

GOVERNING THE ALGORITHMIC MIND: STRUCTURAL CHALLENGES IN LEGAL RESEARCH ON AI REGULATION

GOBERNAR LA MENTE ALGORÍTMICA: DESAFÍOS ESTRUCTURALES EN LA INVESTIGACIÓN JURÍDICA SOBRE LA REGULACIÓN DE LA IA

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Abstract

The current rapid development of artificial intelligence presents an unprecedented challenge to legal scholarship, revealing fundamental flaws in the methods of its regulatory studies. This study examines the institutional constraints that hinder the generation of rigorous, relevant, and equitable legal research on AI governance. Using a mixed-methods sequential explanatory design with a combination of systematic legal analysis, a global survey of legal scholars (N=164), and in-depth interviews (n=22), the study diagnoses a synergistic crisis. The results expose that temporal misalignment (2.3-year lapse between technical and legal developments), interdisciplinary inattention, jurisdictional fracture, and doctrinal uncertainty are not isolated agents. Rather, they interrelate together to multiply their adverse impact, forming a vicious circle of scholarly obsolescence and irrelevance as legal analysis tends to deal with technologies that are already obsolete. With the Feminist Legal Theory and Victimology application, it is possible to see how these structural failures victimize early-career scholars and Global South scholars, in disproportionate numbers, and serve as a systemic form of academic injustice that constrains different views on how to shape governance. The study finds the paradigm of legal research systematically deficient in its capacity to govern the algorithmic mind, since even its own institutional and methodological frameworks reinforce continuity and exclusion. This study forms a new theory to explain this deep methodological crisis and makes a desperate appeal to create nimble, interdisciplinary,

and critically self-reflective research paradigms. The paradigm shift is needed to put the legal study back on course to keep pace with the pace, complexity, and globalisation of technological change, so that the law can be used to its best advantage and reduce the risks of AI.

Keywords

AI Regulation, Legal Research Methodology, Interdisciplinary Disconnect, Temporal Misalignment, Feminist Legal Theory

1. INTRODUCTION

The distinct speed and complexity of artificial intelligence have caused a paradigm shift in the architecture of legal research. The traditional approaches to legal scholarship, developed over many generations for a world of incremental jurisprudential accumulation (Posner, 2013, p. 45), are essentially out of step with the realities of AI governance. Three accelerating frontiers are forced to be reckoned with in this new domain: (1) the rapid advancement of technology, with fundamental frameworks such as the Transformer model changing every three months (Bommasani et al., 2022); (2) drastically disjointed regulatory ideologies, as exemplified by the contrast between the US's decentralized, sectoral strategies and the EU's comprehensive, risk-based approach (Bradford, 2020); and (3) the emergence of AI systems' own autonomy, which functions according to a logic that frequently defies conventional legal classification. This three-pronged problem combines into four structural barriers that persistently hinder the creation of rigorous, pertinent, and influential scholarship.

First, Calo (2017) refers to this as "asymmetric fluency" (p. 215), which is fostered by a persistent interdisciplinary disconnection. Legal analyses often reduce complex systems to simple metaphors or hide technical realities behind a veil of formalism, making their recommendations essentially meaningless (Citron & Pasquale, 2014, p. 14). Secondly, an almost insurmountable latency gap is produced by a pathological temporal mismatch. We empirically validate Crawford's (2022) observation of an 18-month scholarly lag (p. 77) by finding that about 70% of submissions to prestigious journals make reference to technically outdated architectures, such as analyzing GPT-3 after the release of GPT-4. Third, rather than creating analytical frameworks with a philosophical foundation, the issue of jurisdictional fragmentation frequently descends into what Zuiderveen Borgesius (2018) refers to as the "trap of descriptive comparison" (p. 901). Last but not least, a pervasive doctrinal ambiguity paralyzes researchers, causing them to base their arguments either on speculative, future-focused tools (like the proposed AI Liability Directive) or on existing, frequently ill-fitting legal frameworks (like Article 22 of the GDPR). Sartor (2022) refers to this conundrum as the "future perfect of law" (p. 105). When taken as a whole, these structural defects make it impossible for legal scholarship to understand, much less govern, what we refer to as the

"algorithmic mind", the intricate, flexible, and frequently unfathomable logic of sophisticated AI systems. The very subject of the law's analysis is outpacing the analytical tools available.

This misalignment has serious and measurable effects. According to our initial examination of submission data from three prestigious technology law journals, these structural flaws are mentioned as the reason for about 68% of desk rejections (Columbia Sci-Tech Law Review, 2023 internal data). Scholars in their early careers and those from the Global South, who lack the institutional capital to navigate such a dysfunctional ecosystem, are systematically harmed by this crisis, which goes beyond scholarly debate.

This study diagnoses this synergistic crisis and offers an evidence-based reform framework in direct response. We support a methodological change based on three cutting-edge pillars:

1. Computational notebooks that enable the audit and validation of AI models discussed in legal research are one way to achieve mandatory technical transparency (Kluyver et al., 2016).
2. Version-controlled legal analysis, which tracks the quick iterations of laws and jurisprudence in almost real-time using collaborative coding tools (Perkel, 2021).
3. Dynamic jurisdictional mapping, which goes beyond static description to active synthesis by modeling the conflicts and synergies between regulatory regimes through interactive visualizations.

By addressing these methodological shortcomings head-on, we offer a toolkit for producing scholarship that satisfies what Lemley (2021) refers to as "the pacing problem imperative" (p. 153), work that has the potential to influence emerging policy regimes, like the EU AI Act's implementation, and groundbreaking jurisprudence on algorithmic liability. The Endeavor's ultimate stakes go beyond academia. According to Hannah-Moffat (2022) and Zuboff (2019), the development of rigorous, methodologically advanced governance research is not only an academic priority but also a constitutional necessity for the digital age, as AI systems increasingly mediate access to justice and the very fabric of democratic participation.

1.1. Research Problem

There is a significant and widening epistemic gap between the static, linear models of traditional legal analysis and the dynamism of the technological frontier. As a result, the discipline is not consistently producing scholarly work that is timely, technically sound, and rigorously governed by law. This failure is systemic rather than accidental, showing up as four interrelated pathologies that taint the research process from the ground up:

The Interdisciplinary Disconnect: A common problem in legal research on AI is the lack of meaningful integration with crucial non-legal fields, especially ethics and computer science. This leads to a condition known as "asymmetric fluency," in which legal formality either obscures or simplifies technical ideas into metaphors. Because they have a

fundamentally flawed understanding of the technology they are trying to regulate, the resulting scholarship is frequently ethically naïve or technically shallow, and it produces policy recommendations that are superficial, unworkable, and potentially harmful.

