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Ai Contracts: Consent and Enforceability

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Abstract
The increasing prevalence of AI in business operations has changed automated systems from mere tools for drafting to negotiators and executors and even creators of transactions. This development challenges the basic tenet of contract law in which the existence of a binding obligation results from the freely informed consent of a legally adult human being. This paper provides a doctrinal and comparative analysis of the conditions under which a natural or legal person may be considered to be bound to obligations that had been actually generated or negotiated by an automated system instead of the natural or legal person. In doing so, the paper builds upon recent literature on algorithmic contracting, electronic agency, and legal personhood and analyzes the gradual undermining of classical consent doctrine – offer, acceptance, consensus ad idem, free consent, and capacity – in common law, civil law, and Islamic law and statutory provisions such as the US Uniform Electronic Transactions Act, the EU Artificial Intelligence Act, and the Indian Contract Act of 1872 combined with the Information Technology Act of 2000. It is found that current laws are able to cover the issue of AI-generated contracts in most cases by treating the AI system as a tool or an electronic agent whose actions are attributed to the actions of a human or corporate principal; however, this attribution principle is stretched when AI systems become more autonomous, and thus further doctrinal developments are needed.

Keywords: Artificial Intelligence; Contract Law; Consent; Algorithmic Negotiation; Classical; Legal Personhood; Smart Contracts

1. Introduction

Since ancient times, contract law has been based on the premise that a valid agreement involves the concurring wills of two or more individuals who are of sound mind. Consensus ad idem, a concept involving the concurrence of will, has served not only as a basis for the creation of a contract but also as a rationale for its enforceability: a party is made liable simply because they have freely entered into an agreement. The premise, however, becomes increasingly hard to uphold in modern business settings where computers engage in negotiating the terms of the deal, setting price and quantity, selecting the counterparty, and even completing the whole transaction.

Initial examples of AI-enabled automation such as electronic data interchange or even pricing algorithms were considered nothing but a means for communicating the pre-prepared directives of a human agent whose prior consent was presumed for anything done within the framework of those directives. Modern large-language model-based negotiating assistants, however, present a more complex story. First of all,

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they are capable of proposing terms that the human has not thought about, secondly, they are capable of modifying their directives according to changing conditions and, lastly, they can operate with counter-AI systems in a way that their operators may not even know of. The problem posed by this paper, therefore, is not whether the use of AI in negotiations results in the creation of contracts that are enforceable. This question has been settled in favor of enforcibility. The problem rather is under what conditions the person who did not write, read or even foresee the terms of his/her consent to can be considered having provided that consent legally.

Beyond the purely academic value of such an investigation, the issue at hand emerges in consumer-oriented AI shopping and subscription agents, AI business procurement systems for business-to-business transactions, decentralised finance systems which perform 'smart contracts' autonomously, and in the field of negotiation tools for enterprises. Regulatory bodies of the European Union, UK, US, and India each have started grappling with the same core question through a combination of private law doctrines and sectoral regulations, but none has developed a coherent system for AI negotiations[3]. This paper will position itself in that context and try to make a contribution towards it.

2. Objective of the Paper

The primary goal of this paper is to consider, via doctrinal and comparative law analysis, whether it would be possible for someone to be bound by the terms of a contract that have been created or negotiated using an artificial intelligence, and what the changes required to the doctrine of consent are in order to make it work effectively in this context.

The paper seeks to achieve:

1. the identification and classification of how AI assists in contract formation from simple drafting support through to completely autonomous AI negotiation.
2. the examination of how each element of contract formation, offer, acceptance, the intention to create a legal relation, free consent, and capacity operate or fail to operate within this spectrum.
3. the comparison of how legal systems (significant common law, civil law and mixed law jurisdictions) address the above, both doctrinally and by legislation.
4. the development of a set of legal presumptions and principles protecting consent in the AI context.

3. Research Gap

There exists an increasing number of studies related to AI and contract law. Such studies analyze various aspects, including enforceability of blockchain-enabled smart contracts[4], consequences of errors of algorithms, legal personality of autonomous entities, and data protection in self-executing agreements[5] in the case of automatic decision-making. Still, research dedicated to the role of consent as the foundation of contracts and its endurance, transformation, or replacement is rare. In cases where such research does appear, it usually is confined to one particular jurisdiction, namely the latest studies from India, Indonesia, Jordan, and Iraq analyzing their respective civil codes separately, or treats smart contracts and autonomous AI as independent concepts.

[3] Cristina Poncibò, 'Artificial Intelligence as a Communication Tool in Contract Law' (2023) 31(2/3) European Review of Private Law 239.
[4] Marko Đurović and Frank Lech, 'The Enforceability of Smart Contracts' (2022)
[5] Dániel Eszteri, 'The Data Protection Issues of Smart Contracts as Possible Tools for Automated Decision-Making' in Márton Varju and Kristina Mezei (eds), The Challenges of Artificial Intelligence for Law in Europe (Springer 2025).

