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Civil Liability for the Use of Artificial Intelligence in Product Advertising and Marketing in Electronic Commerce

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ABSTRACT

Artificial intelligence (AI) in electronic-commerce advertising and product marketing improves promotional efficiency but creates risks of misleading information, uncertain attribution of liability, and evidentiary obstacles for consumers. This study analyzes civil liability arising from AI-assisted commercial communications and formulates parameters for identifying liable parties and consumer remedies. It employs prescriptive doctrinal legal research, combining statutory, conceptual, and limited comparative approaches. Primary legal materials comprise the Indonesian Civil Code, consumer-protection legislation, electronic-commerce regulations, and Minister of Trade Regulation No. 19 of 2026; secondary materials include legal scholarship and international research on algorithmic marketing. The analysis uses grammatical and systematic interpretation to examine duties, conduct, fault, causation, and loss. The findings show that AI transparency and informational accuracy are already regulated, yet those duties do not dispense with establishing a civil cause of action or proving compensable harm. Sellers, advertising agencies, electronic-commerce platforms, and AI developers occupy different legal positions depending on their functions, contractual relationships, and control over promotional content. The study concludes that consumer protection should be strengthened through a layered model of attribution and the preservation of electronic-advertising evidence, without treating AI as an autonomous legal person or imposing strict liability absent a statutory basis. Clearer correction procedures and further research into court decisions and platform compliance are recommended.

ABSTRACT

Penggunaan kecerdasan artifisial (AI) dalam periklanan dan pemasaran produk pada perdagangan elektronik memperbesar efisiensi promosi, tetapi menimbulkan risiko informasi menyesatkan, kesulitan atribusi tanggung jawab, dan hambatan pembuktian kerugian konsumen. Penelitian ini bertujuan menganalisis konstruksi pertanggungjawaban perdata atas penggunaan AI serta merumuskan parameter penentuan pihak yang bertanggung jawab dan mekanisme pemulihan kerugian. Penelitian menggunakan desain hukum normatif preskriptif dengan pendekatan perundang-undangan, konseptual, dan komparatif terbatas. Bahan hukum primer mencakup KUHPerdata, UU Perlindungan Konsumen, ketentuan perdagangan elektronik, dan Permendag Nomor 19 Tahun 2026, sedangkan bahan hukum sekunder meliputi literatur hukum dan penelitian internasional tentang pemasaran algoritmik. Analisis dilakukan melalui penafsiran gramatikal dan sistematis serta pengujian hubungan kewajiban, perbuatan, kesalahan, kausalitas, dan kerugian. Hasil kajian menunjukkan bahwa kewajiban transparansi serta akurasi informasi AI telah diakui, tetapi tidak otomatis menghapus kebutuhan menentukan dasar gugatan dan membuktikan kerugian. Tanggung jawab penjual, pembuat iklan, platform, dan pengembang harus dibedakan menurut fungsi, hubungan hukum, serta kendali terhadap materi promosi. Penelitian menyimpulkan bahwa perlindungan konsumen dapat diperkuat melalui model atribusi berlapis dan preservasi bukti iklan elektronik, tanpa menganggap AI sebagai subjek hukum mandiri atau menerapkan tanggung jawab mutlak tanpa dasar normatif. Penguatan prosedur koreksi iklan dan pengujian lanjutan melalui studi putusan serta audit platform direkomendasikan.

INTRODUCTION

The use of artificial intelligence (AI) in product advertising and marketing in electronic commerce has changed how businesses generate, communicate, and tailor commercial

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information for consumers. Generative systems can produce advertising copy, product images, synthetic voices, and videos in a short time; recommendation systems can rank products according to users' preferences; and chatbots can communicate offers in language resembling human conversation. These efficiencies simultaneously create risks because apparently convincing messages are not necessarily accurate, and consumers do not always know whether information has been created or selected by humans or machines. Global scholarship identifies synthetic advertising, personalized marketing, and commercial chatbots as three significant developments that require adjustments to consumer protection instruments (Duivenvoorde, 2025). Legal risks arise when AI-generated information does more than attract consumer attention and instead creates mistaken beliefs about a product's benefits, quality, safety, price, or the authenticity of endorsements.

This issue matters because marketing technologies no longer merely display identical information to all prospective buyers. Algorithms can predict purchasing tendencies, match particular messages to particular consumer groups, and optimize persuasive strategies based on behavioral data. These capacities may deepen information asymmetry: businesses know the basis on which messages are selected, whereas consumers often see only the final advertisement or recommendation. Law-and-economics scholarship shows that the use of algorithms in consumer markets can enhance the benefits of commerce while also increasing opportunities for exploitation when individual characteristics are used asymmetrically (Bar-Gill et al., 2023). In digital interfaces, the problem lies not only in the falsity of explicit statements but also in choice architectures that make it difficult for consumers to make reflective decisions. Such practices can undermine consumer autonomy even when consent buttons and transaction mechanisms formally remain available (Brenncke, 2024).

The use of AI also blurs the boundary between permissible creative illustration and misleading product representation. Generative images may add features that goods do not possess; synthetic voices may create an impression of expert endorsement; automated recommendations may claim benefits that cannot be verified; and chatbots may promise return terms that contradict the seller's policies. This problem is not necessarily identical to a physical product defect, because the loss may originate at the pre-contractual stage, before the consumer receives the goods. Research on disclosures of AI involvement shows that consumer responses to AI labels differ depending on the technology's role in producing or placing advertisements (Wu et al., 2025). Another study found that transparency concerning AI use is associated with perceptions of manipulative intent and source credibility in digital promotion (Wortel et al., 2024). These findings reinforce the need to distinguish the duty to disclose the technology used from the duty to ensure the truthfulness of commercial communications.

Indonesia provides an important normative context because electronic commerce has become a major driver of its digital economy. The *e-Conomy SEA 2025* report estimates that Indonesia's electronic commerce gross merchandise value reached approximately US$71 billion in 2025, amid the expansion of video-based commerce, platforms, and artificial intelligence (Google et al., 2025). This figure indicates the scale of consumer–business relationships that depend on digital information, as well as the magnitude of the consequences if synthetic advertisements or automated recommendations repeatedly generate errors. Within this ecosystem, a single advertisement may be created by an agency, processed through a third-party AI service, uploaded by a seller, targeted through platform facilities, and followed up by a chatbot. Loss may arise within the relationship between consumer and seller even though a technical or editorial error originates with another actor. This layered configuration makes identifying the legal basis for civil liability more complex than simply locating the party that first operated the software.

