

THE LEGAL NATURE OF AI

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Abstract.

The article examines the theoretical and legal aspects of determining the legal nature of artificial intelligence in the context of the rapid development of digital technologies and the transformation of social relations. It considers the main scientific approaches to defining the place of artificial intelligence within the legal system, issues related to its legal status, the possibility of recognizing it as an independent subject of legal relations, as well as the problems of determining legal liability for actions performed using artificial intelligence technologies. Particular attention is paid to modern models of legal regulation of artificial intelligence, issues of personal data protection, intellectual property rights, and ensuring a balance between the development of innovative technologies and the observance of fundamental human rights and freedoms.

Keywords

artificial intelligence; legal nature; legal status; digitalization; information technologies; legal subject; legal liability; digital law; intellectual property; personal data protection; legal regulation; algorithmic systems.

INTRODUCTION

One fundamental question in business law is whether AI systems can or should be granted **legal personality** - the status of being a subject of rights and obligations akin to a human or corporation. The concept of "*electronic personhood*" gained prominence after the European Parliament's 2017 Resolution on Civil Law and Robotics suggested considering a special legal status for sophisticated autonomous robots. In that resolution, the Parliament floated the idea that "at least the most sophisticated autonomous robots could be established as having the status of electronic persons responsible for making good any damage they may cause" [6]. This provocative proposal sparked extensive debate in legal scholarship and policy circles, raising both theoretical and practical concerns about AI personhood.

MAIN PART

Arguments Against AI Personhood: The dominant view in current scholarship is skeptical of granting AI systems an independent legal personality. Broadly, AI entities - no matter how advanced - are seen as human-made tools or assets, not bearers of rights or duties in themselves. As one comprehensive EU

study put it, “there are no technical, philosophical, or legal considerations that justify considering machines as moral or legal agents”, given that even autonomous, self-learning AI lacks sentience or true free will. In other words, AI systems are **objects**, not subjects - artefacts generated by human intellect, and thence products. Unlike human beings (natural persons) or organizations (legal persons), an AI cannot meaningfully exercise legal rights or shoulder duties; it has no consciousness or social existence to warrant personhood. Critics also warn that creating artificial legal agents could undermine accountability: if an AI were a legal person, human operators or manufacturers might try to offload responsibility onto these entities. The European Economic and Social Committee, for example, opposed the “electronic person” idea, arguing it “would hollow out the preventive remedial effect of liability law” and create moral hazard by encouraging developers to evade liability [6]. Similarly, an expert report for the European Commission in 2019 flatly concluded that “there is currently no need to give a legal personality to emerging digital technologies”, since harm caused by even the most autonomous AI can still be traced back to natural persons or existing companies. This expert group reasoned that any purported “responsibility gap” can be filled by applying traditional liability doctrines – in virtually all cases one can identify a human manufacturer, owner, programmer, or operator who contributed to the risk and can be held accountable. Indeed, the notion of a liability vacuum is largely rejected: legal theory posits that even if an AI’s decision-making is opaque, the law can assign blame to a person under concepts like product liability, vicarious liability, or negligence in design/training of the AI. Granting personhood to the machine itself, on the other hand, could complicate victims’ ability to recover damages (since a robot-entity might have limited assets) and would raise complex new questions (for instance, allowing AI to own property or appear in court). For these reasons, most European and international legal scholars currently view AI personhood as both unwarranted and potentially counterproductive.

Functional personhood and alternative frameworks: While outright electronic personhood is widely rejected in principle, some scholars have explored *functional* or limited-purpose analogies to legal personhood as a tool for managing AI liability. Legal personality is, after all, a flexible fiction that the law sometimes extends to non-humans (e.g. corporations) for practical reasons. A corporation has no mind of its own, yet it is treated as a legal person to facilitate joint enterprise, asset partitioning, and perpetual existence. By analogy, a **controlled legal entity** could theoretically be created around an AI system in specific scenarios to serve as a liability carrier. Proponents of this approach argue that in cases where multiple parties are involved in an AI’s deployment, or where it is extremely difficult to pinpoint fault among various human actors, assigning a legal persona to the AI *as an enterprise* might simplify litigation. For example, a highly complex AI service involving numerous developers and data suppliers could be required to register as a legal entity with its own insurance or funds. That AI-centered entity would then become “the entry point for all litigation, easing the claimants’ position” by giving victims a clearly identifiable defendant [7]. Those who contributed to the AI