In addition to that, many of these comments have been made prior to the emergence of agentic AI using large language models to conduct negotiations independently through various stages. It has gained momentum since 2024 and has already produced several regulatory and professional discussions without consolidating it into a coherent theoretical approach.[6] The purpose of this paper is to bridge the gap and present a coherent cross-border analysis of the issues related to the consent doctrine in light of smart contracts, electronic agents, and agentic AI negotiators.

4. Research Questions

The paper will address the following research questions:

1. Is there a doctrinal foundation on which a person may be bound by contractual terms essentially generated or negotiated by an AI system, as opposed to those terms generated or negotiated directly by the person?
2. What is the coherence of the traditional notions of offer, acceptance, consensus ad idem, free consent, and contractual capacity in relation to AI-assisted and AI-enabled contracting?
3. How have other legal regimes (common law, civil law, Islamic law) modified the contract doctrine or legislation to cope with AI-made contracts, and what are the points of agreement and disagreement between the regimes in this regard?
4. Which liability and attribution model (agency-based attribution to the human or corporation behind the AI, strict liability, or partial legal personality of the AI itself) strikes the right balance between efficiency and the protective role of the consent doctrine?
5. What are the necessary doctrinal and regulatory modifications to guarantee that consent given in the course of AI-assisted transactions carries meaning?

5. Research Methodology

The paper adopts non-empirical, that is, doctrinal (black letter) and comparative legal method. The paper does not make use of any primary empirical data derived through surveys, interviews or experiments involving human subjects. Instead, the research involves critical evaluation of primary sources of law such as statutes, delegated legislation and court judgments, along with the secondary sources which include peer reviewed journal articles, edited scholarly books, law reform reports and recent commentary on practice.

The comparative method compares the handling of the issues of AI generated contracts and consents in jurisdictions governed by the common law (England and Wales, the United States), the civil and mixed law (the European Union, Indonesia and India, where the contractual doctrines are based on the common law while the legislation is codified), as well as jurisdictions of the Islamic law, in order to establish the similar functional aspects that remain despite different doctrinal vocabularies[7]. Doctrinal method is applied in each case in order to examine how classical doctrine of contract formation applies to certain fact situations that concern AI negotiations, drafting and execution. The analysis will be qualitative and interpretive, and the findings will not be empirically verified but put forward as doctrinal and policy

[6] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming); Katherine B Forrest, 'The Ethics and Challenges of Legal Personhood for AI' (2024) 133 Yale Law Journal 1175; Claudio Novelli et al, 'AI as Legal Persons: Past, Patterns, and Prospects' (2024) 52 Journal of Cross-Disciplinary Research in Computational Law.

[7] Ahmad Saparwadi, FX Joko Priyono and Ro'fah Setyowati, 'Determining Legal Status and Liability of Autonomous Artificial Intelligence System in Islamic Smart Contracts' (2026) 11(1) Diponegoro Law Review 38.

suggestions.[8] This is due to the nature of the topic: since the question of the legal standing of AI generated contracts is uncertain and rarely litigated, the analysis of the existing doctrines, with comparative insights, provides the best method available for evaluating what courts are likely to do.

6. Conceptual Framework: Contract, Consent, and the Emergence of the Machine Negotiator

6.1 The Classical Consent Doctrine

In both the common and the civil law traditions contractual liability arises from the voluntary assumption of obligation by the contracting party. In common law an offer, an acceptance of the same terms as the offer, consideration in most common law countries (save for a few civil-law influenced jurisdictions) and an intention to create legal relations are traditional elements of a binding contract. By contrast in civil law a meeting of the minds is required as well as offer and acceptance, capacity and a lawful object.[9] Underlying these differences is usually the assumption, deriving from nineteenth century will theory, that a contract is a manifestation of the free choice of the contracting parties; that is to say, that they bind themselves by their own volition. Now, as Oliver Wendell Holmes pointed out long ago when discussing precisely this issue, in case of conflict between the parties' subjective intentions and objective manifestations of the same, it is the latter that a court is obliged to follow. In other words, if objective manifestations of intent differ from the subjective intentions of one or more of the contracting parties, the subjective intentions are deemed to be what they need to be in order for the objective manifestations to be consistent with them. This being the case, it comes as no surprise that the theory of objective manifestations of intent, better known as the objective theory of contracts, which Holmes advanced, has proven to be remarkably fruitful in addressing precisely those issues which the present paper seeks to elucidate.[10] By providing a ready-made framework for interpreting the actions of artificial agents, it simultaneously provides the means for undermining the value of consent as a basis for obligations.