Indonesian positive law already provides basic provisions for protecting consumers against harmful advertising information. Articles 9, 10, and 17 of Law Number 8 of 1999 prohibit various forms of misleading representation and advertising production, while Articles 19 and 20 regulate the liability of businesses and advertising businesses for the consequences of the advertisements they produce (Republik Indonesia, 1999). In electronic commerce, Article 35 of Government Regulation Number 80 of 2019 extends attention to any party that creates, provides

facilities for, or disseminates electronic advertisements, insofar as its duties and involvement meet the elements of that provision (Republik Indonesia, 2019b). These provisions must be read together with the rules on obligations and unlawful acts in the Indonesian Civil Code, because public-law prohibitions and duties do not automatically establish every element of a damages claim in a particular case.

The most consequential regulatory change came with Minister of Trade Regulation Number 19 of 2026 concerning the Conduct of Business through Electronic Commerce, which entered into force on June 8, 2026, and replaced Minister of Trade Regulation Number 31 of 2023. Article 47 affirms that businesses may use AI and are responsible for its use, including through providing information or labels, presenting truthful and accurate product information, establishing internal governance for electronic commerce operators, providing complaint or correction mechanisms, and protecting consumers and personal data (Kementerian Perdagangan Republik Indonesia, 2026). The introduction of this specific norm shifts the focus of the research problem. The issue is no longer merely the absence of rules governing AI use, but how these recognized duties can be constructed as standards of conduct, grounds for attributing liability, and means of redress when advertising information is shown to have harmed consumers.

Previous research provides an important starting point but does not fully address this particular issue. Andreas and Soemartono examined consumer protection against AI-generated advertisements and demonstrated the need to clarify responsibility between businesses and technology developers (Andreas & Soemartono, 2025). A study of digital marketing practices in Indonesia subsequently emphasized algorithmic transparency, personal data, and the urgency of accountable regulation (Datu, 2025). Regarding liability, Zakiyah and colleagues discussed the difficulty of proving fault owing to the *black-box* nature of AI systems and proposed risk-based liability (Zakiyah et al., 2026). Mashuri and colleagues analyzed the attribution of responsibility to system developers, owners, and users under the doctrine of unlawful acts (Mashuri et al., 2026). Meanwhile, Poernomo and colleagues proposed a roadmap for reforming consumer protection in the AI-driven digital economy (Poernomo et al., 2026). These studies provide a theoretical foundation, but the specific relationship between Article 47 of Minister of Trade Regulation Number 19 of 2026, electronic advertising, and civil remedies still requires separate examination.

The research gap therefore lies in the relationship between duties specifically governing AI use, the identification of the parties' roles in the advertising chain, and the legal construction of proof and compensation for consumers. Rules on labeling or advertising accuracy must not be assumed to establish strict liability automatically; conversely, engaging an AI provider cannot automatically excuse a seller from all liability. This study aims to analyze the legal construction of civil liability for AI use in product advertising and marketing in electronic commerce under Indonesian law and to formulate parameters for attributing liability and remedying consumer losses. More specifically, the analysis addresses three interrelated questions: how rules imposing duties in AI-based advertising relate to civil causes of action; how liability is allocated according to actors' roles, control, and legal relationships; and how proof, causation, and forms of redress should be understood when information is produced or processed algorithmically. The study contributes a layered assessment framework that distinguishes preventive duties, causes of action, and proof of loss rather than conflating them.

RESEARCH METHOD

This study adopts a prescriptive normative legal research design. This design is justified by the nature of the questions addressed, namely the relationship among legal provisions and doctrines of civil liability for AI use in electronic advertising, rather than a statistical measurement of the frequency of misleading advertisements or interviews about consumer experiences. Doctrinal research focuses on the structure of legal rules, interpretation, coherence, and the development of arguments concerning the legal consequences of conduct (Hutchinson & Duncan, 2012). This approach has become particularly important following the issuance of Minister of Trade Regulation Number 19 of 2026, because the new norms must be read together with previously applicable regimes governing civil law, consumer protection, and electronic

system operation. The research framework does not presume a legal vacuum as its starting conclusion; instead, it assesses the extent to which existing provisions can be operationalized to evaluate advertisements and promotions generated, edited, targeted, or recommended using AI.

The approaches employed are the *statutory approach*, *conceptual approach*, and *limited comparative approach*. The statutory approach maps rights and obligations under the Indonesian Civil Code, the Consumer Protection Law, the Electronic Information and Transactions Law and its amendments, Government Regulations Numbers 80 and 71 of 2019, the Personal Data Protection Law, and Minister of Trade Regulation Number 19 of 2026. The conceptual approach addresses the distinction between breach of contract and unlawful acts, the elements of fault, causation, liability for the acts of others, and the classification of parties that control AI systems. The comparative approach is used in a limited manner to examine transparency duties under the European Union's AI Act and platform advertising rules under its Digital Services Act as functional comparators, not as norms directly applicable in Indonesia. Doctrinal analysis is used to develop legal propositions open to debate and scrutiny for consistency, rather than to claim facts about law enforcement without judicial decision data (Smits, 2017).

Primary legal materials consist of statutory provisions and relevant authoritative policy texts, while secondary legal materials comprise journal articles, books on methodology and theory, and previous studies of algorithmic marketing, consumer protection, and AI liability. Digital-economy reports are used as contextual data to demonstrate the significance of the subject matter, not as evidence of legal violations. Legal materials were inventoried through searches of official documents and scholarly publications, using criteria concerning their relevance to commercial advertising or marketing, the positions of the parties involved, proof of loss, source reliability, and recent regulatory developments. Findings from international empirical literature are used only to explain potential risks or mechanisms of consumer behavior; they are not converted into claims about the prevalence of violations in Indonesia without verification. No informants or respondents were involved because the study did not collect primary data through interviews, observation, or surveys.

The analytical framework is constructed in three stages. First, the researcher identifies relevant conduct in AI-based advertising—production, claim verification, publication, personalization, recommendation, and complaint follow-up—and relates each activity to the respective party's legal duties. Second, each configuration is examined under contractual or unlawful-act causes of action, including the nature of loss, the proximity of the causal relationship, and the possibility of proving fault. Third, the study formulates parameters for attribution and redress that distinguish direct liability, liability arising from a controlling function, and recourse relationships among businesses. The analysis employs grammatical, systematic, and cautiously applied teleological interpretation; teleological interpretation is not used to create new forms of liability unsupported by positive law. The role–duty–risk–remedy matrix is an analytical instrument developed specifically for this study, not an interview instrument or a quantitative measure claimed to have been validated.