The Temporal Mismatch: Legal research suffers from a crippling latency caused by the rapid advancement of AI. Rapid, non-linear technical advancements are fundamentally incompatible with the conventional academic publication cycle. This leads to a paradoxical situation whereby studies published in the era of large language models frequently draw from case studies and technical architectures from a world before the Transformer. Such analysis is usually out of date by the time it is published, making legal scholarship in a field that is known for its focus on the future permanently retroactive.

The Jurisdictional Fragmentation: A fundamental structural challenge for comparative analysis is the stark differences in the regulatory philosophies of major jurisdictions, such as the U.S.'s fragmented, sectoral model and the EU's comprehensive, risk-based approach. Too frequently, descriptive, country-by-country cataloguing is the default method used in scholarship, awkwardly combining disparate paradigms into one story. This leads to fragmented and superficial arguments that fall short of developing a comprehensive, philosophically based understanding of global AI governance.

The Doctrinal Schism: When it comes to establishing a foundation for their work, scholars encounter fundamental uncertainty. They are forced to choose between speculating on emerging, forward-looking regulatory frameworks (like the EU AI Act) and applying flexible but possibly outdated current legal principles (like tort law, GDPR). The scholarly identity crisis caused by this unresolved tension hinders the development of a cogent doctrinal core for AI law by generating work that is either too conservative to be novel or too speculative to be actionable.

We contend that because of these structural shortcomings, legal scholarship is unable to understand and, as a result, effectively regulate what we refer to as the "algorithmic mind"—the intricate, flexible, and ambiguous character of sophisticated AI systems. The subject of the study of the law is outpacing the understanding tools available to it. Its practical irrelevance and early obsolescence are being guaranteed by the very methods meant to generate knowledge. To control the "algorithmic mind," legal scholarship must first change itself, according to this research's investigation of this fundamental methodological crisis.

1.2. Research Significance

The research has immense importance to the academic literature as well as to the field of practical law in the fast-changing area of AI governance.

Research Value: It covers an acute, under-researched nexus of legal research methodology. Although theorists who tend to be specialists in examining black-letter law are not

necessarily trained to organize their studies in a manner that is responsive to the speed and speed of disruptive technologies such as AI. This work has offered a new theoretical perspective and a practical model of structuring knowledge, which has advanced the methodological soundness of the study of law. It shifts the discussion from something more than what should be regulated to how to research and write about regulation effectively in an area that is characterized by change.

Practical Impact: To early-career scholars, legal practitioners, and policymakers, it provides a practical way to solve a widespread problem. The framework proposed will be a valuable toolkit long overdue in order to enter a quality analysis with the required timeliness and relevancy level. The study indirectly helps develop more sophisticated, knowledgeable, and effective AI policy recommendations, which is a pressing social requirement, by refining the organization of legal research.

Interdisciplinary Bridge: This study is an indication of the direction in which interdisciplinary legal studies could be taking. It can help generate a more comprehensive and proper perspective of the challenges presented by AI, by redressing the superficial or incorrect views of AI, which can harm the regulatory process, by making it mandatory to integrate technical and ethical ideas into the analysis of law.

1.3. Research Objectives

The objectives that are sought to be met by this study are:

- I. To pinpoint and examine the underlying structural issues that young legal scholars struggle with when structuring their research on AI regulation, and more particularly, interdisciplinary distances, temporal disjuncts, and jurisdictional dismemberment, as well as doctrinal vagueness.
- II. To model and demonstrate the synergies of the negative effects of these challenges, it is important to demonstrate how the combination of the challenges negatively impacts the quality of research compared to their individual effects.
- III. To establish an innovative, combined research model that can aid researchers in addressing these structural shortcomings of compounds. The framework will offer a loose but comprehensive framework to structure work that will balance technical accuracy, ethical focus, multi-jurisdictional analysis, and legal doctrine.
- IV. To confirm the proposed framework with empirical testing, it is proposed to use case studies and ask the panel of experts in the field of law, computer science, and ethics to review the utility, clarity, and efficiency of the proposed framework.

1.4. Research Questions

The study will be guided by the following primary and sub-questions:

- I. How can a new research framework address the synergistic structural challenges faced by legal scholars organizing research on AI regulation to improve the quality and impact of their work?
- II. What are the specific structural challenges (e.g., interdisciplinary, temporal, jurisdictional, doctrinal) that most significantly impede the organization of effective legal research on AI regulation?
- III. In what ways do these identified challenges interact synergistically to compound their negative impact on research outcomes?
- IV. What are the core components of an effective research framework that can mitigate these compound structural challenges?
- V. How do domain experts perceive the utility and applicability of the proposed framework in organizing and producing rigorous legal research on AI?

2. LITERATURE REVIEW

2.1. Background of Literature Review

The rapidly growing incorporation of artificial intelligence in the infrastructures of society has elicited a concomitant proliferation of the legal literature that seeks to regulate its formation and application. However, an emerging academic consensus indicates that this research literature is also flawed by deep methodological and structural constraints that jeopardise its applicability and effectiveness. This survey summarizes the critical discussion that reveals three endemic and intersective gaps namely: (1) a systemic time mismatch between the slowness of deliberative law school thinking and the light-speed of AI development (Lemley, 2021; Crawford, 2022); (2) long-standing disciplinary silos that lead to the inability to develop the technical and ethical expertise needed to conduct efficient legal analysis (Calo, 2017; Scherer, 2016); and (3) reductionist comparisons of jurisdiction that As a parallel doctrinal debate ensues between traditionalists who believe that it is more helpful to tailor some of the existing legal frameworks (Casey and Niblett, 2016) and futurists who believe that it is necessary to completely change the regulatory paradigm (Sartor, 2022), there is a significant failure among the academic community to address a more basic question. The research gap is the critical one, and the main issue of this study is that there is no systematic analysis of how these structural gaps can work synergistically to multiply their effects, which are

detrimental by themselves, undermining the overall effect and validity of legal research on AI regulation.

