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Consumer Protection against AI-Induced Skin Care Misdiagnosis in Skin Health Services in Indonesia

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Abstract
The development of Artificial Intelligence (AI) in the beauty industry has led to the innovation of electronic-based skin diagnostic services, one of which is AI in Skin Health Services. While offering convenience and personalized product recommendations, the use of this technology poses the risk of misdiagnosis that could potentially harm consumers. This study addresses two main issues: how to protect consumers from misdiagnosis by AI in Skin Health Services in Indonesia and the legal liability of business actors for the resulting losses. The research method used is normative legal research with a statutory and conceptual approach, through an analysis of provisions in the Consumer Protection Law, the Electronic Information and Transactions Law, and regulations related to electronic systems. The results show that AI in Skin Health Services can be qualified as an electronic service and system, thus making business actors responsible based on the principle of presumption of liability with a tendency towards strict liability to ensure protection and legal certainty for consumers.

KEYWORDS
consumer protection, Artificial Intelligence, legal liability, electronic systems, skin health services.

Introduction

The fast growth of information and communication technology during Industrial Revolution 4.0 has sped up digital transformation in many areas, especially trade and services. One of the most important new technologies is the use of Artificial Intelligence (AI) in business processes. AI is a technical system that uses data processing, machine learning, and algorithm-based decision-making to try to copy how people think.[1] This technology enables systems to quickly analyze large amounts of data and generate recommendations or decisions automatically without direct human intervention. In Indonesia, the use of AI is expanding, no longer limited to the industrial, financial, or educational sectors, but has also penetrated the lifestyle and beauty sectors.[2]

In the beauty industry, the use of AI is realized in the form of digital-based skin analysis systems that allow consumers to obtain an instant diagnosis of their skin condition through electronic devices. One application of this technology is the AI-based skin diagnosis service available on various digital skin care platforms. This system allows consumers to obtain an instant analysis of their skin condition through photos, which are then processed using a specific algorithm to identify skin problems such as acne, blackheads, pores, and dark spots.[3]

Technically, the AI-based skin diagnosis service works by leveraging machine learning and a pre-trained dermatological database. The system claims to provide accurate analysis based on thousands of studied skin images.[4] Consumers simply access the feature through a digital platform,

[1] Muhammad Dafi Akbar et al., "Pemanfaatan Dan Permasalahan Artificial Intelligence Dalam Kehidupan Manusia Serta Pengaturannya Secara Hukum," *Media Hukum Indonesia (MHI)* 2, no. (2) (2024): 538, https://ojs.daarulhuda.or.id/index.php/MHI/index.

[2] Kirana Diva Nur Fitria Alayida, Tsabita Aisyah, Rahma Deliana, "PENGARUH DIGITALISASI DI ERA 4.0 TERHADAP PARA TENAGA KERJA DI BIDANG LOGISTIK," *Jurnal Economina* 2, no. 1 (2023): 254–68.

[3] Safrian Andromeda and Ni Luh Bella Dwijaksara, "AI in Dermatology: A Systematic Review on Skin Cancer Detection," *TIERS Information Technology Journal* 5, no. 1 (2024): 41–51, https://doi.org/10.38043/tiers.v5i1.5444.

[4] Andromeda and Dwijaksara.

perform a facial scan, and the system will quickly display a diagnosis and product recommendations. This mechanism reflects the changing interaction patterns between businesses and consumers, where consultations previously conducted in person with professionals can now be conducted through an automated, AI-based system.

The convenience and efficiency offered by AI Skin Health Services make them a key part of modern service strategies in the beauty industry. Consumers can now obtain rapid skin condition analysis without needing direct, face-to-face consultations. Despite these advantages, the use of automated diagnostic systems also brings potential legal challenges when inaccuracies occur. By design, AI operates using data patterns and statistical probabilities, which means it cannot be completely separated from the risk of error. The accuracy of the diagnostic results may be affected by a number of things, including the quality of the lighting when the image was taken, differences in people's skin types, a lack of training data, and bias in the algorithms used.