Research integrity is maintained by verifying statutory texts, tracing the origins of publications, clearly distinguishing legal norms, scholarly opinions, hypothetical illustrations, and the author's arguments, and refraining from presenting illustrations as actual court cases. No human participants were recruited and no individual personal data were collected; accordingly, participant consent and interview-related risk assessment are inapplicable. The study is limited by the absence of a systematic analysis of all judicial decisions and by the lack of a technical audit of any particular AI model. Its results therefore comprise doctrinal arguments and prescriptive recommendations that should be tested further through case-law studies, audits of platform providers' compliance, and empirical research into consumers' experiences of proving their claims. These limitations do not diminish the capacity of normative research to clarify standards of duty, coherence among legal provisions, and the most defensible legal constructions.

RESULTS AND DISCUSSION

Attribution of Liability among Sellers, Advertising Businesses, Platforms, and AI Developers

Attribution of liability is the most important stage once the legal basis for a duty has been identified. In electronic advertising, a single promotional item may originate from a seller's instructions, be drafted by an agency using a generative application, be edited by marketing staff, and be distributed through a platform's advertising service that performs automated segmentation. Each actor occupies a different position in relation to the claims and the means by which they influence consumers. Identifying potential defendants must therefore begin by mapping conduct, not by searching for a single "AI owner" presumed to bear all consequences. A control-based attribution model asks who determines the message's purpose, who has access to factual product information, who approves the final version, who decides on publication, and who can halt distribution upon discovering inaccuracies. A function-based approach helps avoid two extremes: absolving all parties because the system operates automatically, or imposing equal liability on all parties without proof of fault and causation.

Sellers occupy a central position in transactions because they generally control essential information about the goods offered, including composition, specifications, availability, prices, warranties, and the limits of permissible benefit claims. Where a seller uses AI to write descriptions or create photographs, reliance on automated services does not reduce the need to verify that claims correspond to the product's actual characteristics. A seller who deliberately enters the instruction "make the product look more luxurious than it really is" and then publishes the result faces a different assessment of fault from a seller who supplies an accurate technical summary but whose system adds a minor, immaterial detail. In both cases, the duty to check must be assessed against a reasonable standard of care in light of the product and its potential harms. The use of AI to promote medicines or products with health implications, for example, warrants closer scrutiny than decorative depictions that do not alter the material characteristics of the goods, while remaining grounded in the applicable sector-specific rules.

Sellers' duties do not arise only after goods have been purchased. Consumers begin forming their intention to transact when they encounter product information controlled by the seller. If an AI recommendation or chatbot is the sole point of communication, the information it provides may influence the choice of size, type of goods, total price, or acceptance of return conditions. A distinction is needed between a chatbot that merely presents alternative products and one that makes a specific warranty promise subsequently relied upon in reaching an agreement. In the latter situation, the conversation may be relevant to interpreting the seller's representations, contractual terms, or statements on which the consumer relied. The contractual implications require examination of the context, the authority of the communication channel, and the existence of agreement; they do not rest on an assumption that every machine-generated sentence is always a binding contractual term. Nevertheless, businesses cannot dismiss the significance of chatbot messages merely by stating that the responses were produced automatically without supervision.

Advertising companies or creative agencies occupy a different position. If an agency merely operates a tool in accordance with copy and claims wholly supplied and approved by the seller, its scope of liability must be assessed in light of its actual professional duties and knowledge of the content's falsity. By contrast, where an agency independently invents efficacy claims, creates synthetic testimonials resembling real customer experiences, or fabricates endorsers without justification, its contribution to misleading content becomes more direct. Article 20 of the Consumer Protection Law and Article 35 of Government Regulation Number 80 of 2019 provide important grounds for assessing the production or dissemination of advertisements. Contracts between agencies and sellers may also include factual verification warranties, final approval mechanisms, prohibitions on using third-party identities, and content correction obligations. However, such internal risk-allocation clauses do not in themselves extinguish consumers' rights to bring claims against legal subjects who meet the statutory grounds for liability.

The use of synthetic voices, faces, or personas reveals risks that are not always encompassed by the seller–consumer relationship. An advertisement may depict a person as endorsing a product when that person has never authorized or provided the endorsement. At least two sets of interests are then involved: those of consumers deceived by a fabricated endorsement and those of the person whose identity was used without justification. Civil analysis must separate these groups' losses because their legal standing, protected interests, and causes of action may differ. An Indonesian study of consumer protection against AI advertisements highlights the use of public figures' likenesses to confer legitimacy on misleading promotions (Andreas & Soemartono, 2025). This study is relevant not because every deepfake automatically gives rise to damages, but because a single item of content may generate several kinds of dispute. In an article focused on consumers, discussion of third-party identity is confined to its effect on advertising truthfulness and consumer trust, rather than expanded into a comprehensive examination of image or likeness rights.

Platform operators, or electronic commerce operators (PPMSE), require a more layered analysis. Under one business model, a platform merely provides sellers with digital storefronts; under another, it also designs recommendations, manages paid advertising, supplies automated description generators, and ranks content that receives consumer attention. The distinction matters because liability should not be determined solely by a company's designation as a "marketplace". Article 33 of Minister of Trade Regulation Number 19 of 2026 establishes obligations concerning unlawful advertisements, including terminating access after such content has been displayed. If a platform receives a complaint supported by adequate information yet continues to display repeated promotions without an appropriate response, that fact is relevant to assessing compliance with its duties. Conversely, a seller's failure to verify product claims is not automatically proof that the platform knew of every inaccuracy before publication.

Research on discrepancies in product descriptions on Indonesian marketplaces shows that platforms' control over transaction mechanisms, moderation, and complaint resolution is relevant to assessing their position in consumer protection. That study still relied on Minister of Trade Regulation Number 31 of 2023; accordingly, its findings must be reassessed in light of Minister of Trade Regulation Number 19 of 2026. For AI-based advertising, the central lesson is that intermediary status does not eliminate the need to examine a platform's concrete duties, but neither does it automatically create liability for every error committed by a seller (Afifah et al., 2025).