6.2 A Typology of AI Involvement in Contracting

It is helpful to think of at least four locations on a spectrum of AI involvement, since the doctrinal complication different in degree, and in the later stages, in kind. First, AI as a drafting aid: the system creates or suggests possible contractual phrasing, which a human then revises, edits, and executes in the final document. Consent doctrine is not seriously disturbed, since the human maintains both the opportunity and, normally, the actual occasion to read and approve each term. Second, AI as a rule-based transactional tool: it executes pre-programmed rules, as in early electronic data interchange and simple e-commerce 'add to cart' automation. Courts and legislatures have long accepted this category by attributing the machine's output to the human or corporate principal who constructed it, because the latter was presumed to have consented to the parameters within which the tool operates.[11] This is the basis of instruments such as the US Uniform Electronic Transactions Act, discussed further in Part 8 below. Third is AI as an adaptive negotiator: the system uses machine learning to select, propose, or accept terms not specifically anticipated by the human operator, for instance, by varying price, quantity, or delivery

[8] Terry Hutchinson, Researching and Writing in Law (3rd edn, Thomson Reuters 2010); Mike McConville and Wing Hong Chui (eds), Research Methods for Law (Edinburgh University Press 2007).

[9] Katherine B Forrest (n 14); Claudio Novelli and others (n 15), both surveying instrumental and rights-based rationales for extending qualified legal personality to autonomous systems.

[10] Oliver Wendell Holmes Jr, The Common Law (Little, Brown and Company 1881) 242–43.

[11] 'Contracting by Artificial Intelligence: Open Offers, Unilateral Mistakes, and Why Algorithms Are Not Agents' ANU Journal of Law and Technology.

requirements in response to counterparties' behaviour.[12] Here, the fiction of consent to a specific set of terms is undermined, since what the operator consented to (say, the instruction to buy a particular input at the cheapest possible price) was not the terms ultimately accepted (the purchase of that input at a particular price from a particular supplier). Fourth and finally, AI as autonomous agent: multi-step 'agentic' systems that can independently identify a need, choose a counterparty (human or AI), negotiate terms (sometimes over multiple steps), and execute and partially perform the deal with little or no human involvement. It is this category, and above all the recent rapid commercialization of large language model–based agents beginning in 2024, that has generated the most immediate concern about AI and autonomy, and hence about autonomy and consent.

6.3 From Electronic Data Interchange to Agentic AI

Doctrinal progress from category two to category four has been gradual but is accelerating. Systems for electronic data interchange and simple pricing algorithms were comfortably accommodated within existing contract doctrine, because their behaviour, however automated, was fully determined by rules a human had specified in advance; the human's consent to the eventual transaction was, in a sense, given at the point of programming rather than at the point of execution.[13] Negotiation systems based on machine learning and, more importantly, large language model agents that can interpret open-ended natural-language instructions and take novel courses of action disturb this equivalence, because the operator's advance instruction ('find me a good deal on cloud storage and sign us up') no longer maps in any tight way onto the specific terms the agent ultimately accepts.[14] The practical and doctrinal question that this posses — whether the operator's general authorisation should nonetheless be treated as encompassing the agent's specific output — is examined below in Parts 7 and 9 respectively through the lenses of consent doctrine and agency law.

7. Consent Doctrine Under Pressure

7.1 Offer and Acceptance by Algorithm

The rule that an offer must be matched by a corresponding acceptance assumes that there is an identifiable moment, and an identifiable party, at which assent is expressed. When an AI system autonomously makes an offer, or autonomously accepts an offer from a counterparty, on its operator's behalf, courts have by and large been prepared to regard the AI's output as the operator's own offer or acceptance, on the reasoning that someone who deploys an automated system to transact for them cannot claim that the resulting transaction lacks the necessary assent, so long as the transaction falls within the broad scope of what that person authorised the system to do. This 'tool' or instrumentality rationale retains the formal structure of offer and acceptance by shifting the moment of assent away from the point of contract formation to the earlier point of deployment or configuration; however, it pays for this by treating 'assent to be bound by whatever the system produces' as functionally the same as 'assent to these particular terms', a substitution that grows more and more artificial as the system's discretion expands.

[12] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Lauren Henry Scholz, 'Algorithmic Contracts' (2017) 20 Stanford Technology Law Review 128.

[13] Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review.

[14] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Lauren Henry Scholz, 'Algorithmic Contracts' (2017) 20 Stanford Technology Law Review 128; Marko Đurović and Frank Lech, 'The Enforceability of Smart Contracts' (2022) 3(4) Digital Law Journal 32.