If an AI-based skin diagnostic system provides an inaccurate diagnosis and consumers follow the resulting product recommendations, it could potentially result in harm. This harm could include financial losses due to purchasing products that are unsuitable for their skin condition, or physical harm such as irritation, allergies, or worsening skin conditions. In such situations, the issue of legal protection for consumers harmed by AI-based misdiagnosis arises.

The relationship between consumers and businesses using AI-based skin diagnostic services is a legal relationship subject to the provisions of Law Number 8 of 1999 concerning Consumer Protection (UUPK). Article 4 of the UUPK states that consumers have the right to comfort, security, and safety in consuming goods and/or services, and the right to obtain correct, clear, and honest information regarding the condition and guarantees of the goods and/or services. Under these provisions, the diagnostic results and product recommendations provided by the system can be qualified as part

of the information conveyed to consumers.[5] The problem that arises is what happens if the information turns out to be inaccurate and actually causes harm to consumers.

Article 7 of the Consumer Protection Law (UUPK) stipulates the obligation of business actors to act in good faith in conducting their business activities, provide accurate, clear, and honest information, and guarantee the quality of the goods and/or services produced and/or traded. If AI in Skin Health Services is part of the service provided by a business actor, then the system becomes part of the service offered to consumers. Thus, the question arises as to the extent to which business actors are responsible for the accuracy and security of the AI systems they use to provide product recommendations.

The use of AI in Skin Health Services as a digital system is also related to the provisions of Law Number 11 of 2008 concerning Electronic Information and Transactions, as amended by Law Number 19 of 2016 (the ITE Law). The ITE Law recognizes the concepts of electronic systems and electronic system providers. AI can be categorized as part of an electronic system operated to provide services to users. Article 15 of the ITE Law states that every electronic system provider is obliged to operate the electronic system reliably and securely and is responsible for the proper operation of the electronic system. This provision raises legal questions about whether misdiagnosis by AI can be considered a form of electronic system unreliability, and what the legal consequences are for business actors.

In addition to complying with the provisions regarding electronic systems in Law Number 11 of 2008 concerning Electronic Information and Transactions, providers of AI-based skin health services are also related to the provisions of Government Regulation Number 80 of 2019 concerning Trade Through Electronic Systems. This regulation regulates trade activities conducted through electronic devices and procedures, including digital

[5] Sifaul Amin, "Independensi Dan Keunikan Ilmu Hukum Dalam Tinjauan Ontologi, Epistemologi Dan Aksiologi," *Jurnal Multidisiplin Madani* 2, no. 1 (2022): 187–96, https://doi.org/10.54259/mudima.v2i1.352.

services that facilitate interactions between business actors and consumers in the transaction process. In the context of AI-based skin health services, the system not only functions as a skin condition analysis tool but can also influence consumer decisions in selecting or purchasing skin care products that have been recommended by the system. Therefore, providers of these services must also fulfill their obligations in conducting trade through electronic systems.

From a civil law perspective, if an AI diagnostic error causes a loss, it can be analyzed through a breach of contract or unlawful act approach as stipulated in Article 1365 of the Civil Code. However, complexity arises because AI is not a legal entity with the capacity to be independently responsible. Responsibility must be assigned to the party operating, developing, or utilizing the system in its business activities.[6] Furthermore, Article 19 of the Consumer Protection Law stipulates that business actors are responsible for providing compensation for consumer losses resulting from consuming goods and/or services produced or traded. In this context, it is necessary to analyze whether misdiagnosis by AI in skin health services falls under the category of losses resulting from traded services.

Discussion on consumer protection in the use of technology *Artificial Intelligence* has relevance to the Sustainable Development Goals *(Sustainable Development Goals/SDGs),* especially point 16 regarding ***Peace, Justice, and Strong Institutions***, which emphasizes the importance of access to justice for all parties and the strengthening of effective, accountable, and inclusive legal institutions. Consumer protection in technology-based transactions *Artificial Intelligence* is part of an effort to build legal institutions that are adaptive to digital developments.[7]

Several researchers have previously conducted studies on consumer protection and the use of AI. Reynaldi Alfrido Kurniawan, Weny Almoravid

[6] Syafrinaldi Desi Apriani, "Konflik Norma Antara Perlindungan Usaha Kecil Menurut Hukum Persaingan Usaha Indonesia Dengan Perlindungan Konsumen," *Jurnal Pembangunan Hukum Indonesia* 4, no. 1 (2022): 14–33.
[7] Desi Apriani.