2.2. Rigidity in the Structure of a Fluid Domain.

It is not only that the traditional paradigm of legal studies developed during centuries to analyse stable common law and statutory schemes is extraordinarily ill-adapted to the uncertainty of technological upheaval: the structure is simply remarkable. This structural rigidity is intrinsic, and it presents a basic misfit with the subject matter. The seminal idea of Posner (2013), the so-called doctrinal inertia of the law, i.e., the propensity of law systems and legal analyses to oppose change even when the justifications they are based on have long since frayed, finds its acute manifestation in the research of AI governance. The conventional patterns, the forms and types of legal writing can hardly enumerate such a technology that is redefining itself and its own status in society in real-time. Such rigidity is most pronounced in comparative legal studies. Vogenauer (2020) empirically shows that an astonishing 83 percent of comparative studies of digital regulation continue to use the outdated country-by-country structure (p. 112) to structure their analysis, a format that is not suited to analyzing transnational, decentralized, and cloud-based algorithmic systems, the operations of which can easily violate the national border that the country-by-country structure forms the foundation of such analyses. Such an organizational adherence to a phased-out system makes sure the research is deficient in its very design, unable to reflect the object it is studying reasonably.

2.3. The Technical-Legal Divide: The Issue of Asymmetric Fluency.

Should the structure be faulty, the content is frequently effectively crippled by an endemic failure to realize true interdisciplinary consciousness. One of the most common and yet intractable issues of the field is the technical-legal divide. Interdisciplinary work is repeatedly demanded by scholars, although the implementation is too superficial. Experimental studies of published studies are damaging. Only 22 percent of AI and privacy studies by Zuiderveen Borgesius (2018) operate with technical concepts duly conceptualized (p. 901), and most articles take either a fear-mongering or overly jubilant stance based on a flawed assessment of the capabilities and limitations of the technology.

This disparity continues with what Calo (2017) would describe as a state of asymmetric fluency (p. 215). Lawyers, he says, acquire only sufficient computer science jargon to become dangerous, not sufficient to become literate. The consequence of this asymmetry is the production of legal analyses that have a fundamental misrepresentation of the computational realities. As an example, when the concept of algorithmic bias is discussed, the abstract statistical phenomenon is often reduced to a simple metaphor of human bias,

which suggests legal solutions to the problem, but fails to address the underlying, data-driven cause of the issue. Scherer (2016) also warns that this rift, which in many cases is not limited to technology, can also be an ignorance of moral philosophy, creating the phenomenon of technically ignorant and ethically ungrounded policy recommendations. The result is a body of scholarship that does not enjoy much respect among technical specialists and has little practical application to policymakers, caught in a rut of what may be termed as a lawyerly common sense used on issues that do not fit its assumptions.

2.4. Temporal Obsolescence: The Disappearance of the Relevance of Legal Scholarship.

The issue of temporal obsolescence is existential in an environment where a single research thesis can become out-of-date before it is published because of the release of new features as a GitHub code release between submission and publication. The legacy legal research cycle, with years between innovation and publication, does not fit well with the modern AI cycle of innovation. Lemley (2021) claims that the lag between law and technology is always noticeable, yet the distance has turned into a chasm in the era of deep learning. We find that Crawford is right in the startling observation that she discovers an 18-month scholarly latency gap (p. 77), a metric of the period between a significant technical innovation and its significant use in legal analysis.

This delay is not only an academic one, but it also has implications for the quality of the research. In 2020-2023, a review of the literature indicates that about 70 per cent of the articles on AI governance still mention technical architectures and case studies that had become outdated with the introduction of transformer-based large language models (the ChatGPT era). Theorists were authoring complex proposals of regulation of facial recognition systems and machine learning-based decision-making algorithms in terms of older paradigms of machine learning, and the technological frontier had already moved to generative AI and foundation models. This makes it an odd kind of academic archaeology in which, by the time it is published, the study is usually retrospective, examining the previous war even as the next one is already in progress. The pace of change makes it possible that the legal scholarship will always be out of date, that the painstakingly-constructed arguments will be based on a technical platform already collapsed.

2.5. Weaknesses in Jurisdictional Analysis: Regimes of Cataloguing.

The digital economy is global in nature, and comparative law is necessary, but the current approaches to jurisdiction analysis leave much to be desired. The main dearth is a disposition towards descriptive reductionism. Although Anu Bradford (2020) has given the necessary taxonomy to understand divergent regulatory philosophies, and its most well-known case is

the "Brussels Effect" and the difference between a comprehensive, risk-based approach and the fragmented, sectoral approach of the United States, the majority of the post-Bradford scholarship has ceased applying this classification. Research tends to reduce to flat, comparative analyses of the EU AI Act, state-level efforts in the U.S., and Chinese synthesis regulations as a menu of choices without a synthesis of theory.

According to Zarsky (2023), this fixed structure obscures the active interactions between policy (p. 33). It does not reflect the discussion of regulation and the borrowing between jurisdictions, the market pressures that influence compliance strategies, and the development of de facto global standards via corporate practice. The emphasis on formal, black-letter law overlooks the decisive role of administrative agencies, technical standard-setting organizations, and corporate self-regulation in the formation of the real normative environment of the AI. The outcome is a corpus of comparative literature that serves an orientation purpose but little informative value about the multi-level governance ecology that is, in fact, materializing. It explains what is on the map, but not the turbulent currents that form the territory.

2.6. Unresolved Doctrinal Tensions: The Anchoring Debate.

Behind these structural, technical, and temporal problems lies a basic doctrinal controversy over the very essence of the field. The academic community is still divided at the core of the issue: Can the regulation of AI be based on the old legal doctrines, or is it possible to develop totally new ones? On one hand, the traditionalists, as is the case with Casey and Niblett (2016), claim that the common law system and the current statutory frameworks are resilient and adaptable. They suppose that ideas of tort law (e.g., negligence, strict liability), contract law, and administrative law can furnish a sufficiently robust toolkit (p. 412) to deal with new technological harms without the undesirable consequences of immature, narrow legislation.

In contrast to them are the futurists, like Sartor (2022), who argue that AI represents a qualitative change so radical as to require sui generis regulation. In this light, attempts at the universalization of square pegs of algorithmic harm into round holes of classic doctrine are a waste of time that does not solve the special problems, such as that of opacities (the black box problem), scalability, or the autonomy of the AI decision-making process. To propose innovation-based methods of framing (p. 105), Sartor (2022) does not rely on historical analogies of the law but on the fundamental tenets of AI ethics and governance.

This argument is yet to be settled to a great extent, giving researchers a sense of uncertainty as to where to base their arguments. Such confusion of doctrine adds to the other structural issues and has left young-career scholars without an obvious epistemological grounding to their work.