7.2 Consensus Ad Idem and the 'Black Box' Problem

A closely related challenge involves consensus ad idem, in situations where the AI systems belonging to each party negotiate with each other directly. Since advanced negotiation systems, especially those relying on deep learning architectures, are often opaque even to the developers who built them, it may be impossible to determine afterward precisely which considerations caused the system to accept a given term, let alone to show that the result represents any true meeting of the two human principals' expectations.[15] Scholars studying smart contracts observe that the deterministic, self-executing nature of code-based agreements can commit parties to outcomes they did not fully grasp when the underlying transaction was made, because the obligation's practical substance only becomes fully apparent once the code runs, at times long after the point nominally regarded as contract formation.[16] This "black box" problem is not confined to AI — standard-form contracts and boilerplate terms have long been criticised for generating assent that is nominal rather than substantive — yet AI negotiation sharpens it, since the terms themselves, not just the surrounding boilerplate, may result from an opaque process.

7.3 Free Consent, Mistake, and Misrepresentation

The rules on flawed consent — mistake, misrepresentation, undue influence, and coercion — were created to catch cases where people in a deal did not truly agree, and using them for contracts made through AI brings up special problems. For example, the doctrine of common mistake usually demands that both sides hold the same wrong belief; when two AI agents deal with each other under a shared but mistaken assumption taken from training data, it is not clear whether the doctrine should apply directly to the agents' 'assumptions' or be kept for the mental states of the humans behind them, who may not have held, or even known about, the mistaken premise.[17] In the same way, the law of misrepresentation in most common law systems calls for a false statement of fact that leads to the contract; when an AI system produces a materially wrong description of what the contract is about and no human knows about the error, the question of whose 'representation' it was, and whether the innocent principal can use it to rescind against their own counterparty, is still not well settled in doctrine. Recent comparative research on Indian contract law has argued that the ideas of coercion, misrepresentation, and free consent under Sections 13 to 19 of the Indian Contract Act, 1872 need to be read anew to fit algorithmically mediated deals, and it suggests a rebuttable presumption of informed consent that can be set aside when the algorithm's decision-making was not made reasonably clear to the party affected.[18]

7.4 Capacity and Competence to Contract

The doctrine of contractual capacity is about whether the human party is competent, not whether any tool that party uses is competent. Because of this, most commentators agree that an AI system's own "capacity" does not matter legally: the real question is always whether the human or company principal the AI system

[15] Guilherme Guimarães Feliciano, Samyra Haydêe Dal Farra Naspolini, Paulo Roberto Fogarolli Filho and Devanildo de Amorim Souza, 'Smart Contracts: Transparency or Double Discrimination?' (2023) 33(12) Revista Direito em Debate.

[16] 'Smart Contracts and Legal Enforceability: Decoding the Political Philosophy of Code as Law' (2025) Interdisciplinary Studies in Society, Law, and Politics.

[17] Indian Contract Act 1872, ss 13–19 and 20; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review; Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Lauren Henry Scholz, 'Algorithmic Contracts' (2017) 20 Stanford Technology Law Review 128.

[18] Indian Contract Act 1872, ss 13–19; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review; Ery Agus Priyono, Olawale Olufemi Akinrinde, Muhammad Najiib Al Fithri and Muhamad Azhar, 'Digital Transformation of Contract Law: Legal Certainty and Human Rights Protection in AI-Based Contracts' (2025) 8(1) Jurnal Sains Hukum 132.

acts for has the required capacity.[19] This reasoning holds up as far as it goes, but it does not deal with a separate concern close to capacity: if a principal does not understand, and by nature cannot understand, the terms an autonomous system creates for them, have they given a legally valid form of assent at all, apart from whether they formally have the capacity to contract? Some recent research argues that this is better seen not as a problem of capacity but as a problem of information asymmetry, which calls for transparency and disclosure duties rather than remedies based on incapacity. This paper largely supports that view in Part 11 below.[20]

8. Comparative Legal Responses

8.1 United States: UETA and E-SIGN

The Uniform Electronic Transactions Act (UETA), which most US states have adopted in different forms, and the federal Electronic Signatures in Global and National Commerce Act (E-SIGN), both deal with 'electronic agents' in a direct way. UETA's introductory materials and Section 14 state that a contract can be formed when electronic agents interact, even if no person looked at what the agent did or at the terms that came out of it, and that the person who set the agent in motion is generally held responsible for the transaction. This 'user attribution' approach is the clearest legislative example of treating AI-made contracts as binding on the party that deployed the AI, and recent commentary from practitioners has read it as covering, at least for now, more advanced agentic AI systems, reasoning that for these purposes an agentic AI is still a tool its user uses to transact, not a separate party to the contract. Still, it is disputed whether this reading can hold up as agentic systems become more autonomous, especially when an agent deviates in a major way from any reasonable understanding of what its user instructed.