Dungga, and Mellisa Towadi (2024) in their study entitled "Implementation of the Consumer Protection Law Regulating Business Transactions Using Artificial Intelligence," published in the Journal of Law and Social Politics, Vol. 2 No. 2, May 2024, discussed the urgency of implementing AI in business service transactions and the application of the Consumer Protection Law (UUPK) in regulating these transactions. This research used normative legal methods supported by empirical data. The study results indicate that the UUPK still has limitations in addressing the complexity of AI-based transactions.[8] Similarities with this study lie in the discussion of consumer protection in the use of AI and the limitations of the Consumer Protection Law in the context of digital transactions. However, that study discussed AI in the context of general business service transactions, while this study specifically examines AI-mediated misdiagnosis of skin care in skin health services, which has direct implications for consumer health.

Melisa, Habib AlHafiz, Siti Patimah, Marina Juwita, Dini Marissa, Nanda Amelia, and Abdul Halim Nasution (2025) in a study entitled "Consumer Protection for AI-Based Products: Legal Challenges in the Digital Era", published in the Scientific Journal of Management and Entrepreneurship, Vol. 4 No. 2 May 2025, used a normative juridical method and highlighted the regulatory vacuum regarding the responsibility of AI providers and the weak correction mechanism for automated AI decisions.[9] The similarities lie in the discussion of legal gaps and the importance of recognizing AI as an electronic agent. However, that research was general in nature, addressing various AI-based products, while this

[8] Meliisa T Reynaldi Alfrido Kurniawan, Weny Almoravid Dungga, "Penerapan Undang-Undang Perlindungan Konsumen Mengatur Tentang Transaksi Bisnis Dengan Menggunakan Artificial Inteligence Mengoperasionalkan Suatu Hal Yang Dikerjakan Oleh Manusia Yang Berkaitan Dengan Berkembang Secara Eksponensial Di Berbagai Bidang Ind," *Jurnal Hukum Dan Sosial Politik* 2, no. 2 (2024): 338–53, https://doi.org/10.59581/jhsp-widyakarya.v2i2.2927.

[9] Melisa Melisa et al., "Perlindungan Konsumen Atas Produk Berbasis Ai : Tantangan Hukum Di Era Digital," *Jurnal Ilmiah Manajemen Dan Kewirausahaan* 4, no. 2 (2025): 696–708, https://doi.org/10.55606/jimak.v4i2.4596.

study is more specific and applicable to AI in skin health services, specifically in skin care diagnostics.

Suratno, Yuniwati, Zulfikar Ali, and Dewi Noviyanti (2024) through their research "Reforming Consumer Protection Regulations Regarding the Risks and Benefits of Artificial Intelligence" published in JEHSS Vol. 7 No. 2 November 2024, emphasized the need for reforming consumer protection regulations to accommodate the complexity of AI.[10] The similarities are that both highlight the need for regulatory reform and discuss AI as an electronic agent. However, those studies focused on macro-level policy reformulation, while this study specifically analyzes the legal liability of business actors for AI misdiagnosis that results in consumer harm.

Muhammad Farhan, Lukmanul Hakim, and Yulia Hesti (2024) in their study "Legal Aspects of the Use of AI Chatbots in Business Support Services by PT. Matahari Department Store," published in QISTINA Vol. 3 No. 1 June 2024, discuss the responsibilities of business actors in using AI chatbots. The similarities lie in the discussion of AI as part of an electronic system and the responsibilities of business actors.[11] However, the object of that research was a retail customer service chatbot, while this study discusses AI that performs the function of diagnosing skin conditions with higher risks because it is related to consumer health and safety.