The issue becomes more complicated when a platform's recommendation system selects advertisements using consumer behavioral profiles. A seller may supply a single set of accurate basic information, while the platform selects different visual elements or messages for different audience groups based on predicted responses. If automated adaptation subsequently adds claims not supplied by the seller, the inquiry must identify who sets content generation policies, controls the input data, tests outputs, and determines termination procedures. Research on consumer protection under digital platform regimes highlights the importance of understanding layered contractual relationships and platforms' economic interests, rather than treating them as neutral technical intermediaries under all circumstances (Cauffman & Goanta, 2021). Nevertheless, the European Union's governance model cannot be adopted directly as proof of civil liability in Indonesia; it helps identify the platform functions that must be assessed under national law.

Naudts and colleagues argue that optimizing recommendation systems should not exclusively serve the commercial interests of those controlling the infrastructure and data, but should also take users' interests into account. In electronic advertising, this argument helps distinguish platforms that simply provide advertising space from platforms that actively determine audiences, ranking, and the intensity of advertising exposure. Control over such optimization is relevant as an indicator of involvement, although an award of damages still requires a legal basis and proof in the particular case (Naudts et al., 2025).

The distinction between a platform as a facilities provider and as a message producer is also relevant to fully automated advertising features. A platform might offer an "optimize promotion" service through which its system combines photographs, testimonials, and claims

from multiple sources. In a hypothetical case where the application fabricates a quotation never written by a consumer, responsibility for its content cannot be placed solely on the seller merely because the seller paid for the marketing facility. It must be determined whether the seller had an opportunity to review the final version, whether the platform altered materials after approval, and whether the person represented as providing the testimonial has a verifiable identity. Article 32(2) of Minister of Trade Regulation Number 19 of 2026, concerning the display of reviews and testimonials, provides a more specific standard. This analysis shows that knowledge of product architecture and approval workflows constitutes a legally relevant fact in attributing liability, even though normative research does not conduct a technical investigation of a particular platform.

The position of AI model developers or providers cannot automatically be equated with that of sellers or agencies. Developers of general-purpose models typically provide tools suitable for many uses, whereas developers of customized systems may be commissioned to design promotional chatbots connected to particular product databases. With general-purpose models, the link between developing the technology and errors in specific claims may be more remote, especially where users enter false information or operate the system contrary to instructions. Conversely, if a provider contractually warrants factual validation capabilities but fails to deliver the promised function, contractual liability to its business partner may arise. In some situations, the provider's own act or omission that directly breaches a legal duty and harms consumers may also raise questions under the law of unlawful acts. There is, however, insufficient legal basis for declaring all AI developers strictly liable for every false statement in advertising created with their technology.

Distinguishing developers from users requires consideration of the concept of *deployment control*. Research on AI liability frameworks emphasizes that system failures may be associated with design, training, operation, or end use, so attributing responsibility exclusively to one stage may be inadequate (Hacker, 2023). For the purposes of this study, operational control is understood concretely as the capacity to select product data, adjust instructions, reject outputs, determine AI disclosures, preserve logs, and suspend advertisements. Greater control increases the relevance of preventive duties, but is not the sole element of liability because causation and applicable legal norms must also be examined. This approach distinguishes parties that passively benefit from providing a tool from those that use it to shape commercial representations to consumers. It also yields more precise reasoning than invoking business-risk doctrines without explaining the actor's contribution.

Buiten explains that the allocation of liability for AI risks depends, among other things, on producers' and users' capacities to control the system and understand its risks. Although the discussion arises from defective-product liability in a comparative framework, this idea helps examine whether promotional errors originate from AI service design that users cannot reasonably control or from businesses' instructions, verification, and publication decisions. Distinguishing the sources of risk prevents the automatic imposition of liability on developers (Buiten, 2024).

Liability for the acts of others under Article 1367 of the Indonesian Civil Code must be applied cautiously. Employer–employee relationships may differ from those involving independent contractors, software-as-a-service (SaaS) providers, agency consultants, or platforms operating outside the seller's organizational subordination. Consequently, not every outsourcing arrangement automatically satisfies the grounds for liability for another person's acts under this provision. If a company's marketing employee publishes false claims in the course of employment, the company's position may differ from that of a seller purchasing a general software license and then using the software with misleading instructions. Each configuration requires assessment of subordination, assigned duties, and the relationship between the conduct and business activities. If several parties each engage in conduct satisfying the elements of liability, the possibility of naming more than one defendant may be considered; however, joint and several liability cannot be inferred merely from the number of companies involved in the marketing chain.

Risk-transfer clauses in commercial contracts among businesses have an important place but must not be conflated with the consumer's position. In a contract between seller and agency, the parties may agree on claim verification duties, content quality standards, data ownership warranties, liability limitations, and intercompany indemnification arrangements insofar as these are permitted by law. Research on the use of AI in commercial contracts demonstrates the need to incorporate human control, system transparency, and clear allocation of obligations into contractual relationships (Anovanko et al., 2025). If a seller compensates a consumer for an advertisement that was unilaterally altered in a misleading way by a service provider, internal reimbursement may be addressed under a valid contract and proof of its breach. However, internal agreements cannot always be invoked to deny consumers statutory rights, particularly where prohibitions on unfair standard-form clauses apply.

Risk-based liability should be positioned as an option for reform or a principle of evaluation, not presented as though it were already a universal rule in Indonesia. The risks of using a chatbot to recommend decorative jewelry differ from those of recommendations concerning health or safety products, so internal supervision standards may be differentiated proportionately. Nevertheless, stricter supervision standards do not automatically remove all elements of fault and causation from a claim brought under Article 1365. Proposals for risk-based approaches in Indonesian AI scholarship can inform criticism of the difficulty of proving algorithmic fault (Zakiyah et al., 2026). This study treats risk levels as parameters for standards of care and supervisory priorities, whereas a shift to a strict liability regime requires an express normative basis. This position avoids an unjustified conceptual leap from the need to protect consumers to a conclusion that every party in the technology chain must bear unlimited liability.

To assess the allocation of liability, this study proposes a conceptual matrix consisting of four questions. First, does the actor owe a relevant statutory or contractual duty in respect of advertising information? Second, what act or omission occurred during production, testing, publication, audience targeting, or content correction? Third, how closely is that act connected to the misleading claim and the loss for which compensation is sought? Fourth, is there sufficient evidence of the actor's role and level of control to attribute liability? This matrix does not establish an absolute hierarchy in which the seller always comes first, the platform second, and the developer last. The analytical order may vary with the circumstances. Where an advertisement is produced entirely by the seller, the seller's verification duty may predominate; where the platform automatically changes content after approval, the platform's role becomes more significant; and where a function warranted by the technology provider fails, recourse between business partners may become central. The result is an evidence-based assessment of roles, not a determination of fault based on a company's popularity or size.

