inter-operation to an upper level.

# 5.1 Policy options

5.1.1 Revision of the conduct rules. Professional codes of conduct or conduct rules represent the authoritative rules lawyers must fulfil to ethically carry out legal services and representation on behalf of their clients. Making the necessary amendments over these rules thus can be regarded as the first and foremost step to be taken by the regulators or equivalent bodies, e.g. law societies, bar associations, that oversee implementation of ethical responsibilities in the legal sector. Since this policy option requires updating the conduct rules and principles, this option can be run within the boundaries of legal ethics with no involvement of the actors from AI ethics.

Such a policy option is rationalised by the fact that lawyers are charged to provide legal services ethically, regardless of any technological means used. This standpoint regards AI as an emerging technology and considers any ethical issue to be resolvable within the domain of 'legal ethics'. Considering implications of technology if not specifically AI, many regulators, law societies and bar associations made light-touch amendments in their conduct rules.<sup>6</sup> Such type of amendments taking place in the

protected data is not collected or not considered by the algorithm, this can mask the situation and result in a fair outcome overall.

<sup>&</sup>lt;sup>6</sup> See ABA Model Rules of Professional Conduct (as amended 2012) Rule 1.1, Rule 5.3.; Canadian Model Code of Professional Conduct, 4A Commentary (as amended 2019), 16-17.

US and Canada demonstrate that this first policy route is followed in these countries. This option can however be criticized for not taking the industry stakeholders on board, and given its implications are limited to 'using' AI in legal practice.

Overall, lawyers' widely formulated professional conduct duties and ethical responsibilities are contrasted to their limited role in the AI life cycle during which legal tech tools are designed and developed. Stakeholders taking part during this life cycle have the greatest impact in this value-laden process, 7 even though their ethical responsibilities are not mandated by law and no binding rules exist in AI ethics. 8 In sum, without their involvement, ethical challenges would not be fully or effectively resolved by solely revising the conduct rules. Therefore, this policy option does not dissipate the ethical concerns, particularly those regarding cross-domain issues, from a holistic viewpoint.

5.1.2 Individual (company level) collaboration. Given the fact that 'AI ethics' cannot be isolated from but needs to be considered together with 'legal ethics', representatives of both domains should ideally contact and collaborate with a view to find out appropriate solutions regarding AI-driven legal tech. In this policy option, while industry stakeholders including developers, manufacturers and providers, e.g. legal tech companies, continue to lead the creation and implementation of AI tools, they collaborate with lawyers to better meet their needs. Usually, lawyers seek collaboration with AI developers and providers to maximise use of AI to automatise their contract review and analytics, due diligence, and legal research, to create customized legal applications for their clients and to obtain case outcome prediction when informed decisions are needed.

A great many examples involve partnership between legal tech companies and global law firms in that usually the former develops a particular AI software for the partnering law firm [6][29][42]. Other examples mean partnerships with early-stage startups that do not necessarily involve a "minimal viable product" and are supported by law firms via incubators, accelerators and/or funding [35]. This can involve assistance or know-how transfer from law firms to such companies for various reasons such as data labelling. For instance, Slaughter and May Collaborate helps entrepreneurs to develop, test and expand legal tech products in collaboration with their in-house lawyers [37]. Besides, many individual collaborations take place with the universities through which law firms benefit from their technical capacity and expertise, to develop various AI systems, e.g. from rules-based decision support system to intelligent data-driven fraud prevention and detection service to support insurance claim handling [41][35].

Collaboration between AI developers/providers and lawyers may commence with how to ameliorate AI use by the latter and proceed with sophisticated AI design and development, taking the form of

<sup>7</sup> Regarding the ethical values that needed to be embedded into AI, see [15].

either 'legal operations' or 'legal technology' business models. While legal operations can bring integrated digital solutions and lower costs as an added value, legal technology solutions provide value creation based on product sales (licensing) or usage (so-called "software as a service") [35]. In each scenario, AI developers/providers would acquire the lawyers' data and their feedback as users, not usually involving them as an actor within the process of design and development. Nevertheless, lawyers' feedback would enable AI developers/providers to improve their tools and services to render a more effective and responsive tool.