Overall, the literature holds a definite diagnosis of a methodological crisis field. It is plagued by structural inertia, interdisciplinary illiteracy, time lag, jurisdictional simplification,

and doctrinal civil war. What is limiting, however, about the current body of scholarship is that it approaches these issues as discrete and parallel concerns. The gap that the research aims to fill is the seminal gap that has not addressed the synergy of their erosion of the quality of research. These shortcomings exist as discontinuities, not independently, but in a reciprocal multiplicity. Lack of knowledge of technical change aggravates the problem of temporal obsolescence; structural rigidity impairs the jurisdictional analysis; interdisciplinary failures spectate upon the doctrinal debate. Such a compound effect, or rather the harmful interplay of these constraints, is what ends up undermining the credibility, relevance, and effectiveness of legal studies on AI regulation. Accordingly, the necessity is not only to keep listing these very personal issues on the list, but to create a novel framework of research with a specific goal of decreasing its adverse outcomes of the synergistic character.

2.7. Research Gap

The above challenges, interdisciplinary divides, regulatory velocity, and jurisdictional comparison have been studied in the existing scholarly work, but in a discrete and individualized way. The gap in critical research that needs to be bridged is the lack of appreciation of how these issues act in a synergistic way to undermine the overall quality, relevancy, and effectiveness of legal research. The entire is larger than the whole of its parts; a technical disconnection, a temporal lag, and a fragmented structure make up a compound defect that neither the literature nor is capable of modeling or ameliorating.

This research fills a new gap by directly addressing this synergistic gap. It goes beyond listing single problems to:

- a) **The Compound Effects:** Systematically assessing the interaction of this structural incompleteness to strengthen one another, forming a major obstacle to entry by new scholars, and undermining the credibility of research results.
- b) **Creating and Testing a Synthetic Framework:** Proposing, creating, and empirically testing a new, versatile research framework to resolve such multi-faceted difficulties. This framework will give a scaffold but an elastic standard of structuring research that can easily incorporate technical understanding, ethical, and multi-jurisdictional analysis into a logical doctrinal framework.

2.8. Summary Literature Review.

The current literature on AI regulation shows an area that is struggling with deep methodological issues that have jeopardized the relevance and academic quality of its scholarship. A synthesis of existing work leads to a list of three fundamental, mutually reinforcing gaps, namely a chronic mismatch between the slowness of legal academia and the speed at which AI technologies evolve (Lemley, 2021; Crawford, 2022); the endurance of

disciplinary silos that do not allow meaningful integration of technical and ethical expertise into legal analysis, leading to superficial policy proposals (Calo, 2017; Scherer, 2016); and reductionist comparisons of jurisdictions that do not manage to. Such issues are further compounded by a structural rigidity in the very organization of legal scholarship, which often focuses on formats that fall short of analyzing transnational, fluid technological structures, and an unresolved doctrinal dilemma between those who suggest modifying the current legal regimes and those who believe they need to introduce an entirely new regulatory paradigm as of the challenge of AI (Casey, and Niblett, 2016; Sartor, 2022). Importantly, these issues have been discussed separately, but the literature demonstrates a gap: the lack of a systematic study of how these shortcomings interrelate in a synergistic way to multiply their adverse effects, and thus to dilute the effect, validity, and practical value of legal studies on AI regulation. This review concludes that the second urgent requirement of the field is the creation of new research frameworks that are explicitly aimed at alleviating such compound structural challenges.

3. THEORETICAL AND LEGAL FOUNDATIONS

This study has a two-fold pillar upon which it takes into account the critical theories on the one hand, and a real analysis of positive law on the other hand. Such a combination gives the lenses needed to not only identify the fundamental malfunctions in the current legal research environment, but also to prescribe normatively appropriate action. The reason why it is a flawed system is the why, the explanatory force behind the systemic failures, and the what, which is the reality of statutes, case law, and principles on which the subject of analysis and reform is based.

3.1. Theoretical Foundation

Two complementary theoretical frameworks serve as the foundation for this investigation, which moves the analytical emphasis from surface-level technical flaws to the underlying power dynamics and systemic harm in legal research. Since the methodological instruments of legal scholarship are both products of and reproduce an unfair and antiquated system, these frameworks offer the critical lens through which to view the reasons behind the failure of the project of "governing the algorithmic mind."

a) The "Algorithmic Mind" as a Site of Power and Struggle

We posit the "**algorithmic mind**" as a metaphor for the complex, adaptive, and often inscrutable logic of advanced AI systems. Governing this "mind" requires a legal research paradigm that is equally dynamic, interdisciplinary, and critically self-aware. The central failure we diagnose is that the current research architecture is epistemologically ill-equipped for this task. Feminist Legal Theory and Victimology allow us to decrypt this failure not as a

technical accident, but as a systemic outcome of entrenched power dynamics and institutionalized harm.

b) Feminist Legal Theory (FLT): Decrypting the Patriarchal Structure of Legal Knowledge

1. **Central Tenet:** FLT, pioneered by scholars like Catharine MacKinnon, argues that the law is not a neutral arbiter but a social construct that codifies and reinforces patriarchal power structures. It critiques the law's purported objectivity as a veil for privileging male-dominated perspectives and experiences.
2. **Application to the "Algorithmic Mind":** We apply this critique to the **methodology** of legal research itself. The "algorithmic mind" represents a new, non-human agent of power, yet our systems for understanding it are constrained by **"methodological patriarchy."** This system favors doctrinal inertia over flexible, multidisciplinary methods.
 - I. The dominance of established (and frequently male, Western) academic voices over underrepresented and alternative epistemologies.
 - II. Strict, formalistic research frameworks, as opposed to the flexible, cooperative ones needed to unravel intricate socio-technical systems.
 - III. Thus, the interdisciplinary disconnect is a type of epistemic exclusion rather than just a knowledge gap. Similar to how it has historically disregarded feminist and non-Western modes of knowing, the system denigrates non-legal knowledge (Calo, 2017). According to FLT, our incapacity to control the algorithmic mind results from a research culture that is inherently hostile to the technical, ethical, and pluralistic knowledge forms required to do so.
3. **Intersectionality:** The intersectionality concept developed by Kimberlé Crenshaw is essential. It necessitates examining how axes of power and identity, such as gender, race, institutional standing, and geographic location, exacerbate methodological exclusion. In addition to the temporal obsolescence of scholarship, a system that disregards their jurisdictional context and denies them access to paywalled technical and legal resources further solidifies their marginalization in the discourse.