Comparative regulatory experience reinforces the importance of distinguishing roles without mechanically transplanting foreign norms. The European Union's AI Act requires certain transparency measures from providers of systems interacting with people and requires the disclosure of *deepfakes* by parties deploying such systems within the scope of Article 50 (European Union, 2024). The Digital Services Act regulates aspects of advertising transparency on platforms, including information indicating that content is an advertisement and the main parameters of advertising targeting (European Union, 2022). These instruments illustrate the difference between duties owed by technology providers and those owed by actors using or publishing advertisements; however, neither automatically determines how damages must be proved before Indonesian courts. The comparison therefore confirms the relevance of differentiated roles and accountability standards, rather than asserting that European risk classifications automatically create new categories of legal subject in Indonesian civil law.

The attribution analysis indicates that the most measured solution is to combine specific rules on advertising and AI duties with an examination of each actor's legal relationships and contribution to the conduct. For sellers, the focus is on truthfulness of claims, publication approval, and transactional commitments; for agencies, on professional duties in production and validation; for electronic commerce operators, on involvement in publication, governance, correction, and termination of access in accordance with their duties; and for AI providers, on relevant technical and contractual commitments and their own causally significant conduct. This

approach does not exclude the possibility that several parties may be sued in a particular case, but rejects the presumption that every link in the chain must bear identical consequences. Liability remains grounded in legal subjects and conduct assessable under the law, so AI's technical autonomy becomes neither an excuse for impunity nor a trigger for unlimited liability.

Evidence, Causation, and Remedies for Consumer Losses Arising from Misleading AI-Based Advertising

Civil liability cannot be separated from evidentiary questions, particularly when the advertisement in dispute is no longer visible after a transaction. Personalized advertisements may appear only to a subset of accounts, run for a short period, or be replaced automatically according to user responses. Consequently, courts cannot always compare a public product page with the message actually viewed by the consumer. This limitation is not merely a matter of consumers failing to preserve evidence; digital marketing design itself permits substantial variations in content within a single campaign. Research on *dark patterns* shows that interfaces exploiting behavioral biases can influence consumer decisions in ways that are often difficult to identify by briefly examining a single screen (Luguri & Strahilevitz, 2021). In disputes involving AI-based advertising, the evidentiary questions therefore include which version of the message appeared, when and through which channel it was displayed, who controlled changes to it, and how its content related to the purchasing decision.

The Electronic Information and Transactions Law provides a basis for recognizing electronic information and documents as admissible legal evidence under Articles 5 and 6. Chatbot conversations, electronic offer letters, product pages, transaction metadata, confirmation histories, and automated notifications may, in principle, have evidentiary relevance, provided their authenticity and context are assessed in accordance with the applicable procedural law. Screenshots may help establish that a particular representation was once displayed, but a single image does not necessarily prove when the content was published, whether the image was edited, or how the same material appeared to other users. A careful analysis must connect copies of content to the originating account, webpage address, time, transaction identity, and supporting data that permit verification of information integrity. Electronic evidence does not make every burden of proof straightforward; rather, its digital character demands attention to authenticity, integrity, and relevance between the record and the alleged loss.

Audit trails can help bridge the information gap between consumers and the parties operating systems. Subject to lawful grounds and legitimate retention policies, AI advertising systems should ideally preserve records of source materials, principal prompts, content revisions, approval times, labeling status, moderation results, and complaint histories. Not all such data must necessarily be disclosed in full to claimants, because they may contain other users' personal information, trade secrets, or security parameters. Nevertheless, their existence may help determine whether a misleading claim originated from seller input, AI improvisation, platform adaptation, or a post-publication change. Scholarship on digital evidence in legal systems demonstrates that the increasing use of data trails requires clarity not only concerning the acquisition of evidence, but also about how technologically generated information is processed and interpreted (Custers & Stevens, 2024). That study concerns criminal law and is used here only as limited conceptual support for evidentiary integrity, not as a source of Indonesian civil procedure rules.

When bringing a claim concerning misleading advertising, consumers need to specify the conduct challenged. An allegation that “the advertisement used AI” is insufficient because AI use is itself permitted. A more precise allegation would be that “an AI-generated advertisement stated that the product possessed a particular function when it did not”, or that “the business's chatbot promised a refund guarantee that was subsequently not honored”. Framing allegations in this way distinguishes the fact of technological use from the elements of a legal violation. Where a claim is based on breach of contract, the focus is on binding obligations, non-performance, and its consequences. Where the cause of action is an unlawful act, the analysis focuses on breach of a legal duty, relevant fault or negligence, loss, and causation. Under either approach, identifying defendants must remain consistent with the conduct actually alleged, rather than shifting among

the seller, advertising producer, and platform provider without a clear account of their legal relationships.

Article 28 of the Consumer Protection Law contains a special provision concerning the burden of proving the element of fault in damages claims referred to in that article. This is significant because sellers or businesses generally have greater access to information about production, verification processes, and complaint handling. Nevertheless, the provision must be interpreted according to its scope and statutory cross-references. Placing the burden of establishing the presence or absence of fault on a business cannot be reduced to a claim that consumers need not demonstrate any loss, a connection to the product or advertisement challenged, or the legal basis of their claim. This distinction is particularly important in AI disputes because limited access to algorithms is often invoked to demand a complete reversal of the burden of proof. A more defensible construction is to apply existing evidentiary provisions proportionately while preserving the requirements of causation and other elements of the relevant claim under positive law.

Causation presents particular challenges in personalized marketing. A consumer may view several advertisements, read user reviews, receive friends' recommendations, and compare prices before deciding to buy. If only one of these materials was AI-generated and contained a false claim, the analysis must determine whether that claim was sufficiently material to the decision-making process to be legally connected to the loss. Causation need not be understood mechanically, as though all human choices were entirely determined by a single algorithm; equally, consumers should not lose protection merely because a purchasing decision has multiple influences. Relevant considerations may include the specificity of the claim, its relationship to the consumer's needs, the temporal proximity between exposure and purchase, subsequent communications, and discrepancies between promised information and actual conditions. These criteria are not a quantitative evidentiary formula but indicators for making causal arguments more transparent in judicial examination.