In addition, Titin Syafiqotuzzuhda (2024) in her thesis entitled "Problems of Consumer Protection Law in Facing Artificial Intelligence-Based Crimes" examines the limitations of Law Number 8 of 1999 concerning Consumer Protection in providing legal protection to consumers harmed by AI-based crimes. This study utilises a normative legal research methodology, focusing on the analysis of pertinent laws, legal theories, and academic perspectives.The results of the study indicate that the Consumer

[10] Suratno Suratno et al., "Pembaharuan Regulasi Perlindungan Konsumen Terhadap Risiko Dan Manfaat Artificial Intelligence," *Journal of Education, Humaniora and Social Sciences (JEHSS)* 7, no. 2 (2024): 295–303, https://doi.org/10.34007/jehss.v7i2.2216.
[11] Yulia Hesti Muhammad Darhan, Lukmanul Hakim, "Aspek Hukum Pemanfaatan Chatbot AI Dalam Layanan Dukungan Bisnis Oleh PT. Matahari Department Store," *Jurnal Multidisiplin Indonesia* 3, no. 1 (2024): 191–203.

Protection Law has not been able to provide an adequate legal umbrella in dealing with AI-based crimes because it is still oriented towards conventional transactions and does not explicitly regulate electronic transactions based on intelligent technology.[12] The similarities between the aforementioned studies and this study lie in their discussion of the limitations of the Consumer Protection Law (UUPK) in addressing the development of AI technology, and their use of a normative approach to Indonesian positive law. However, while the aforementioned study discussed the general issue of consumer protection against AI-based crimes, this study specifically examines AI-mediated misdiagnosis of skin care in skin health services, a service based on an electronic system that has the potential to cause physical and material harm to consumers. Furthermore, this study not only highlights regulatory limitations but also analyzes the construction of business actors' legal responsibilities, including the possibility of applying breach of contract, unlawful acts, and responsibilities under the UUPK and the ITE Law.

Problems arise when the provisions of Law Number 8 of 1999 concerning Consumer Protection do not explicitly regulate the accountability mechanism for automated, algorithm-based decisions, particularly in the context of Artificial Intelligence. Similarly, the Electronic Information and Transactions Law and Government Regulation Number 71 of 2019 do recognize the concept of electronic systems and electronic agents, but do not provide detailed regulations regarding the limits of business actors' liability in the event of AI-based analysis errors that directly impact consumer health. Furthermore, the construction of business actors' legal liability does not provide a clear explanation of whether such diagnostic

[12] Titin Syafiqotuzzuhda, "PROBLEMATIKA HUKUM PERLINDUNGAN KONSUMEN DALAM MENGHADAPI KEJAHATAN BERBASIS ARTIFICIAL INTELLEGENCE," *Universitas Islam Negeri Maulana Malik Ibrahim* (2023), http://publications.lib.chalmers.se/records/fulltext/245180/245180.pdf%0Ahttps://hdl.handle.net/20.500.12380/245180%0Ahttp://dx.doi.org/10.1016/j.jsames.2011.03.003%0Ahttps://doi.org/10.1016/j.gr.2017.08.001%0Ahttp://dx.doi.org/10.1016/j.precamres.2014.12.

errors can be qualified as breach of contract, an unlawful act, or as a form of absolute liability of the business actor under the Consumer Protection Law. This lack of clarity can make the law less clear and make it harder for consumers to stand up for their rights. This study seeks to establish a more extensive legal framework to safeguard consumers from potential risks associated with the utilisation of Artificial Intelligence (AI) in skincare services. This study is expected to provide clarity regarding the limits and forms of legal responsibility of business actors in the use of AI systems, as well as strengthen the principles of legal certainty and consumer protection in digital technology-based transactions. With an in-depth analysis of applicable positive legal provisions, this research is expected to contribute to the development of regulations that are adaptive to technological advances, thus creating a balance between digital innovation and the protection of consumer rights in the Indonesian beauty industry.