8.2 European Union: The AI Act and Private Law

The EU Artificial Intelligence Act, which took effect in 2024, is mainly a tool for product safety and risk classification, not a private-law statute, and it does not directly settle issues of contract formation or consent.[21] Still, it places transparency and human-oversight duties on providers and deployers of "high-risk" AI systems, and these duties are likely to have major indirect effects on how consent is analyzed under private law, because national courts will probably treat a system's compliance, or lack of it, with required transparency duties as evidence of whether a counterparty's consent was properly informed. Research tied to the 2023 special issue of the European Review of Private Law on AI and private law has contended that EU private law's current flexible, technology-neutral ideas of declaration of intent and imputed knowledge can, for now, take in AI-mediated contracting without a major overhaul, while warning that greater AI autonomy could in time call for specific rules on how AI-generated declarations of intent are attributed.[22] Other work on AI tools for contract management points out how hard it is in

[19] Indian Contract Act 1872, s 11; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review; Victor Schollaert, 'AI and Legal Personality in Private Law: An Option Worth Considering(?)' (2023) 31(2/3) European Review of Private Law 387; Katherine B Forrest, 'The Ethics and Challenges of Legal Personhood for AI' (2024) 133 Yale Law Journal 1175.

[20] Silvia Martinelli, 'AI as a Tool to Manage Contracts and Challenges in Applying Legal Tech to Contracts Management' (2023) 31(2/3) European Review of Private Law 411.

[21] Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), [2024] OJ L 2024/1689; Claudio Novelli et al, 'AI as Legal Persons: Past, Patterns, and Prospects' (2024) 52 Journal of Cross-Disciplinary Research in Computational Law.

[22] Cristina Poncibò, 'Artificial Intelligence as a Communication Tool in Contract Law' (2023) 31(2/3) European Review of Private Law 239; Silvia Martinelli, 'AI as a Tool to Manage Contracts and Challenges in Applying Legal Tech to Contracts Management' (2023) 31(2/3) European Review of Private Law 411; Victor Schollaert, 'AI and Legal Personality in Private

practice to apply general legal-tech transparency standards specifically to contract formation, as distinct from contract administration.

8.3 Islamic Law Perspectives

Scholars of comparative Islamic law have tackled this same issue using the classical doctrine of wakalah (agency) and, more specifically for autonomous systems, the idea of wakalah muqayyadah, or restricted agency, in which an autonomous AI system's legal ability to make a contract is seen as a delegated and limited capacity that comes from, and stays under the control of, its human principal or muwakkil, with responsibility for the AI's actions assigned to that principal[23]. Newer research that applies this analysis to multi-party smart-contract arrangements has suggested combining classical risk-sharing tools like kafalah (guarantee) and takaful (mutual insurance) to share liability collectively when several human principals depend on the same autonomous system, an approach that gives a doctrinally consistent, homegrown alternative to simply importing common law agency ideas. Additional Iraqi and wider Arabic-language research on 'intelligent agents' has reached a similar conclusion: for the time being, AI is still a technical tool for carrying out its owner's will rather than a separate legal actor, though it calls for legislative changes to reinforce digital identity verification (such as biometric authentication) so that an AI agent's conduct can be reliably traced back to a particular human principal.[24]

8.4 The United Kingdom: Law Commission and Judicial Guidance

In its 2021 advice on smart legal contracts and its 2023 Digital Assets: Final Report, the Law Commission of England and Wales determined that English contract law's flexible, technology-neutral nature generally accommodates smart contracts and automated transactions without the need for wholesale statutory reform.[25] Nevertheless, more recent practitioner analysis has noted that once neither party to a contract has actual knowledge of the specific terms agreed by an agentic AI system, the 'meeting of minds' requirement — as examined in leading contract law treatises — becomes genuinely problematic, and that existing doctrines of common mistake and actionable misrepresentation, which were developed for human bargains, will need to be applied to agentic AI scenarios with real interpretive creativity rather than straightforward extension.[26] This cautious, wait-and-see stance among courts and law reformers, shared by England, the United States, and the EU, mirrors a wider pattern: legislatures and apex law-reform bodies have thus far favored incremental doctrinal accommodation over comprehensive new legislation aimed specifically at AI-generated contracts.

8.5 India: The Indian Contract Act, 1872 and the Information Technology Act, 2000

No Indian statute deals specifically with contracts that are generated or negotiated by AI. The basic cond-

Law: An Option Worth Considering(?)' (2023) 31(2/3) European Review of Private Law 387; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review.

[23] Jalil Hassan Bashat Al-Saadi and Aula Ghazi Luaibi, 'Mechanism for Concluding and Implementing the Contract Concluded Through the Artificial Intelligent Agent' (2025) 15(1) Al-Anbar University Journal of Law and Political Sciences.