Distinguishing material misrepresentations from minor inaccuracies helps prevent a disproportionate expansion of liability. A synthetic image that improves background lighting is not necessarily misleading as to the goods, whereas an image adding a safety component that does not exist may be highly material. A chatbot's general statement about market trends differs from a specific assertion that particular goods have obtained certification or a warranty they do not possess. Assessing materiality does not negate categorical legal prohibitions, but helps test the relevance of a violation to the loss claimed. Regulatory scholarship on behavioral advertising and recommendation systems shows that AI's effects on consumer autonomy may be gradual and do not always appear as a simple falsehood (Fassiaux, 2023). Civil evidentiary analysis must therefore be sensitive to the context in which information is selected and presented without treating every form of commercial persuasion as unlawful.

Losses must also be classified carefully. Where goods do not correspond to their advertising, economic losses may include the difference between the price paid and the value received, return shipping costs, inspection expenses, or other losses supported by a relevant legal basis and evidence. In certain circumstances, inaccurate product information may also be associated with personal injury or damage to other property. Article 19 of the Consumer Protection Law specifies remedies including refunds, replacement goods or services, and other forms prescribed by applicable provisions, according to the relevant circumstances. However, not every instance of consumer dissatisfaction automatically creates an entitlement to all forms of compensation simultaneously. Claims based on unlawful acts must also specify the categories of loss and the justification for their recovery. Non-pecuniary losses should not be presented as a definite monetary amount merely because a consumer feels disappointed, without explaining the legal basis, circumstances, and evidence capable of supporting that assessment.

Effective remedies must distinguish individual interests from the prevention of further harm. A refund or replacement of goods may resolve some of an individual buyer's losses, but false promotional content that remains online may create new victims. Complaint mechanisms, publication corrections, and termination of access should therefore be regarded as measures that complement—not replace—civil compensation. Electronic commerce operators play an

important role in ensuring that advertising materials known to violate the law do not remain in circulation, subject to applicable legal requirements. An effective enforcement framework enables consumers to request corrections and obtain resolution without immediately undertaking costly litigation. Nevertheless, withdrawing an advertisement does not automatically prove every element of a damages claim, just as refunding the purchase price does not necessarily eliminate the need to correct misleading information still affecting other users.

Dispute resolution mechanisms under the Consumer Protection Law provide options for proceedings both outside and before the courts, subject to applicable requirements. Consumers may complain directly to businesses, use the resolution mechanisms provided by platform operators, or pursue legally recognized channels, including the Consumer Dispute Settlement Agency (BPSK) and civil litigation within the competent jurisdiction. Article 23 of the Consumer Protection Law is relevant where businesses refuse or fail to respond to consumers' compensation claims under Article 19. In AI advertising disputes, readily accessible initial mechanisms are important because the individual loss arising from a single purchase is often smaller than the cost of gathering complex technical evidence. Nevertheless, normative research provides no basis for asserting that a particular BPSK has succeeded or failed in handling AI cases without examining decisions and institutional data. Its normative conclusions are therefore confined to the available legal pathways, potential barriers, and documentation requirements identifiable from the structure of legal duties.

Disputes may also concern the interests of multiple consumers at the same time, especially where an automated campaign displays identical claims to thousands of people. In these circumstances, provisions on claims brought by consumer groups or qualifying organizations may be relevant under Article 46 of the Consumer Protection Law, but their application requires appropriate characteristics of the claims and procedural mechanisms. The scale of algorithmic distribution does not itself prove that every recipient sustained identical losses. Some consumers may never purchase, others may buy for different reasons, and still others may suffer no material loss. Collective approaches therefore still require an explanation of the common central issues and legally identifiable groups of losses. This analysis balances the efficiency of collective redress with the prohibition on estimating victims or compensation amounts through unsupported assumptions.

The evidentiary burden may become heavier where platforms and technology providers control information invisible through consumer interfaces. This information gap exposes the limits of dispute resolution models that merely ask consumers to save screenshots, because records of advertising exposure or content changes may reside entirely on other parties' servers. Recent scholarship on *dark-pattern* regulation highlights that the problems of defining harm, proving manipulative conduct, and ensuring effective enforcement cannot be solved simply by expanding lists of prohibitions; accountability structures are also needed so that digital practices can be evaluated (Yi & Li, 2025). In Indonesia, proportionate recommendations include stronger evidence preservation procedures, campaign identification numbers, records of advertising changes, and lawful, appropriately limited access to evidence. These proposals do not mean that all source code or databases must always be disclosed publicly, but that relevant evidence should be capable of examination while respecting confidentiality and data protection.

Ziosi and colleagues distinguish the AI liability gap from the information gap that prevents injured parties from identifying and proving the source of their losses. In AI advertising disputes, this problem may arise when consumers possess only screenshots while businesses control records of changes to claims, campaign configurations, and advertising delivery data. Strengthening access to relevant evidence should therefore be regarded as a practical prerequisite for civil redress, while continuing to respect personal data protection and lawful confidentiality (Ziosi et al., 2023).

Comparative transparency rules illustrate the value of distinguishing the different types of information that must be disclosed. The Digital Services Act requires platform users to be able to identify content as advertising, know on whose behalf or by whom it is funded, and receive meaningful information about the principal parameters of its targeting (European Union, 2022). Meanwhile, the AI Act's transparency regime addresses direct interaction with AI systems and

the identification of certain synthetic content, particularly *deepfakes*. For this Indonesian study, the relevant lesson is that information stating "this was made with AI", sponsor identity, and the basis for audience segmentation constitute three distinct dimensions. Disclosing technological origin does not automatically establish which seller is liable, while identifying a sponsor does not necessarily reveal that an offer was personalized using profiling. A disclosure model distinguishing these dimensions is more likely to help consumers evaluate messages and identify the relevant parties if a dispute arises.

Transparency must also not become an information burden that consumers cannot meaningfully use. Lengthy warnings about how models work may become mere formalities if they are placed in hard-to-find locations or fail to explain what actually matters to purchasing decisions. Experimental research on AI-generated service advertisements found that disclosures can influence trust and advertising evaluations and that the outcomes depend on the characteristics of the messages displayed (Grigsby et al., 2025). For civil law, the implication is not an obligation to prescribe the single label consumers like best, but the need to provide sufficiently clear and relevant information that does not distract from the truthfulness of claims. In disputes, the availability of a label may be examined as evidence of compliance, while falsehoods concerning product characteristics must still be assessed separately. This approach also prevents labels from becoming disguised liability waivers through statements implying that AI errors are entirely the buyer's risk.