Under this policy route, lawyers therefore stay within the domain of 'legal ethics' as users of AI tools following the technical guidelines and instructions given by providers. They stand to assume responsibility against the ethical risks for legal work, without taking an active part in the AI life cycle. Given the feedback channels enabled between the parties during and after AI life cycle, one can argue ethical challenges including cross-domain issues can be effectively dealt with under these collaborations. Notwithstanding, individual collaborations would provide such benefits only to the partners and to the extent the subject-matter of the partnership is limited.

5.1.3 Higher level collaboration. To respond the limitations posed by the first two policy options, lawyers would rather opt higher level collaboration with industry stakeholders including SSOs, pursuing a long-term vision. A holistic approach requires 'AI ethics' and 'legal ethics' to inter-operate and given this need, ethics actors representing both should consider taking a more sustainable and forward-looking initiative aiming at collaboration across the domains.

To that end, all AI stakeholders would pursue a higher-level collaboration expanding or enriching their individual feedback channels and calling upon all ethics actors to discuss in-depth issues of AI life cycle incorporating data quality and governance, design choices and configuration, standards setting for legal tech products, user training and business models between the parties. This collaboration can effectively be led by regulators such as SRA or equivalent bodies, e.g. law societies or bar associations. Actors representing AI ethics would follow the principles of SSOs e.g. IEEE P7000 series which would mitigate the ethical risks on their part. However, in such a higher-level collaboration, stakeholders would consider developing new principles or memorandum of understanding concerning the issues that can otherwise create discrepancy or loophole as mentioned above.

A well-designed higher-level collaboration would enable all ethics actors to share and disseminate best practices, flag up wider issues of AI-driven business models not limited to ethical concerns, and discuss potential threats that can undermine ethical AI from a

<sup>&</sup>lt;sup>8</sup> Remarkably, AI ethics is governed by soft law, whether via self-regulatory mechanisms by corporate bodies or sets of principles adopted by other governmental or non-governmental agencies. By 13 April 2022, it has been identified that over 90

organisations attempted to define ethical AI principles, including governments, multilateral organisations, non-governmental organisations and companies [31].

<sup>9</sup> Regarding an example demonstrating such a collaboration led by IEEE see [40].

holistic perspective. Such a holistic approach would better cope with ethical concerns concerning the legal sector, going beyond the challenges that would be faced by individual partners (at company level collaboration).

In effect, this policy option would mean broader insights for the stakeholders towards re-designing or re-developing their AI models. They can benefit from the best practice dissemination, where necessary by altering their models' variables and/or configuration, find better ways to compromise the business expectations with ethical requirements and mastermind alternative means of (individual) collaborations or business models. This would both enhance ongoing collaborations and enable new ones, and encourage new entrants and start-ups towards the AI-driven legal tech. By then, lawyers can be considered to be 'implementors' as well as users of AI, being an active member of such collaborative agenda that can eventually shape out creation and implementation of AI-driven legal tech.

#### 6 Discussion

Not excluding one another, three policy options examined above can be of guidance to better understand and mitigate the ethical challenges that would affect the legal profession from a holistic viewpoint. Notably, such policy options indicate the routes for AI ethics and legal ethics to inter-operate. In each of these routes, collaboration takes place at different levels, whereby varying interfaces are enabled expanding from the first option to the third one. As demonstrated in Table 1, while one option does not preclude opting any other, adding on new interfaces along these options would create newer routes of inter-operation and broader collaboration.