[24] Jalil Hassan Bashat Al-Saadi and Aula Ghazi Luaibi, 'Mechanism for Concluding and Implementing the Contract Concluded Through the Artificial Intelligent Agent' (2025) 15(1) Al-Anbar University Journal of Law and Political Sciences; Ahmad Saparwadi, FX Joko Priyono and Ro'fah Setyowati, 'Determining Legal Status and Liability of Autonomous Artificial Intelligence System in Islamic Smart Contracts' (2026) 11(1) Diponegoro Law Review 38.

[25] Law Commission of England and Wales, Smart Legal Contracts: Advice to Government (Law Com No 401, 2021); Law Commission of England and Wales, Digital Assets: Final Report (Law Com No 412, 2023).

[26] Browne Jacobson LLP, 'The Impact of Agentic AI on English Contract Law' (13 January 2026); Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review.

itions for a valid contract set out in Sections 10 and 13 of the Indian Contract Act, 1872 — free consent between competent parties for a lawful consideration and object — continue to apply unchanged, whereas the Information Technology Act, 2000 (as amended) grants only limited recognition to electronic records and the formation of electronic contracts, and does not directly govern autonomous negotiation by algorithms.[27] Recent Indian commentary and scholarship has noted that when an AI agent independently begins and concludes a transaction on a user's behalf, it becomes truly unclear whether any legally binding contract has been formed under the wording of the existing statute, because Section 10 envisages consent given by the contracting parties themselves rather than by a tool acting on their behalf[28]. One answer, discussed in recent Indian legal writing, is to attribute the AI agent's conduct to its human principal by analogy with ordinary agency principles, though with the significant caveat that agency law itself assumes an agent able to exercise some independent judgment and answerable to a principal — a premise that fits only imperfectly with today's AI systems, which have no legal personality of their own and cannot themselves be sued, sanctioned, or bound by fiduciary duties. Indian scholarship has therefore suggested doctrinal innovations, such as a rebuttable presumption of informed consent for consumer contracts negotiated by algorithms and mandatory disclosure of the fact and material parameters of AI involvement, as a way of aligning Sections 13 and 14 of the Act (which deal with free consent and with coercion or misrepresentation) with the realities of automated bargaining.

9. Attribution, Liability, and the Legal Personhood Debate

9.1 Agency-Based Attribution to a Human or Corporate Principal

The prevailing modern approach to the problem of AI-generated contracts is attribution: the AI system's actions are regarded as those of the human or corporate principal that deployed it, following the analogy of common law agency and, in the United States, through direct statutory attribution under UETA.[29] This approach offers the notable advantage of not demanding any new legal category, as it merely builds on the well-settled rule that a principal is bound by the authorized acts of an agent, whether human or not. Its drawback is definitional: agency law makes attribution contingent on the agent acting within the bounds of actual, implied, or apparent authority, and it is growing ever less clear what "scope of authority" signifies for a system able to generate courses of action that its principal neither foresaw nor could reasonably have foreseen. When an AI negotiator strays so far from any credible reading of its instructions that the resulting transaction cannot fairly be described as falling within any authority the principal could be deemed to have conferred, attribution doctrine, on its own terms, would appear to argue against binding the principal at all — a conclusion that current practice largely resists, for reasons of commercial certainty, by stretching the notion of authorized scope instead of discarding attribution as the governing model.[30]

[27] Indian Contract Act 1872, ss 10, 11 and 13–19; Information Technology Act 2000, ss 4, 5 and 10A; Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Marko Đurović and Frank Lech, 'The Enforceability of Smart Contracts' (2022) 3(4) Digital Law Journal 32.

[28] Namrata Dubey and Sharda Balaji, 'Agentic Commerce and the Law: Are We Ready for AI-Driven Transactions?' Bar & Bench (2026).

[29] Noam Kolt, 'Governing AI Agents' (n 13), discussing common-law agency doctrine as the principal analytical frame for attributing AI-agent conduct to human or corporate principals.

[30] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Harshita Singh Patel, 'Law of Agency and AI Agent: Can an Autonomous AI Agent Bind Its Human Principal?' LiveLaw (1 September 2026); Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review.