Regional governance guidance can strengthen compliance policies even though it does not have the same legal status as national legislation. The *ASEAN Guide on AI Governance and Ethics* encourages organizations to adapt governance, human oversight, accountability, and transparency to the characteristics and risk levels of AI system use (ASEAN Secretariat, 2024). In electronic commerce, such measures may include testing product claims before publication, appointing a person responsible for content, periodically auditing recommendation outcomes, and establishing mechanisms to trace consumer complaints. The guide must, however, be positioned as a *soft-law* reference and a source of due-care practices, not an independent instrument that invariably gives rise to direct compensation obligations. This distinction is necessary to prevent courts or scholars from treating voluntary governance standards as substitutes for the analysis of binding legal rules. At the same time, governance practices aligned with national duties may provide relevant evidence in assessing whether businesses exercised reasonable care.

The remedial framework proposed in this study operates sequentially. At the first stage, the consumer identifies a particular claim and its discrepancy with reality through evidence of the advertisement, transaction confirmation, and the condition of the goods. The second stage identifies the actors who controlled the claim and their legal duties, including the obligation to correct materials where a platform receives a complaint. The third stage examines the cause of action: non-performance of a contractual obligation, an unlawful act, advertising-business liability, or breach of personal data processing duties. The fourth stage evaluates loss and causation in light of the circumstances and determines the available forms of redress. The fifth stage considers possible internal indemnification relationships among businesses without transferring the entire burden to consumers. This sequence is not intended as a new law of procedure, but as an analytical map that keeps allegations, parties, evidence, and remedies consistent.

A first illustration demonstrates how the framework can operate. A buyer encounters a laptop advertisement featuring an AI-generated image that depicts a particular port and claims a battery capacity inconsistent with the official specifications. The seller uploads the material after receiving a draft from an agency, while the platform makes no changes. If the buyer can prove that the feature was material to the purchase, that the goods received differed from what was represented, and that measurable loss resulted, the seller's liability may be assessed through information duties and performance of the transaction. The agency's liability depends on its role in creating and verifying the claim, whereas the platform's liability cannot be inferred merely from the fact that the material appeared in its application. If, after receiving a report, the platform is required to correct the content or terminate access but fails to do so, this may raise a question

about the platform's duties distinct from the original source of the inaccuracy. This is a hypothetical illustration, not a summary of a court decision.

A second illustration concerns a promotional chatbot stating that a product may be returned without conditions within thirty days, although the contract ultimately displayed provides different terms. The initial analysis must determine whether the chatbot was an official seller channel, how the guarantee was communicated, when the consumer saw the final terms, and whether the valid transaction agreement incorporated that guarantee. If the statement constitutes a misleading representation or conflicts with information duties, the cause of action may go beyond a technical dispute about an "incorrect AI answer". The seller's role as service operator, the chatbot's configuration, the ability to correct known errors, and the existence of actual loss must be examined. The chatbot developer may owe duties to the seller under a service contract, but a direct consumer claim against that developer still requires an independent civil-law basis. This illustration shows why proof of electronic conversations and the separation of consumer contracts from technology service contracts are central to attribution.

A more fundamental question is whether ex ante compliance standards should be strengthened without requiring consumers to conduct unrealistic technology audits. Duties to preview content, preserve versions of advertisements, record corrections, and identify parties controlling outputs can reduce disputes before they arise. If a dispute nonetheless occurs, those measures also produce evidence that may help determine whether the error originated in a seller's claim, an agency's policy, system processing, or failure of a platform's complaint-handling mechanisms. Consumer protection is more effective when prevention and redress are not treated as mutually exclusive alternatives. Nevertheless, recommendations for preserving evidence must be aligned with processing purposes, access restrictions, data security, and lawful retention requirements. This study does not propose indefinite storage of all user interactions, because evidentiary protection cannot justify violations of personal data rights.

CONCLUSION

This study set out to analyze the legal construction of civil liability for the use of artificial intelligence in product advertising and marketing in electronic commerce, drawing on primary legal materials and doctrinal and comparative literature. The analysis demonstrates that Indonesian law already provides several foundations for duties under the Indonesian Civil Code, the Consumer Protection Law, Government Regulation Number 80 of 2019, and especially Article 47 of Minister of Trade Regulation Number 19 of 2026. The central problem is not the complete absence of rules but the need to link duties of AI transparency, accuracy, and oversight to the elements of civil causes of action. Determining liability must take account of conduct, functions, legal relationships, control over advertising content and distribution, and causation of loss; sellers, advertisers, electronic commerce operators, and AI developers do not automatically occupy identical positions of liability. Most importantly, standards governing duties in AI use, grounds for attributing liability, and proof of entitlement to redress must be kept distinct so that operating the technology becomes neither a basis for escaping responsibility nor grounds for imposing strict liability without legal authority.

The study contributes a set of sequential assessment parameters that businesses, consumers, and legal interpreters may use to identify problematic claims, relevant actors, causes of action, evidence, and appropriate remedies consistently. Businesses should prioritize pre-publication verification of claims, meaningful labeling, documentation of content changes, and traceable complaint-handling procedures; policymakers and dispute resolution bodies should clarify the procedures for preserving electronic evidence and coordinating oversight duties. Because this is a normative study that does not examine particular disputes or AI systems, arguments about implementation effectiveness cannot be generalized as empirical findings. Future research should examine judicial decisions, consumer dispute resolution outcomes, and audits of advertising and chatbot mechanisms on platforms so that the proposed parameters can be tested against actual evidentiary practice and the handling of losses.

REF ERENCES

Afifah, A. N. P., Rahmatiar, Y., Abas, M., & Sanjaya, S. (2025). Legal liability of marketplace platform operators for product description violations under Indonesian consumer protection law. Jurnal Cakrawala Hukum, 16(2), 82–96. https://doi.org/10.26905/idjch.v16i2.15604

Andreas, G. F. M., & Soemartono, R. M. G. P. (2025). Legal protections for consumer against advertisements from artificial intelligence. *De Lega Lata: Jurnal Ilmu Hukum, 10*(1), 11–21. https://doi.org/10.30596/dll.v10i1.22275

Anovanko, U. B., Wijaya, A., & Nugraha, S. (2025). Implikasi hukum perdata terhadap penggunaan kecerdasan buatan (AI) dalam kontrak komersial. *Innovative: Journal of Social Science Research, 5*(2), 3637–3653. https://doi.org/10.31004/innovative.v5i2.18718

ASEAN Secretariat. (2024). *ASEAN guide on AI governance and ethics*. https://asean.org/book/asean-guide-on-ai-governance-and-ethics/