Methods

This research uses a normative legal research method, namely research that focuses on the study of positive legal norms, principles, and legal doctrines that are relevant to the problems being researched.[13] This study aims to analyze consumer protection against misdiagnosis of skin care by AI in Skin Health Services in Indonesia based on applicable Indonesian law.

The approaches used are a statutory approach and a conceptual approach. The statutory approach is conducted by examining Law Number 8 of 1999 concerning Consumer Protection, Law Number 11 of 2008 concerning Information and Electronic Transactions as amended by Law Number 19 of 2016, Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, and the Civil Code. This study employs a conceptual framework to examine the concepts of legal liability, breach of contract, unlawful acts, and electronic agents

[13] Abdulkadir Muhammad, *Hukum Dan Penelitian Hukum* (Bandung: PT. Citra Aditya Bakti, 2004).

within the Indonesian legal system. The legal materials utilised in this research comprise primary, secondary, and tertiary sources, all obtained through a comprehensive literature analysis. Primary legal materials include laws and regulations relating to consumer protection, particularly Law Number 8 of 1999 concerning Consumer Protection, and other provisions relevant to the use of technology in consumer services. Meanwhile, secondary legal materials were obtained from books, scientific journals, and previous research related to consumer protection and the development of artificial intelligence technology. Tertiary legal materials, including legal dictionaries and other reference sources, were used to clarify the terms used in the research.

This research is also closely aligned with the Sustainable Development Goals (SDGs) particularly Goal 16 on Peace, Justice, and Strong Institutions, which underscores the importance of ensuring access to justice and reinforcing the strength of legal institutions. This study seeks to promote legal certainty and effective protection for consumers in the face of developments in artificial intelligence-based technology, as part of strengthening a legal system that is adaptive and responsive to digital innovation.

Result and Discussion

1. Consumer Protection against AI-Induced Skin Care Misdiagnosis in Skin Health Services in Indonesia

a. The Concept of Consumer Protection in Indonesian Law

Normatively, Article 1 number 1 of the Consumer Protection Law states that consumer protection is all efforts to ensure legal certainty to provide protection to consumers. This formulation emphasizes that consumer protection is not only interpreted as actions after a loss occurs, but also encompasses all legal instruments that guarantee consumer rights before,

during, and after a transaction. Legal certainty is the key word in this definition, which means consumers must receive assurance that their rights are recognized and enforceable through available legal mechanisms.

Article 1 also defines the subject and object in consumer protection. A consumer is defined as any person who uses goods and/or services available in society, whether for their own benefit, that of their family, that of other people, or that of other living beings, and not for resale. This definition indicates that legal protection is provided to end users.[14] Meanwhile, business actors are any person or business entity that carries out business activities in various economic fields in the legal territory of Indonesia.[15] Thus, a legal relationship for consumer protection arises when a business actor provides goods or services which are then used by consumers.

Protected objects are also broadly defined. Goods include tangible and intangible objects, movable or immovable, that can be traded and used by consumers. Services are defined as any service in the form of work or performance provided to the public. This broad definition of services indicates that consumer protection applies not only to physical products but also to technology-based services, consulting, and electronic systems.[16]

In Chapter II of the Consumer Protection Law, consumer protection is based on several important principles as stated in Article 2, namely the principles of benefit, justice, balance, consumer safety and security, and legal certainty. The principle of benefit means that consumer protection must provide the greatest possible benefit to the interests of consumers and business actors. The principle of justice requires fair treatment for both parties, so that no party is disproportionately disadvantaged The notion of

[14] Serge Gijrath, "Consumer Law as a Tool to Regulate Artificial Intelligence," *Constitutional Challenges in the Algorithmic Society* 2019, no. December (2021): 281–97, https://doi.org/10.1017/9781108914857.015.
[15] Bima Guntara Abdul Hadi, "Pembaharuan Hukum N Nasional Dalam Upaya Perlindungan Data Pribadi Di Era Distrupsi," *Jurnal Hukum Mimbar Justitia* 8, no. 1 (2022): 233–53, https://law.ugm.ac.id/wpcontent/uploads/s.
[16] Penggalih Mahardika Herlambang Rani Tiyas Budiyanti, "Perlindungan Hukum Pasien Dalam Layanan Konsultasi Kesehatan Online," *Jurnal Hukum Kesehatan Indonesia* 3, no. 02 (2023): 81–90, https://doi.org/10.53337/jhki.v3i02.99.