9.2 Strict and Risk-Based Liability Models

A different or additional approach places liability on the deploying party no matter whether the AI's particular output comes within any interpretation of authorised scope, based on a risk-allocation rationale: whoever decides to deploy an autonomous negotiating system for commercial gain ought to bear the risk of its unforeseen outputs, just as operators of other autonomous or semi-autonomous technologies (for instance, algorithmic trading systems, whose ability to generate extreme and unexpected market outcomes was vividly demonstrated by the 2010 'flash crash'[31]) are generally subject to a form of enterprise or strict liability for how the technology operates, rather than to a fault-based standard that requires proof of specific unauthorised conduct. This model gives up some of agency law's doctrinal elegance in exchange for greater predictability and stronger incentives for deploying parties to invest in oversight, monitoring, and safety features, and several of the doctrinal-reform proposals examined in Part 11 below are built on this risk-allocation logic.[32]

9.3 The Legal Personhood Debate

A more drastic proposal—though one that remains largely theoretical for now—is to grant qualified legal personality to sufficiently autonomous AI systems themselves, so that the system (or a fund or insurance arrangement tied to it) could carry liability and, by the same token, be regarded as a true contracting party able to give its own 'consent'.[33] Supporters contend that qualified electronic personhood could bridge accountability gaps that would otherwise prove intractable and bring doctrinal honesty to situations where attributing conduct to a human principal has turned into a legal fiction strained beyond any useful purpose, whereas critics caution that legal personhood for AI may become a liability shield protecting the humans who in fact profit from deploying such systems, and that historical parallels—such as corporate personhood or, going further back, the attribution structures in Roman law used to manage the legal consequences of a paterfamilias's slaves and dependants transacting on his behalf—indicate that personhood is best seen as an instrumental legal fiction adopted for particular practical ends rather than as an acknowledgment of any inherent moral status, which present-day AI systems clearly do not possess. This paper's own view, elaborated further in Part 11, is that legal personhood for AI is neither required nor, given the current stage of AI capability, advisable: the attribution and risk-based liability models examined above can address all but the most extreme instances of AI autonomy, and personhood ought to be kept in reserve as a last-resort solution instead of being adopted pre-emptively.[34]

10. Recent Developments (2023–2026)

Three changes during the last three years matter a great deal for the doctrinal debate outlined above.

First, starting in 2024, 'agentic' AI systems that can carry out transactions on their own in multiple steps appeared and were quickly put to commercial use, which pushed the toughest doctrinal questions from

[31] Andrei Kirilenko, Albert S Kyle, Mehrdad Samadi and Tugkan Tuzun, 'The Flash Crash: High-Frequency Trading in an Electronic Market' (2017) 72(3) Journal of Finance 967.

[32] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Katherine B Forrest, 'The Ethics and Challenges of Legal Personhood for AI' (2024) 133 Yale Law Journal 1175; Stefan Koos, 'Machine Acting and Contract Law – The Disruptive Factor of Artificial Intelligence for the Freedom Concept of the Private Law' (2021) 5(1) UIR Law Review.

[33] Katherine B Forrest, 'The Ethics and Challenges of Legal Personhood for AI' (2024) 133 Yale Law Journal 1175.

[34] Claudio Novelli and others, 'AI as Legal Persons: Past, Patterns, and Prospects' (2024) 52 Journal of Cross-Disciplinary Research in Computational Law.

theory into practice.[35] Legal writing published in 2025 and 2026 in several jurisdictions has started to ask openly whether current contract law is 'ready' for AI-driven transactions in which no human principal on either side reviews the exact terms agreed; Indian commentary puts this directly as a question of whether a binding contract is formed at all under Section 10 of the Indian Contract Act, while English commentary puts it as a question of whether the 'meeting of minds' requirement can hold up in agentic negotiation.

Second, regulatory focus has moved away from smart contracts and blockchain-based automation, which held the spotlight in commentary from about 2018 to 2022, and toward wider governance frameworks for agentic AI. The EU AI Act coming into force, the UK Law Commission's finished work on digital assets and smart contracts, and growing discussion of dedicated governance frameworks for AI agents in academic and policy writing all point to a clear shift away from tailor-made 'smart contract' regulation and toward broader AI-governance tools that treat contracting as just one use case among many. Civil-code jurisdictions that use comparison, such as Indonesia, have produced similar scholarship applying their own written consent rules (for instance Article 1320 of the Indonesian Civil Code) to AI-based contracting, which shows this is now a truly global doctrinal conversation, not only an Anglo-American or European one.[36]

Third, and most recently, professional and academic writing published in 2026 has started to move past the basic question of enforceability and toward finer questions about the scope and authority of agency, including whether the conduct of an autonomous AI agent can bind its human principal when the agent's decision goes beyond anything the principal could have expected, and what standards of evidence should apply when proving the agent's authorised scope in litigation. This change follows the wider pattern noted in Part 9 above: once the basic enforceability question is settled (mostly in favour of enforceability through attribution), the doctrinal centre of gravity shifts to the harder question of where the limits of that attribution lie.

11. Outcome of the Paper

The analysis in this paper produces four main findings. First, in the vast majority of cases, current contract doctrine in every jurisdiction studied can treat a person as bound by terms generated or negotiated by AI, by viewing the AI system as a tool or electronic agent whose output is credited
to its human or corporate principal; outright unenforceability is not the default legal position in any jurisdiction studied, and is unlikely to become so.