Policy options	Ethics rules and boundaries	Collaboration	Ethical challenges
Revision of the codes of conduct	Legal ethics undergo revision whereas status quo is kept regarding AI ethics, resulting in (domain-specific) change limited to the legal ethics and its boundaries	Consultation on an occasional basis ('passive collaboration') — usually directed from legal sector to the AI industry and stakeholders, involving no interoperation between ethical domains and actors	Legal ethics (domain) specific issues are dealt with via revision, whereas AI ethics (domain) specific issues and cross- domain challenges are mostly left unresolved
Individual (company level) collaboration	New ethical boundaries can be explored based on the interaction between the ethics actors yet would be limited to the partners involved	Passive collaboration, e.g. via performance metrics, feedback channels, as well as active collaboration, e.g. via sharing clients data, are embraced, thereof potential new ways of interoperation	Both domain- specific issues (regarding AI ethics and legal ethics) and cross- domain issues are dealt with, yet being limited to the partners and their particular issues or concerns
Higher level collaboration	New ethical boundaries are expected to be created on a sector-wide level, having the effect to shape out and re-orient both AI ethics and legal ethics	P2P collaboration on a regular basis involving industry stakeholders, e.g. SSOs, legal tech companies, as well as lawyers and universities, along with widened inter- operation between ethical domains and actors	Both domain- specific issues (regarding AI ethics and legal ethics) and cross- domain issues are dealt with on a wider scale, enabling all the stakeholders to raise, discuss and resolve actual or potential concerns

Table 1: Policy options to enhance interaction between 'AI ethics' and 'legal ethics'

In the first policy option, only the actors of legal ethics take action, with a view to revising their codes of conduct to respond to AI-related challenges, whereas industry stakeholders such as AI developers and providers stand as passive actors, e.g. opining in any public consultation. That's to say, AI ethics would have no or limited inter-operation with legal ethics following this policy option. Accordingly, ethical issues concerning the legal sector, in particular cross-domain challenges are mostly left unresolved under this policy option.

In the second option, AI ethics and legal ethics inter-operate at the company level. For less than a decade, this policy route represents an avenue through which increasing number of law firms seek ways of collaboration with different partners, e.g. legal tech companies

or universities. Despite its clear benefits, such collaborative mechanisms respond to the company level issues and concerns faced by the partners, e.g. towards specific legal operation or technology solutions, and would thus fall limited against the need for holistic governance of the ethical challenges.

In the third option, all the stakeholders representing the domains of AI ethics and legal ethics would collaborate. This means all the ethics actors could raise, discuss and resolve actual or potential concerns regarding the legal sector. Such a multi-actor environment would enable elaboration of wide-ranging solutions and strategies, which can turn into a holistic guidance on how to design, develop, deploy and use AI-driven legal tech. By then, not only would the leading principles of AI ethics, e.g. 'transparency', 'fairness' and 'accountability', be revisited but also lawyers' professional conduct duties can be amended from a holistic point of view. This option can trigger new business models as well as disseminate best practices alongside (individual) collaborations. Overall, higher-level collaboration would respond best to the need for holistic governance of the ethical challenges that are driven by ever far increasing AI adoption in the legal sector.

#### 7 Conclusion

As the legal sector undergoes a transformation driven by AI, how to respond to the ethical challenges arising from AI-driven legal tech emerges as a key policy question. As highlighted by this paper, lack of sufficient interfaces between the domains of 'AI ethics' and 'legal ethics' makes it difficult to resolve such challenges incorporating domain-specific and cross-domain issues. Overall, tackling ethical concerns arising from AI-driven legal tech requires a holistic governance by the stakeholders, specifically the actors representing AI ethics and legal ethics. This entails inter-operation between these ethical domains and actors as a key policy tool, for which this paper examines three leading options: (i) revision of lawyers' codes of conduct, (ii) individual (company level) collaboration and (iii) higher-level collaboration.