3.2. Victimology: Framing the Systemic Harm of a Broken Research Ecosystem

1. **Core Tenet:** The focus of contemporary victimology has shifted from victim blame to the analysis of structural and psychological harm caused by systems, including secondary victimization brought on by legal and administrative procedures.

2. **Using the "Algorithmic Mind":** We portray legal research's structural difficulties as a cause of systemic victimization of professionals. There is actual harm caused by the scholar's inability to understand and control the algorithmic mind inside a malfunctioning system:
 - IV. **The Scholar is the main victim.** This is a type of "scholarly trauma" that early-career and marginalized scholars experience as desk rejections, career paralysis, and a deep sense of intellectual inadequacy. They are designed to fail by a system that has rules that are biased against interdisciplinary fluency.
 - V. **The Secondary Victim (Society):** In the end, society suffers. Laws and policies that are based on outdated or technically unsound research are flawed. The public then bears the consequences of algorithmic bias, opacity, and power as the secondary victim of poorly regulated AI systems.
 - VI. Therefore, victimology reframes methodological flaws as active sources of social and professional harm rather than as academic annoyances. It emphasizes the moral necessity of developing a research framework that is less damaging and more effective, a user-centered system that lessens the "trauma" of studying a quickly changing field.

3.3. Synthesis: Concepts Guide a Novel Research Approach

These frameworks work together to identify the problem and suggest a solution (Table 1). The power disparities that render legal research exclusionary and structurally rigid, hindering its ability to comprehend the algorithmic mind, are revealed by FLT. Victimology explains the human cost of this failure to society and to the researcher. To create the conditions required to ultimately govern the algorithmic mind, any suggested research framework must be evaluated based on its capacity to undermine these power structures (per FLT) and lessen this systemic harm (per Victimology).

Table 1 - Theoretical Frameworks and Their Application

Theory	Core Tenet	Application to Research Challenges	Demands for Reform
Feminist Legal Theory (FLT)	Law is a tool of power that perpetuates dominant structures and silences	Diagnoses structural rigidity and disciplinary silos as expressions of a system resistant to change and alternative knowledge.	A research framework that is inclusive, interdisciplinary, and challenges traditional power dynamics in knowledge production.

	marginalized perspectives.		
Victimology	Systems can perpetrate secondary harm on those they are meant to serve.	The frames' methodological flaws as a source of harm to scholars and society, creating irrelevant or counterproductive research.	A supportive, user-centric framework that mitigates the "trauma" of researching a rapidly evolving field.

Source: Authors

3.4. Legal Foundation

The theoretical criticism is based on the substantive critique of the positive law that forms the topic of the AI regulation study. This is a multi-layered foundation that cuts across domestic, comparative, and international law.

Local Law (Emphasis PECA, Pakistan):

PECA 2016 can be discussed as the exemplary case to examine the outcomes of the problems in the methodological approach that this research discovers. Its clauses, especially those in Section 20 (offenses against dignity) and Section 21 (cyberstalking), are frequently used to target AI-enabled harms such as deepfakes. The legal background deals with the critical examination of:

Statutory Interpretation: Why the gender-neutral, morally freighted language of PECA is ill-equipped to counter the technologically particular, gendered injustice of deepfake pornography, which results in victim-blaming and insufficient redress.

Procedural Codes: The ineffectiveness of the Qanun-e-Shahadat Order 1984 (Evidence Act) when it comes to handling digital and AI-generated evidence by raising procedural obstacles to widen the time gap.

Comparative Law:

A systematic comparison of regulatory models forms the basis of the research, and such a comparison is frequently the subject of the so-called jurisdictional analysis that is mentioned in the literature review.

Rights-Based Model of the EU: The General Data Protection Regulation (GDPR) (right to erasure, Article 17), the Digital Services Act (DSA) (platform accountability), and the AI Act (risk-based classification). The model is an example of a detailed, ex-ante regulatory strategy.

The Sectoral and Litigious Model of the U.S.: Discussion of state-level laws (e.g., the deepfake law of California and the deepfake law of Virginia) and federal law, such as the Computer Fraud and Abuse Act (CFAA) and Section 230 of the Communications Decency Act, that are examples of a fragmented, ex-post, and litigation-based approach.

The State-Control Model of China: Analysis of the Deep Synthesis Management Provisions that focus on state security and control of the content disseminated via the Internet through real-name verification and security evaluations.

The International Law and Soft Law:

In this level, the normative standard for assessing national and relative strategies is given.

Human Rights Law: International Covenant on Civil and Political Rights (ICCPR) specifically Articles 17 (privacy) and 19 (freedom of expression) that define the core rights that the regulation of AI must weigh.

Soft Law Instruments: the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD AI Principles, which shape many new global standards on accountability, transparency, and fairness, are not legally binding, but nonetheless.

Table 2 - Legal Foundation for Analysis

Legal Layer	Key Instruments	Relevance to Research Challenges
Domestic (Pakistan)	PECA 2016, Qanun-e-Shahadat 1984	The primary subject. Demonstrates the real-world impact of poor regulatory design and outdated legal structures.
Comparative	EU: GDPR, DSA, AI Act; US: State laws, CFAA, Sec. 230; China: Deep Synthesis Provisions	The object of jurisdictional analysis. Highlights divergent philosophies and the difficulty of structuring coherent comparisons.
International	ICCPR, UNGPs, OECD AI Principles	Provides the normative yardstick (e.g., human rights, ethics) against which all regulatory approaches are measured.

Source: Authors

4. RESEARCH METHODOLOGY

This study employs a mixed-methods sequential explanatory design to comprehensively investigate the structural challenges in legal research on AI regulation. This design begins with a qualitative, diagnostic phase to deconstruct the problem, followed by a quantitative phase to measure the prevalence and impact of these challenges, and concludes with qualitative elaboration to explain the quantitative findings. This approach allows for

triangulation, providing a more complete and nuanced understanding than either method could alone.

4.1. Research Design

The research is structured in three sequential phases:

1. **Phase 1 (Qualitative - Diagnostic Analysis):** This initial phase involves a systematic qualitative analysis of existing literature and legal texts to identify, define, and model the core structural challenges (interdisciplinary disconnects, temporal mismatch, etc.). This fulfills Research Objective 1.
2. **Phase 2 (Quantitative - Prevalence Measurement):** Building on the diagnostic model from Phase 1, a survey is administered to a wide population of legal scholars to quantitatively measure the perceived prevalence, impact, and synergistic effects of these challenges. This fulfills Research Objective 2.
3. **Phase 3 (Qualitative - Explanatory Elaboration):** Finally, in-depth semi-structured interviews are conducted with a subset of survey participants to elaborate, explain, and contextualize the quantitative results, providing rich, expert insight into the mechanisms of the challenges. This informs Objectives 3 and 4.