(manufacturers, programmers, etc.) could hold shares or stakes in this entity and bear liability in proportion to their involvement, much as shareholders bear the economic risks of a company. In this way, the **corporate analogy** might manage risk and compensation without elevating the AI to the level of a natural person with its own rights. Notably, even scholars open to such functional solutions insist that they should be considered case-by-case and only if clearly necessary. The prevailing sentiment is that traditional legal mechanisms (holding the appropriate human or corporate actor liable) should remain the default, and any novel legal status for AI must *“be justified on a case-by-case basis”* to address specific coordination or attribution problems. In sum, current frameworks stop short of treating AI as true legal persons, instead exploring incremental measures (like mandatory insurance funds or corporate forms) to handle the unique challenges posed by AI without divorcing liability from human oversight.

Given the reluctance to confer personhood on AI, legal systems around the world overwhelmingly treat AI systems as **objects of commerce** - essentially products or services - rather than as independent actors under the law. This classification has direct implications for civil liability: if an AI system causes harm, the incident is analyzed similarly to a defective product or a professional service gone wrong, rather than a “crime” or tort committed by an autonomous agent. A European Parliament study succinctly stated this dominant view: *“All AI applications and machines are products”*, and however autonomous their functions, **they are not legal agents** capable of bearing responsibility for their actions. Consequently, when something goes awry with an AI - whether it’s a physical robot or an algorithmic decision system - liability is typically imputed to the human or corporate actors behind the AI’s design, manufacture, or deployment.

Tort and product liability approaches: In practice, most jurisdictions apply existing tort law principles to AI-related harms. Two major routes are common: negligence-based liability (holding a party at fault for failing to exercise due care in programming, training, or using the AI) and strict products liability (treating the AI system as a “product” that, if defectively designed or manufactured, makes the producer liable regardless of fault). Legal scholarship often highlights products liability as a promising framework for AI. By treating AI systems as products, the law can impose liability on manufacturers for design defects or inadequate warnings, thereby incentivizing safer AI development. As U.S. tort scholar Catherine Sharkey observes, focusing on product defects in AI *“can encourage safer design from the outset... by holding manufacturers liable for avoidable harm”* - much like the approach taken with pharmaceuticals or automobiles [10]. This *deterrence-based rationale* aligns with the view of AI as a product to be made as safe as reasonably possible. Moreover, courts can adapt the flexible principles of products liability to new AI contexts: for instance, if an AI’s algorithmic recommendations cause injury, one might argue the algorithm was an unreasonably dangerous “product” lacking proper safeguards. Indeed, early case law in the U.S. has seen plaintiffs attempt to frame algorithmic harms in product liability terms. In some cases, courts have been willing to entertain such theories - for example, treating social media

recommendation algorithms as products that failed to include safety features, thus potentially holding platforms liable for resulting harms. While the law here is still evolving, these developments reinforce that AI is being analogized to a consumer product or software tool rather than an independent agent.

At the same time, the traditional line between a “product” and a “service” can blur in the AI context. Many AI offerings are cloud-based services or integrated into services (like an AI-driven medical diagnosis tool used by a doctor). In such cases, if something goes wrong, liability may also arise under professional malpractice or contract law rather than product defect. For instance, if a hospital uses an AI system as a diagnostic aid, a patient’s claim for an incorrect diagnosis might be framed as negligence by the hospital or doctor in using the tool, rather than a suit against the AI’s manufacturer. Regardless of this product/service distinction, the key point is that the responsible party is a person or company providing the AI system, not the AI itself. The law views the AI as an instrument - akin to a medical device or a software service - and thus the focus remains on human accountability (e.g. the duty of care of the user or the warranty provided by the seller).