These policy options, as examined in the paper, mean alternative routes that can be followed by the ethics actors to unlock ethical AI concerning the legal sector and profession. While the first two policy options enable collaboration, whether passively or actively, inter-operation between the domains and actors cannot be mentioned in the first one, namely the revision of conduct rules by lawyers. Although individual collaborations enable inter-operation between the ethical domains, this fall limited to the partners, reducing the potential benefits and likelihood of this option to cope with ethical challenges holistically. In contrast to these, the third policy option, namely higher-level collaboration can broaden potential benefits to all the stakeholders and users of AI-driven legal tech. Not only for this but also given its potential for holistic governance of the ethical challenges, higher-level collaboration emerges as the most sustainable and long-term policy option.

To realise higher-level collaboration along with the intended benefits, this paper suggests it needs to be led by the regulatory bodies such as SRA. Given the very aim of collaboration(s) concerning legal sector and profession, lawyers' voices need to be heard at the widest level particularly given the AI-ushering era of legal tech. To ensure that wide-ranging ethical challenges are brought out and factored into this holistic governance, SRA type institutions need to have a leading role. By then, not only ethical issues but also other AI-related challenges can be discussed in this medium, whereby potential solutions could be elaborated and found out for a better future of legal tech.

#### REFERENCES

- American Bar Association (ABA). 2019. Model Rules of Professional Conduct https://www.americanbar.org/groups/professional responsibility/publicat
- ions/model\_rules\_of\_professional\_conduct/.

  [2] ABA. 2019. ABA Model Rules of Professional Conduct 'Rule 3.4:
  Fairness to Opposing Party & Counsel'.

  https://www.americanbar.org/groups/professional\_responsibility/publicat
  ions/model\_rules\_of\_professional\_conduct/rule\_3\_4\_fairness\_to\_opposi
  ng\_party\_counsel/.
- [3] ABA. 2019. ABA Resolution 112. https://www.americanbar.org/content/dam/aba/directories/policy/annual-2019/112-annual-2019.pdf.
- [4] Anthony E. Davis, 2020. The Future of Law Firms (and Lawyers) in the Age of Artificial Intelligence. The Professional Lawyer, 27(1). https://www.americanbar.org/groups/professional\_responsibility/publicat ions/professional\_lawyer/27/1/.
- [5] B. D. Mittelstadt et al, 2016. The ethics of algorithms: Mapping the debate Big Data & Society, 1 (July-December 2016).
- [6] Baker McKenzie. 2021. Baker McKenzie Scales Up AI Transformation by Moving to Next Stage of Collaboration with SparkBeyond (24 May 2021)
  - https://www.bakermckenzie.com/en/newsroom/2021/05/sparkbeyond-next-phase.
- [7] Canadian Model Code of Professional Conduct (as amended October 19, 2019). https://flsc-s3-storage-pub.s3.ca-central-1.amazonaws.com/Model-Code-October-2019.pdf.
- [8] CCBE. 2021. Model Code of Conduct for European Lawyers. https://www.ccbe.eu/fileadmin/speciality\_distribution/public/documents/ DEONTOLOGY/DEON CoC/EN DEONTO 2021 Model Code.pdf.
- [9] Central Digital & Data Office and Office for Artificial Intelligence. 2019. Guidance: Understanding artificial intelligence ethics and safety ('UK Guidance 2019') (June 2019). https://www.gov.uk/guidance/understanding-artificial-intelligence-ethics-and-safety.
- [10] Chen Meng Lam, 2020. Impact of Artificial Intelligence on the Professional Responsibilities of Lawyers. Singapore Law Review 37, 43-60
- [11] Council of Bars and Law Societies of Europe (CCBE). 2020.