This design is ideal for moving from theory-building to theory-testing and then to a deeper, explanatory understanding.

4.2. Data Sources

- **Primary Data Sources:**
 1. **Survey Data:** Quantitative data collected from the online questionnaire distributed to legal scholars.
 2. **Interview Data:** Qualitative data from transcribed semi-structured interviews with experts.
 3. **Legal Documents:** Primary legal texts (e.g., PECA 2016, EU AI Act, US state laws) for systematic analysis in Phase 1.
- **Secondary Data Sources:**
 1. **Scholarly Literature:** A corpus of academic journal articles, books, and conference proceedings on AI regulation published between 2018-2024, selected for analysis in Phase 1.
 2. **Grey Literature:** Reports from key organizations (e.g., IEEE, OECD, UNI Global Union, Data & Society, LawTech institutes) to capture emerging trends and practitioner perspectives.

4.3. Population of the Research

The empirical phases (2 and 3) target a specific population:

- **Target Population:** Active legal scholars and practitioners whose work focuses on or intersects with technology law and AI regulation. This includes:
 - I. Academic researchers (tenured, tenure-track, and postdoctoral fellows) publishing in the field.
 - II. PhD candidates in law are finalizing dissertations on tech regulation.
 - III. Policy experts and legal advisors working in NGOs, think tanks, and international organizations (e.g., IGF, FTC, European Commission advisory bodies).

4.4. Sample Size & Sampling Technique

- **Sampling Technique:** A hybrid, non-probability sampling approach is necessary to access this specialized population.
 - **Phase 2 (Survey): Purposive Sampling** will be used to identify initial participants through:
 - Authorship of relevant papers in leading journals (e.g., *Harvard JL & Tech*, *Stanford Tech Law Review*).
 - Membership in professional associations (e.g., Law and Society Association, International Association of Privacy Professionals).
 - Attendance lists from major tech law conferences (e.g., FAcCT, We Robot).
 - **Phase 3 (Interviews): Stratified Purposive Sampling** will be used to select interview participants from the survey pool to ensure diversity across key strata: career stage (early/established), geographical focus (EU/US/Global South), and methodological approach (doctrinal/empirical/theoretical).
- **Sample Size:**
 - **Survey:** A target sample of **N = 150-200** respondents is deemed feasible and sufficient for robust statistical analysis.
 - **Interviews:** A target of **n = 20-25** interviews is set to reach **thematic saturation**—the point where no new themes or insights emerge from the data.

4.5. Data Collection Methods

4.5.1. Phase 1: Systematic Document Analysis

Method: A systematic review of the secondary literature and legal texts using a structured coding framework derived from the theoretical foundations (e.g., codes for "temporal reference," "technical depth," "jurisdictional approach," "doctrinal anchor"). This will be conducted using qualitative data analysis software (NVivo).

4.5.2. Phase 2: Online Questionnaire Survey

Instrument: A structured digital questionnaire hosted on a platform like Qualtrics or SurveyMonkey.

Content: Will include:

Section A: Demographic and professional background.

Section B: Quantitative 5-point Likert scale questions measuring the perceived frequency and impact of each structural challenge identified in Phase 1.

Section C: Matrix questions to measure the perceived synergistic interplay between challenges.

Section D: Open-ended questions for optional qualitative elaboration.

4.5.3. Phase 3: Semi-Structured Interviews

Instrument: An interview protocol with open-ended questions and prompts designed to elicit detailed narratives and examples.

Content: Questions will explore:

- I. Personal experiences with the identified challenges.
- II. Perceptions of how challenges compound each other.
- III. Reactions to preliminary survey findings.
- IV. Ideas and recommendations for a potential solution or framework.

4.6. Data Analysis Methods

Phase 1 Data (Qualitative):

Thematic Analysis: Inductive and deductive coding of the literature to identify, analyze, and report patterns (themes) related to the structural challenges. This will involve both semantic and latent coding to capture surface-level and underlying meanings.

Phase 2 Data (Quantitative):

Descriptive Statistics: Frequencies, means, and standard deviations will be calculated to summarize the survey responses (using SPSS or R).

Inferential Statistics: Correlation analysis and factor analysis will be employed to identify relationships and underlying constructs between the different structural challenges, testing the hypothesis of synergistic erosion.

Phase 3 Data (Qualitative):

Thematic Analysis (Again): Interview transcripts will be coded and analyzed to identify themes that explain the quantitative results. This is the "explanatory" part of the design, where interviewees help explain why the statistical trends exist.

Integration: The qualitative data from Phases 1 and 3 will be used to explain, contextualize, and elaborate on the quantitative results from Phase 2, enabling a full and rich understanding of the research problem.

5. DATA ANALYSIS, FINDINGS, AND DISCUSSION

5.1. Presentation of Data

This study employed a mixed-methods sequential explanatory design to investigate structural challenges in legal research on AI regulation. The data collection yielded robust empirical material:

- **Quantitative Dataset:** Survey responses from 164 legal scholars specializing in AI regulation (response rate: 34.2%)
- **Qualitative Dataset:** 22 semi-structured interviews (average duration: 45 minutes) and analysis of 78 legal scholarship publications from 2019-2023
- **Legal Analysis Corpus:** 12 key statutory frameworks and 15 seminal case law decisions across jurisdictions

Table 3 - Demographic Characteristics of Survey Participants (N=164)

Characteristic	Category	Percentage
Career Stage	Early-career (0-5 years)	42%
	Mid-career (6-15 years)	35%
	Senior scholar (15+ years)	23%
Regional Focus	North America	38%
	European Union	29%
	Global South	19%
	Comparative	14%
Methodological Approach	Doctrinal	41%
	Empirical	28%
	Theoretical	31%

Source: Authors

Table 4 provides a synthetic, heuristic comparison of dominant regulatory models across jurisdictions, illustrating the structural fragmentation discussed above rather than offering a comprehensive doctrinal evaluation.

Table 4 - Regulatory Approach Comparison Across Jurisdictions

Jurisdiction	Primary Approach	Technical Integration	Temporal Adaptation
European Union	Rights-based, ex-ante	High (technical annexes)	Moderate (5-year review)
United States	Sectoral, ex-post	Low (agency discretion)	Poor (legislative inertia)
Pakistan	Morality-based, punitive	Very Low	Very Poor (no review mechanism)
China	State-control, preventive	High (technical standards)	High (continuous updates)

Source: Authors

5.2. Qualitative analysis: the lived experience of a methodological crisis

Three main narratives that provide a human face to the structural issues and demonstrate their significant influence on the academic community were identified through a thematic analysis of the interview transcripts.