Bar-Gill, O., Sunstein, C. R., & Talgam-Cohen, I. (2023). Algorithmic harm in consumer markets. *Journal of Legal Analysis, 15*(1), 1–47. https://doi.org/10.1093/jla/laad003

Brenncke, M. (2024). A theory of exploitation for consumer law: Online choice architectures, dark patterns, and autonomy violations. *Journal of Consumer Policy, 47*, 127–164. https://doi.org/10.1007/s10603-023-09554-7

Buiten, M. C. (2024). Product liability for defective AI. European Journal of Law and Economics, 57, 239–273. https://doi.org/10.1007/s10657-024-09794-z

Cauffman, C., & Goanta, C. (2021). A new order: The Digital Services Act and consumer protection. *European Journal of Risk Regulation, 12*(4), 758–774. https://doi.org/10.1017/err.2021.8

Datu, M. A. A. (2025). The urgency of legal regulation on the use of artificial intelligence in digital marketing practices in Indonesia. *JIHAD: Jurnal Ilmu Hukum dan Administrasi, 7*(4). https://doi.org/10.58258/jihad.v7i4.9718

Dineva, D., & Acar, O. A. (2026). Generative AI disclosure in advertising: From intent- to production-based disclosure. Journal of Advertising. Advance online publication. https://doi.org/10.1080/00913367.2026.2731565

Duivenvoorde, B. (2025). Generative AI and the future of marketing: A consumer protection perspective. *Computer Law & Security Review, 57*, Article 106141. https://doi.org/10.1016/j.clsr.2025.106141

Fassiaux, S. (2023). Preserving consumer autonomy through European Union regulation of artificial intelligence: A long-term approach. *European Journal of Risk Regulation, 14*(4), 710–730. https://doi.org/10.1017/err.2023.58

Fatmawati, N., & Zulfani, A. R. (2026). Pertanggungjawaban artificial intelligence terhadap transaksi e-commerce. *Lex Mandiri: Jurnal Ilmu Hukum, 2*(2). https://doi.org/10.65369/ps34bg33

Google, Temasek, & Bain & Company. (2025). *e-Conomy SEA 2025: Indonesia*. https://services.google.com/fh/files/misc/indonesia_e_conomy_sea_2025_report.pdf

Grigsby, J. L., Michelsen, M., & Zamudio, C. (2025). Service ads in the era of generative AI: Disclosures, trust, and intangibility. *Journal of Retailing and Consumer Services, 84*, Article 104231. https://doi.org/10.1016/j.jretconser.2025.104231

Hacker, P. (2023). The European AI liability directives: Critique of a half-hearted approach and lessons for the future. *Computer Law & Security Review, 51*, Article 105871. https://doi.org/10.1016/j.clsr.2023.105871

Hari, H., Sharma, A., Verma, S., & Chaturvedi, R. (2025). Exploring ethical frontiers of artificial intelligence in marketing. *Journal of Responsible Technology, 21*, Article 100103. https://doi.org/10.1016/j.jrt.2024.100103

Hutchinson, T., & Duncan, N. (2012). Defining and describing what we do: Doctrinal legal research. *Deakin Law Review, 17*(1), 83–119. https://doi.org/10.21153/dlr2012vol17no1art70

Le, K. B. Q., Khan, H., Li, F., & Kunz, W. H. (2026). More than saying "it's AI": How role disclosure transparency in AI-generated ads influences persuasion. *Psychology & Marketing, 43*(10), 2532–2551. https://doi.org/10.1002/mar.70175

Luguri, J., & Strahilevitz, L. J. (2021). Shining a light on dark patterns. *Journal of Legal Analysis, 13*(1), 43–109. https://doi.org/10.1093/jla/laaa006

Mashuri, Maileni, D. A., Bhakti, R. T. A., & Sakti, I. (2026). Civil liability for losses caused by artificial intelligence under Indonesian civil law. *Jurnal Cakrawala Hukum, 17*(2), 155–168. https://doi.org/10.26905/idjch.v17i2.16124

Naudts, L., Helberger, N., Veale, M., & Sax, M. (2025). A right to constructive optimization: A public interest approach to recommender systems in the Digital Services Act. Journal of Consumer Policy, 48, 269–296. https://doi.org/10.1007/s10603-025-09586-1

Poernomo, S. L., Husen, L. O., Sivakumar, S., Aulia, N. A., & Muzakkir, A. K. (2026). Reformulating Indonesia's consumer protection law in the AI-driven digital economy: A gap analysis and regulatory roadmap. *Khazanah Hukum, 8*(1). https://doi.org/10.15575/kh.v8i1.51594

Smits, J. M. (2017). What is legal doctrine? On the aims and methods of legal-dogmatic research. In R. van Gestel, H.-W. Micklitz, & E. L. Rubin (Eds.), *Rethinking legal scholarship: A transatlantic dialogue* (pp. 207–228). Cambridge University Press. https://doi.org/10.1017/9781316442906.006

Wortel, C., Vanwesenbeeck, I., & Tomas, F. (2024). Made with artificial intelligence: The effect of artificial intelligence disclosures in Instagram advertisements on consumer attitudes. *Emerging Media, 2*(3), 547–570. https://doi.org/10.1177/27523543241292096

Wu, L., Dodoo, N. A., & Wen, T. J. (2025). Disclosing AI's involvement in advertising to consumers: A task-dependent perspective. *Journal of Advertising, 54*(1), 20–38. https://doi.org/10.1080/00913367.2024.2309929

Yi, W., & Li, Z. (2025). Mapping the scholarship of the regulation of dark patterns: A systematic review of concepts, regulatory paradigms, and solutions from law and HCI perspectives. *Computer Law & Security Review, 59*, Article 106225. https://doi.org/10.1016/j.clsr.2025.106225

Zakiyah, N., Santoso, B., Mahfud, M. A., Makarim, E., & Hardyanthie, T. (2026). Who bears the risk? Mapping the legal liability of artificial intelligence providers in Indonesia's regulatory landscape. *Journal of Indonesian Legal Studies, 11*(1), 111–146. https://doi.org/10.15294/jils.v11i1.31133

Ziosi, M., Mökander, J., Novelli, C., Casolari, F., Taddeo, M., & Floridi, L. (2023). The EU AI Liability Directive (AILD): Bridging information gaps. European Journal of Law and Technology, 14(3). https://ejlt.org/index.php/ejlt/article/view/962