  Considerations on the Legal Aspects of Artificial Intelligence. https://www.ccbe.eu/fileadmin/speciality\_distribution/public/documents/
  IT\_LAW/ITL\_Guides\_recommendations/EN\_ITL\_20200220\_CCBE-considerations-on-the-Legal-Aspects-of-AI.pdf.
- [12] Council of the European Union. 2022. Proposal for a Regulation of the European Parliament and of the Council laying down Harmonised Rules on Artificial Intelligence (AI Act) and amending certain Union legislative acts, 25 November 2022 ('EU's Proposed AI Act').
- [13] D. Leslie et al, 2021. Artificial intelligence, human rights, democracy, and the rule of law: a primer prepared for the Council of Europe, *The Alan Turing Institute*. https://doi.org/10.5281/zenodo.4639743.
- [14] Daniel W. Linna Jr. and Wendy J. Muchman. 2020. Ethical Obligations to Protect Client Data when Building Artificial Intelligence Tools: Wigmore Meets AI. The Professional Lawyer, 27(1). https://www.americanbar.org/groups/professional\_responsibility/publicat ions/professional\_lawyer/27/1//.
- [15] Drew Simshaw, 2019. Ethical issues in Robo-Lawyering: The need for guidance on developing and using Artificial Intelligence in the practice of law. Hastings Law Journal 70, 173-213.
- [16] Ed Walters, 2019. The Model Rules of Autonomous Conduct: Ethical Responsibilities of Lawyers and Artificial Intelligence. Georgia State

- University Law Review 35(4). https://readingroom.law.gsu.edu/gsulr/vol35/iss4/1.
- [17] European Commission for the Efficiency of Justice (CEPEJ). 2018. European Ethical Charter on the use of artificial intelligence in judicial systems and their environment.
- [18] Herbert B. Dixon Jr (Ret), 2020. What Judges and Lawyers Should Understand About Artificial Intelligence Technology. *Judges' Journal*. 59(1). https://www.americanbar.org/groups/judicial/publications/judges\_journal /2020/winter/
- [19] IEEE Standards Association. 2023. The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. https://standards.ieee.org/industry-connections/ec/autonomous-systems/.
- [20] Independent High-Level Expert Group (IHLEG) on Artificial Intelligence (set up by the European Commission). 2019. Ethics Guidelines for Trustworthy Artificial Intelligence. https://digitalstrategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai.
- [21] International Bar Association (IBA). 2011. IBA International Principles on Conduct for the Legal Profession (28 May 2011). https://www.icj.org/wpcontent/uploads/2014/10/IBA\_International\_Principles\_on\_Conduct\_for the legal prof.pdf.
- [22] Jan L. Jacobowitz and Justin Ortiz, 2018. Happy Birthday Siri! Dialling in Legal Ethics for Artificial Intelligence, Smart Phones, and Real Time Lawyers. Tex. A&M Journal of Property Law 4, 407-442.
- [23] Jason Tashea and Nicolas Economou, 2019. Be competent in AI before adopting, integrating it into your practice' ABA Journal. (23 April 2019). https://www.abajournal.com/lawscribbler/article/before-lawyers-canethically-adopt-and-integrate-ai-into-their-practices-they-must-first-becompetent
- [24] Jeffrey Wolf, 2022. What is EDRM? (Electronic Discovery Reference Model) And How it Has Evolved. IPRO, (October 2022). https://ipro.com/resources/articles/.
- [25] John M. Barkett, 2012. More on the Ethics of E-Discovery: Predictive Coding and Other Forms of Computer-Assisted Review. https://scholarship.law.duke.edu/bolch/8/.
- [26] Kai Jacob, Dierk Schindler and Roger Strathausen, 2016. Liquid Legal: Transforming Legal into a Business Savvy, Information Enabled and Performance Driven Industry (Management for Professionals) Springer, Cham
- [27] Florian Möslein and Maximilian Horn. 2021. Emerging Rules on Artificial Intelligence: Trojan Horses of Ethics in the Realm of Law? In Larry A. DiMatteo et al. (Ed.) The Cambridge Handbook of Lawyering in the Digital Age, 77-95. Cambridge University Press, Cambridge.
- [28] Law Council of Australia. 2020. Australian Solicitors' Conduct Rules https://www.lawcouncil.asn.au/policy-agenda/regulation-of-the-profession-and-ethics/australian-solicitors-conduct-rules.
- profession-and-ethics/australian-solicitors-collidate-ratio.