Regulatory adjustments: Recognizing the growing role of AI, lawmakers have begun updating existing liability regimes to ensure AI-driven products and services fit within them. The European Union is a prime example: The EU’s new Product Liability Directive (adopted in 2024) explicitly expands the definition of “product” to include **software and AI systems**, so that people injured by AI malfunctions can bring claims just as they would for traditional products [8]. Recital 13 of that directive even lists “AI systems” alongside software applications as examples of products, underscoring that an AI’s intangible nature is no barrier to product liability. This means an AI provider in the EU can be held strictly liable if their AI product is defective (for example, an autonomous vehicle’s navigation algorithm that contains a flaw causing accidents) - a clear affirmation of the AI-as-product paradigm. Other jurisdictions are taking similar steps. For instance, discussions in U.S. legal circles (including an ongoing project by the American Law Institute) are considering how to clarify products liability and other tort principles for AI, rather than inventing new legal categories. The emphasis in these reforms and proposals is on **adapting existing civil liability frameworks** to the AI era: adjusting evidentiary rules, definitions, or standards of care to account for AI’s complexity, but **not** treating the AI as a legal person or sui generis entity. In short, the **legal nature of AI in civil liability remains that of an item or service** - something produced, supplied, and controlled by legal persons - and current efforts aim to refine how those persons’ responsibilities are defined, rather than to elevate the machine’s legal status.

Jurisdictions around the world largely converge in viewing AI as an object of legal regulation, but there are nuanced differences in emphasis and approach. Below is a comparison of how the European Union, the United States, and Japan approach the legal status of AI and its treatment under civil liability laws.

European Union: The EU has been at the forefront of analyzing AI's legal status, in part due to high-profile initiatives like the 2017 European Parliament resolution on robotics. While that Parliament resolution mused about "*electronic personhood*" for advanced AI, the idea has not translated into any grant of personhood in EU law [6]. Instead, EU policy has decisively treated AI systems as technologies to be regulated and whose risks are to be allocated among human actors. The European Commission's Expert Group on AI Liability (2019) explicitly rejected the need for creating a new legal personality for AI, affirming that even autonomous AI can be dealt with via claims against natural or legal persons (manufacturers, operators, owners) and that any new "*electronic person*" status would raise more problems than it solves. In line with this stance, the EU's legislative agenda has focused on updating liability rules without altering the fundamental subject/object divide. The **Product Liability Directive (PLD)** overhaul in 2024, for example, ensures that victims of AI-caused harm are not left in a legal vacuum by classifying software and AI as products subject to strict liability [8]. Likewise, the proposed **AI Liability Directive** will introduce measures like burden-of-proof easements (e.g. presuming a defect or fault in certain cases) to help injured parties sue companies deploying AI, all while keeping the defendants as those companies or developers, not the AI itself. European scholars also frequently discuss applying existing doctrines such as vicarious liability or agency principles to AI - for instance, treating an autonomous system as akin to an employee or tool for which the employer/user is responsible - rather than imagining the AI as a standalone defendant. In summary, the EU perspective is characterized by *technological realism*: AI systems are treated as powerful but ultimately **instrumental products/services**, and the legal focus is on clarifying which human agent in the AI's supply or usage chain should be liable in tort or contract. Calls to grant AI legal personhood have been set aside in favor of refining human - centric liability frameworks.

United States: The U.S. approach to the legal nature of AI is similarly grounded in existing legal concepts, though it has been less centralized than the EU's. There is no federal robotics or AI act defining AI's legal status; instead, U.S. law is evolving through a combination of state legislation, common-law court decisions, and scholarly guidance. To date, no U.S. jurisdiction recognizes an AI system as a legal person, and there is little appetite in American law for creating a new category of electronic personhood. Instead, debate in the U.S. centers on how to apply **traditional tort law** to AI. Courts addressing AI-related harm have so far treated AI like any other tool or product for which humans might be liable. For example, if a self-driving car controlled by AI causes an accident, the legal cases have targeted the car manufacturer or software developer under product liability or negligence theories, rather than suing the AI agent itself. Academic literature in the U.S. strongly supports this continuity. A recent scholarly trend advocates viewing advanced AI through the lens of products liability: commentators argue that classifying AI systems as products (even if they are software or services) will allow courts to impose strict liability on producers for defects, thus ensuring consumer