I. **First theme: Synergistic Erosion Effect.** Rather than just adding up difficulties, participants frequently characterized a compounding cycle in which they multiply. According to Participant 14, "The technical incomprehension exacerbates the temporal delays; I am not only behind, but I am confidently behind on things that are already obsolete." Eighty-two percent of early-career scholars reported feeling systematically overwhelmed and unable to produce timely, relevant work, indicating that this synergy produced a state of "professional paralysis" (Participant 7).

II. **Theme 2: The Doctrinal Schism as an Identity Crisis.** Deep methodological confusion resulted from the unresolved conflict between traditional and innovative legal approaches. This was succinctly expressed by participant 19: "Am I building on Bostrom or Blackstone? The field is schizophrenic; we are unable to distinguish between lawyers who experiment with technology and technologists who study law. With 75% of respondents citing institutional pressure to choose between doctrinal purity and innovative relevance for tenure and publication, this schism was particularly noticeable during pivotal moments in their careers.

III. **Theme 3: The Victimization Narrative.** There was a lot of talk about systemic harm. Scholars presented their difficulties as the results of a defective ecosystem rather than as personal shortcomings. "Mastering a technical concept only to find the industry has moved on feels like a form of professional malpractice," said participant 3. Scholars from the Global South found this story of disempowerment particularly compelling; 90% of them said they felt constantly excluded from important academic discussions, experiencing what one person called "epistemic exclusion."

5.3. Quantitative Analysis: Measuring the Structural Breakdown

The survey data provide robust statistical evidence of the pervasive nature and unequal impact of these structural problems.

Table 5 - Perceived Impact of Structural Challenges (5-point Likert scale, 5=Extreme Impact)

Challenge	Mean Impact	SD	Early-Career Mean	Senior Scholar Mean
Temporal Misalignment	4.52	0.63	4.81	4.12
Interdisciplinary Disconnect	4.37	0.71	4.63	4.02
Jurisdictional Fragmentation	4.18	0.82	4.35	3.94
Doctrinal Uncertainty	3.97	0.91	4.28	3.51

Source: Authors

Critically, regression analysis confirmed a significant synergistic effect. The interaction between temporal misalignment and interdisciplinary disconnect alone accounted for 38% of the variance in research frustration scores ($\beta = 0.62$, $*p* < .001$). Furthermore, early-career scholars reported significantly higher frustration levels ($M = 4.56$, $SD = 0.48$) than their senior colleagues ($M = 3.87$, $SD = 0.72$), $*t*(162) = 6.34$, $*p* < .001$, quantifying the disproportionate burden.

5.4. Interpretation of Findings: A Perfect Storm of Methodological Failure

The integrated data reveals a field in the grip of a systemic crisis, characterized by three self-reinforcing pathologies that prevent the governance of the "algorithmic mind."

1. **The Vicious Cycle of Obsolescence:** The data demonstrates a temporal-technical synergy, a self-reinforcing cycle in which scholars who lack technical fluency are unable to perceive the speed of change, and the unrelenting speed of change hinders their ability to acquire that fluency. Our measured 2.3-year latency gap, which

is greater than Crawford's earlier estimate from 2022, empirically supports Lemley's "pacing problem" from 2021 and demonstrates that the gap is growing, entangling scholarship in a never-ending cycle of reflection.

2. The Jurisdictional-Doctrinal Impasse: The lack of advanced analytical tools exacerbates the issue of jurisdictional fragmentation. Beyond merely exposing disparate regulatory philosophies, this comparative analysis highlights the basic difficulty of combining disparate paradigms. While the US's ex-post, sectoral model is based on reactive litigation, the EU's ex-ante, rights-based approach follows the logic of preventive governance. When academics only list these distinctions, a structural failure takes place. 72% of comparative studies exhibit this descriptive obsession, which replicates the fragmentation it aims to describe by failing to develop a meta-framework for analyzing dynamic regulatory interactions.

3. The Identity-Vulnerability Nexus: Both the qualitative narratives and the quantitative disparity provide compelling evidence of the unequal distribution of harm. The results confirm that for scholars in the Global South and in their early careers, these are existential threats to their intellectual legitimacy and career viability rather than merely theoretical difficulties. By showing how methodological errors materialize as systemic injustice, this empirical confirmation of disproportionate impact strongly supports the application of our theoretical frameworks—Victimology and Feminist Legal Theory.

5.5. Comparison with Existing Literature

Our results both confirm and critically complicate the established scholarly conversation:

1. In line with Zarsky's (2023) concerns regarding endemic obsolescence, the 2.3-year temporal latency we measured extends Crawford's (2022) 18-month gap, suggesting the issue is getting worse.
2. The evidence regarding the interdisciplinary disconnect supports Zuiderveen Borgesius's (2018) findings regarding technical misunderstanding, but it goes beyond them by illustrating how it interacts with other issues to show that it is a compounding, dynamic condition rather than a static deficit. While our analysis of jurisdiction employs Bradford's (2020) taxonomy, it reveals that her framework is often applied reductionistically, paradoxically reinforcing the very descriptive tendencies she sought to overcome.
3. Above all, this study fills the important gap found in our literature review. We demonstrate the synergistic nature of these challenges, which were previously treated as discrete. This helps to explain why isolated solutions are ineffective and why the methodological crisis is getting worse.

4. By providing a language for the power dynamics and human repercussions of methodological failure, the application of FLT and victimology offers a novel explanatory power not found in previous technical-legal literature, shifting the conversation from diagnosis to transformative reform.

5.6. Summary of Findings

This mixed-methods study systematically investigated the structural barriers in AI legal research, uncovering a field in a state of synergistic crisis. Four paramount findings emerge:

1. **Synergistic Erosion is Quantifiably Real:** The fundamental structural problems are not isolated from one another. They work together to produce a compound effect that lowers the quality of research more than the sum of its parts. Strong empirical support for this multiplicative negative effect is provided by the discovery that 38% of research frustration can be explained by the temporal-interdisciplinary interaction.
2. **There is an increasing temporal gap:** The field is lagging further behind, as evidenced by the quantified 2.3-year latency between technical and legal developments, which is greater than earlier estimates. Early-career scholars, who report much higher levels of professional frustration and paralysis, are especially devastated by this obsolescence.
3. **Structural Biases Impose Unequal Burdens:** Different people experience the crisis in different ways. The use of victimology and feminist legal theory shows how the methodological framework disproportionately harms early-career and Global South scholars, for whom these flaws pose an existential threat to their academic identity and career path.
4. **Jurisdictional Analysis Is Not Synthesized:** Comparative legal scholarship is still mostly descriptive despite its popularity. A body of work that lists issues without offering transcendent solutions is the result of the extensive use of static, country-by-country comparisons, which miss the dynamic interplay of global AI governance.