  [29] Legal Futures. 2019. Technology collaboration transforming legal processes with AI innovation (1 October 2019). https://www.legalfutures.co.uk/associate-news/technology-collaboration-transforming-legal-processes-with-ai-innovation.
- [30] Mehmet B. Unver, 2022. Artificial Intelligence in the Legal Sector: Business as Usual? HertsLawSBlog. https://uhertslawblog.wordpress.com/2022/12/06/artificial-intelligence-in-the-legal-sector-business-as-usual/.
- [31] Maria Luciana Axente and Ilana Golbin, 2022. Ten principles for ethical AI. PwC Australia (April 2022). https://www.pwc.com.au/digitalpulse/ten-principles-ethical-ai.html.
- [32] Michèle Finck. 2021. Hidden Personal Insights and Entangled in the Algorithmic Model: The Limits of the GDPR in the Personalisation Context. In U. Kohl and J. Eisler (Ed.) Data-Driven Personalisation in Markets, Politic and Law, 95-106. Cambridge University Press, Cambridge.
- [33] Nicholas Diakopoulos. 2020. Transparency. In M. D. Dubber, F. Pasquale and S. Das (Ed.) *The Oxford Handbook of Ethics of AI*, 197-213. Oxford University Press, New York.
- [34] Pietro Ortolani and Larry A. DiMatteo. 2021. Lawyering in Digital Age? In Larry A. DiMatteo et al. (Ed.) *The Cambridge Handbook of Lawyering in the Digital Age*, 1-37. Cambridge University Press, Cambridge.
- [35] R. Parnham, M. Sako and J. Armour, 2021. AI-assisted lawtech: its impact on law firms. *University of Oxford* (December 2021). https://www.law.ox.ac.uk/sites/default/files/migrated/ai\_final1097.pdf.
- [36] Singapore Legal Profession (Professional Conduct) Rules. 2015. https://sso.agc.gov.sg/SL/LPA1966-S706-2015.
- [37] Slaughter and May. 2022. Collaborate. https://www.slaughterandmay.com/our-firm/innovation/collaborate/.
- [38] Solicitors Regulation Authority (SRA). 2018. SRA Code of Conduct for Solicitors, RELs and RFLs. https://www.sra.org.uk/solicitors/standardsregulations/code-conduct-solicitors/.

- [39] SRA. 2020. Guidance: Confidentiality of client information. https://www.sra.org.uk/solicitors/guidance/confidentiality-client-information/.
- [40] The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. 2019. Law. https://standards.ieee.org/wp-content/uploads/import/documents/other/ead\_law.pdf.
- [41] The Law Society of England and Wales. 2018. Horizon Scanning:
  Artificial Intelligence and the Legal Profession.
  https://www.lawsociety.org.uk/topics/research/ai-artificial-intelligence-and-the-legal-profession.
- [42] Thomson Reuters. 2023. Case study: HSBC. https://legalsolutions.thomsonreuters.co.uk/en/products-services/highq/customer-stories/hsbc.html
- [43] UK Cabinet Office, Central Digital & Data Office, Office for Artificial Intelligence. 2021. Guidance: Ethics, Transparency and Accountability Framework for Automated Decision-Making.
- [44] Virginia Dignum, 2023. The ART of AI Accountability, Responsibility, Transparency. *Medium* (March 2018). https://medium.com/@virginiadignum.
- [45] W. Bradley Wendel. 2014. Ethics and Law: An Introduction (1st ed.). Cambridge University Press, Cambridge.
- [46] Woodrow Hartzog, 2020. BIPA: The Most Important Biometric Privacy Law in the US? In Amba Kak (Ed.) Regulating Biometrics: Global Approaches and Urgent Questions. AI Now Institute. https://ainowinstitute.org/publication/regulating-biometrics-global-approaches-and-open-questions.