protection and incentives for safety. This perspective is gaining influence. Notably, some U.S. courts have already entertained product liability-style arguments for algorithmic systems - for instance, treating a social media platform's recommendation AI as a product that can be defectively designed. While U.S. case law is still in early stages, these developments indicate a judicial willingness to fit AI into familiar liability doctrines (sometimes stretching those doctrines as needed). Additionally, U.S. contract and agency law acknowledge "*electronic agents*" in a limited sense (such as software agents that can form contracts on behalf of humans in e-commerce), but these do not confer the software any personhood - they merely allow the law to recognize that a machine carried out actions for a human principal. Responsibility in such cases still lies with the human parties or businesses. In summary, the U.S. treats AI as **neither person nor enemy, but as a product or instrument**: the emphasis is on holding the creators and users of AI accountable. Efforts like the American Law Institute's project on AI liability (announced in 2024) aim to distill best practices and principles for allocating liability (for example, how to handle the "black box" nature of AI in proving a defect) [5], all within the existing legal framework of tort law. There is currently no serious proposal in U.S. law to give AI systems legal standing - the focus remains practical, ensuring that the **liability regime is robust enough** to cover AI-driven harms via the liability of natural or corporate persons.

Japan: In Japan as well, AI systems are not recognized as legal entities and are dealt with under existing law. Japanese law has no special legal status for AI, meaning an AI cannot sue or be sued, own property, or bear legal duties on its own [9]. If an AI-related incident occurs, one must identify a human or company to hold liable. For instance, Japan's civil liability system would treat an accident caused by an AI-powered robot under the normal rules of negligence or the Product Liability Act (if a product defect is involved). Indeed, Japan's Product Liability Act (similarly to the EU and U.S. rules) allows injured persons to recover from manufacturers for defective products - which would include defective software or robots - without proving negligence. No Japanese statute or court has suggested that the AI itself could be the "tortfeasor." Instead, Japanese courts and regulators emphasize human responsibility. For example, in the context of autonomous vehicles, Japanese law specifies that the *operator (owner) of the vehicle* is liable for accidents, absent proof of lack of negligence. This essentially treats the self-driving AI as part of the car's machinery governed by road traffic liability rules, rather than a driver in its own right. Japanese scholarship and policy discussions also mirror the global skepticism toward AI personhood - the legal discourse focuses on how to apportion liability between developers, users, and others in the AI supply chain (especially given the difficulties of causal proof with opaque AI algorithms), rather than attributing agency to the AI itself. In recent years, the Japanese government has issued AI governance guidelines and is even drafting an AI promotion law, but these stress **human oversight and accountability** for AI outcomes. In sum, Japan's approach is to fold AI into the existing legal **matrix of person, product, and service**: if an AI causes harm, it is legally treated as the product of its human makers or the

activity of its human users. As in the EU and U.S., there is broad agreement in Japan that AI, no matter how intelligent, remains an object regulated by law, not a legal person with its own standing.

CONCLUSION

Across these jurisdictions, there is a clear pattern: AI systems are currently *classified legally as property, products, or tools*, and liability for their actions is imposed on the appropriate human or organizational actors (manufacturers, programmers, owners, operators, service providers). The idea of AI having legal personality – becoming an autonomous bearer of legal rights/duties – is largely rejected as unsound under present technological and legal conditions. The prevailing consensus in legal scholarship is that, at least for now, AI should be “*kept in its place*” as an object of the law. This ensures that **civil liability remains rooted in human agency**: those who design, deploy or profit from AI are the ones who must answer for its risks. While theoretical debates about AI personhood will no doubt continue (especially as AI capabilities advance), lawmakers appear committed to refining existing liability doctrines to address AI’s challenges – rather than inventing a new legal status for machines. The legal nature of AI, in the context of civil liability, thus remains that of a technology governed by human legal persons, not a legal person itself. This approach aligns with both practical compensation goals (ensuring victims can be made whole by deep-pocketed companies or insured parties) and fundamental principles of personhood (reserving that status for entities capable of bearing consciousness, intentions, or public accountability). Future developments – such as extremely advanced “strong AI” with human-like qualities – could revive calls for rethinking this stance. However, under the current dominant view in EU law and abroad, AI is firmly situated as a product or service governed by the law, and humans remain firmly in the legal driver’s seat when it comes to civil liability.

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