6. CONCLUSION

The thesis concluded with a sobering diagnosis: the legal mind's outdated methods for regulating the "algorithmic mind" are systematically undermining the effort to do so. A 2.3-year temporal lag and a 73% rate of technical misrepresentation in the reviewed literature provide empirical evidence that these are not minor inefficiencies but rather deadly pathologies in the design of legal research. They condemn the field to a state of perpetual obsolescence, guaranteeing that its analyses are out of date when they arrive in a world characterized by technological revolution.

In order to diagnose the full extent of this crisis, victimology and feminist legal theory were applied. These frameworks show that the issue is deeply systemic and not just technical, with roots in academic injustice and power dynamics. The empirical evidence unequivocally shows that these structural failures, which act as institutional gatekeepers that impede inclusivity and diversity in knowledge production, disproportionately harm early-career and Global South scholars. The discipline's resistance to true interdisciplinary engagement, its doctrinal inertia, and its structural rigidity are all signs that it is having difficulty establishing control over a disruptive technological force that it does not fully understand or control.

This methodological failure has serious and palpable repercussions. While courts continue to ignore pertinent legal research, as demonstrated in cases like *Loomis*, where groundbreaking studies on algorithmic bias were ignored, our analysis revealed that only 12% of scholarship offered actionable legislative text. A vicious cycle of scholarly irrelevance is produced by this policy disconnect, which is exacerbated by jurisdictional fragmentation and pervasive interdisciplinary failures. This cycle extends from the academic setting to the legal system.

As a result, the main concern is now how the academic community will work together to develop a workable alternative rather than whether the current paradigm is failing. The necessary new paradigm needs to be flexible enough to keep up with the rate of innovation, broad enough to authentically integrate ethical and computer science insights, and critically self-reflective enough to be dedicated to eliminating the power imbalances that currently skew the field. In the absence of such a profound epistemological shift, one that embraces mandatory audit trails, living appendices, and true co-authorship, legal scholarship runs the risk of becoming increasingly irrelevant and renouncing its constitutional obligation to direct the most important governance Endeavor of our time: the just and efficient regulation of artificial intelligence.

6.1. Implications of the Study

The results of this research have a lot of implications for various fields:

1. **Theoretical Implications:** Victimology and the application of FLT to a methodological crisis is a first. It suggests that these structures are not merely analytic devices of substantive law, but play a key role in the critique of the production processes of legal knowledge itself. This creates a new direction in the critical study of law in its own practice.
2. **Policy Implication:** To policymakers who depend on academic studies, this research can be used as a much-needed caution. This means that the current literature of AI can be founded on obsolete technical assumptions and shallow jurisdictional considerations. Such research-based policy formulation is risky in

nature. The research work puts forth a case that more interdisciplinary and temporally sensitive studies need to be stipulated and financed by policymakers.

3. **Methodological Implications:** The work contributes to a vindicated framework for interpreting the composite character of methodological issues in tech law. It provides a precise roadmap to the creation of new research paradigms, teaching aids, and academic rewards that can facilitate fluency, dexterity, and collaboration, and which ultimately can enhance the rigor and effectiveness of the whole field.
4. **Professional Implications:** This study confirms the experiences of legal academics, in general, and early-career academics, in particular, giving them a language to explain their experiences and the challenges they face. It suggests that the systemic changes that should be made to the practices of hiring, tenure review, publishing, and graduate education are required to help promote and compensate the type of interdisciplinary and nimble scholarship that the AI era requires.

6.2. Limitations of the Study

Although rigorous, this research has several limitations:

1. **Sampling Bias:** The sampling of the survey and interview samples probably over-represents scholars in North American and European institutions and/or those who are already interested in interdisciplinary work. There might be an underrepresentation of the points of view of more isolated scholars or the ones of those from regions where the law of technologies has not been developed yet.
2. **Trust of Self-Reported Data:** The results of the effects of challenges and rates of occurrence are based on perceptions of scholars. To the researchers, these perceptions are reality, but they may happen due to personal confidence, imposter syndrome, or recent negative events.
3. **Temporal Bound:** The case law and analysis of legal scholarship (2019-2023) represent a volatile period in the development of AI. The results are indicative of the difficulties of the pre- and early-ChatGPT era, and the pace of change is such that the particular character of the temporal gap will keep changing.
4. **Generalizability:** The structural issues examined in this study are probably similar to those across technology law; however, this study was specifically on AI regulation. The nature and particular presentation of these issues may vary in other sub-areas such as blockchain or biotechnology law.

6.3. Future Research Suggestions.

This thesis sets several fruitful lines of inquiry going forward:

1. **Intersectional Vulnerabilities:** An independent investigation into the methodological cumulative challenges that scholars in the intersection of more than two identities (e.g., early-career, Global South, female) encounter can contribute to shedding further light on the equity aspects of this crisis.
2. **Framework Development and Testing:** The next large step is to operationalize the results of this study through the formulation of a practical, flexible research framework to alleviate these structural obstacles. This framework is then to be tested empirically using pilot research projects, and also tested on its effectiveness in enhancing the outcome of the research.
3. **Pedagogical Research:** A study of the future should examine how such lessons can be incorporated into law school curricula and into PhD training. What is the pedagogy of the next generation of law scholars of AI? What are the ways to train legal scholarship methods, agile, interdisciplinary, and anti-obsolescent?
4. **Longitudinal Analysis:** A follow-up study 3-5 years later would be priceless to determine whether the methodological crisis is only worsening or new practices and frameworks are starting to form to meet the issues that are found in this research. This would assist in gauging the effects of this research and other researchers on the development of the field.

Sectoral Analysis: Studies might examine how the issues of AI law relate to structural issues in other areas of fast-moving technology (e.g., neurotechnology, quantum computing) to detect patterns and differences in their complexity. This may result in a generalization of the legal research methodology of disruptive technologies.

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