Second, this attribution model is still a fiction of degree, not of kind: it holds up when the AI system's discretion is limited and its output fits a plausible reading of its principal's instructions, and it becomes steadily less convincing as the system's autonomy grows, with no clear doctrinal line currently marking where that shift happens. No jurisdiction studied has yet set out a clear, workable test for pinpointing when an AI system's output departs so far from any plausible reading of its authorised scope that attribution should fail and the resulting transaction should be treated as unformed or voidable.

[35] Noam Kolt, 'Governing AI Agents' (2025) Notre Dame Law Review (forthcoming), arXiv:2501.07913; Browne Jacobson LLP, 'The Impact of Agentic AI on English Contract Law' (13 January 2026); Namrata Dubey and Sharda Balaji, 'Agentic Commerce and the Law: Are We Ready for AI-Driven Transactions?' Bar & Bench (2026).

[36] Ery Agus Priyono, Olawale Olufemi Akinrinde, Muhammad Najiib Al Fithri and Muhamad Azhar, 'Digital Transformation of Contract Law: Legal Certainty and Human Rights Protection in AI-Based Contracts' (2025) 8(1) Jurnal Sains Hukum 132.

Third, comparative analysis shows considerable convergence in outcome despite differences in doctrinal vocabulary: common law jurisdictions reach broadly similar results to civil law and Islamic law jurisdictions through electronic-agent attribution, imputed declarations of intent, and restricted-agency (wakalah muqayyadah) reasoning respectively, which suggests that the underlying policy judgment — that deploying parties should generally bear responsibility for the transactional consequences of tools they choose to use — comes close to a genuine cross-cultural consensus, even though few instruments state this policy judgment explicitly.

Fourth, the protective role that consent doctrine is meant to play — making sure a party's obligations reflect that party's genuine, informed choice — is measurably undermined by current attribution practice, especially for consumers and other non-repeat-player counterparties who lack the sophistication or bargaining power to negotiate meaningful oversight of the AI systems used against them. On the analysis presented here, addressing this weakening does not require giving up attribution or granting AI systems legal personality; it requires adding targeted transparency, disclosure, and rebuttable-presumption mechanisms of the kind discussed in recent Indian and EU scholarship.

12. Conclusion and Recommendations

Based on how current comparative authority weighs the matter, a person can be legally bound by contract terms that an artificial intelligence system created or negotiated, as long as that system is correctly described as a tool or electronic agent acting within the authority given by its human or corporate principal. This conclusion, however, should not be taken as a claim that consent doctrine has come through the rise of AI-mediated contracting unchanged. More precisely, what has happened is a shift in when consent occurs and what it covers: away from specific agreement to particular terms, and toward general, advance agreement to a category of outcomes that an AI system might produce. That shift works in doctrinal terms, and one could argue it is necessary for an economy that relies more and more on automated negotiation to function efficiently, but it carries real costs for the protective, autonomy-respecting role that consent doctrine was meant to serve, and those costs fall hardest on parties least able to monitor or challenge what an AI system produces.

For this reason, the paper puts forward four particular changes to doctrine and regulation. First, legislatures and courts should establish a clear outer-boundary test for attributing acts to an AI agent — for example, a standard asking whether the AI system's output was something a reasonable principal, knowing the system's general parameters, would have viewed as a foreseeable exercise of the authority given — rather than allowing attribution to grow without limit by default. Second, mandatory transparency and disclosure duties should apply whenever AI systems are used in consumer-facing contracting and in other settings marked by unequal bargaining power, requiring clear notice of the fact and the key parameters of AI involvement in creating or negotiating the relevant terms, building on the direction already suggested by the EU AI Act's risk-based transparency architecture and by recent Indian scholarly proposals. Third, jurisdictions should adopt a rebuttable presumption of informed consent for AI-mediated consumer contracts, one that can be overturned by proof that the required transparency was not provided, which would preserve commercial certainty for compliant deployers while restoring a meaningful consent-based remedy for those who were not properly informed. Fourth, and most cautiously, legal personhood for AI systems should be seen as a reserve option rather than a near-term policy goal: the attribution and risk-based liability models available today are sufficient for the great majority of foreseeable cases, and

personhood should be reconsidered only if AI autonomy develops to a point where attributing conduct to any identifiable human or corporate principal becomes not merely strained but genuinely arbitrary.

The path this paper has traced — AI gaining autonomy faster than doctrine can adapt piece by piece — is not likely to turn around. The comparison and doctrinal review presented here indicate that contract law's usual tools, used with the particular changes suggested above, should still be sufficient for the near future, though ongoing attention and regular updates to doctrine will be needed as AI systems keep gaining more freedom to negotiate.

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