balance seeks to establish equilibrium among consumers, business entities, and the government. The principle of consumer safety and security emphasizes that every product and/or service in circulation must guarantee that there is no risk that harms consumers. Finally, the principle of legal certainty requires the existence of clear and enforceable regulations.[17]

In Chapter II of the Consumer Protection Law, consumer protection is based on several important principles as stated in Article 2, namely the principles of benefit, justice, balance, consumer safety and security, and legal certainty. The principle of benefit means that consumer protection must provide the greatest possible benefit to the interests of consumers and business actors. The principle of justice requires fair treatment for both parties, so that no party is disproportionately disadvantaged. The principle of balance aims to create a balanced position between consumers, business actors, and the government. The principle of consumer safety and security emphasizes that every product and/or service in circulation must guarantee that there is no risk that harms consumers. Finally, the principle of legal certainty requires the existence of clear and enforceable regulations.[18]

Consumer rights are regulated in detail in Article 4 of the Consumer Protection Law. The right to enjoy goods and services in an environment free from danger is the first right. Companies must guarantee that their wares are safe for customers to use to exercixe this privelege. The second right is the right to choose goods and/or services and to receive them according to the exchange rate, conditions, and guarantees promised.[19] This means that consumers have the right to receive what is promised in a transaction. The third right is the right to correct, clear, and honest

[17] Sahrul Muhamad Ammar Muhtadi, "Hukum Perlindungan Konsumen Dan Etika Bisnis Di Era Teknologi Kecerdasan Buatan: Perlindungan Pengguna Dan Tanggung Jawab Perusahaan," *Jurnal Hukum Dan HAM Wara Sains* 02, no. 09 (2023): 922–30, https://doi.org/10.58812/jhhws.v2i09.674.
[18] Maldi Omar Muhammad and Lucky Dafira Nugroho, "Perlindungan Hukum Terhadap Pengguna Aplikasi E-Commerce Yang Terdampak Kebocoran Data Pribadi," *Pamator Journal* 14, no. 2 (2021): 165–74, https://doi.org/10.21107/pamator.v14i2.12472.
[19] Muhammad and Nugroho.

information regarding the condition and guarantees of goods and/or services. Misleading or incomplete information violates this right.[20]

Other rights include the right to have one's opinions and complaints heard, the right to receive advocacy and proper dispute resolution, the right to receive consumer guidance and education, and the right to be treated fairly and without discrimination. Equally important is the right to receive compensation, restitution, and/or replacement if the goods or services received do not comply with the agreement or are not as expected. This right is the primary basis for consumer claims when experiencing losses.[21]

For balance, Article 5 also regulates consumer obligations, including reading the user manual, acting in good faith during transactions, paying as agreed, and properly following dispute resolution. Meanwhile, Article 7 outlines the obligations of business actors, such as acting in good faith in conducting their business, providing accurate and clear information, guaranteeing the quality of goods and/or services, and providing compensation or redress for consumer losses.

The Consumer Protection Law also expressly prohibits certain acts that harm consumers, as stipulated in Articles 8 through 17. These prohibitions include producing or trading goods and/or services that do not meet standards, do not conform to promises made on labels or promotions, contain false information, or offer goods and services in a misleading manner. These prohibitions demonstrate that the law not only regulates rights and obligations but also limits the actions of business actors to protect consumers.

In terms of liability, Article 19 emphasizes that business actors are responsible for providing compensation for damage, pollution, and/or consumer losses resulting from the use of goods and/or services produced or traded. Compensation can take the form of a refund, replacement of equivalent goods or services, health care, or compensation. In fact, the

[20] Widyastuti et al., "Skrining Dan Pelayanan Kesehatan Kulit Sebagai Upaya Pencegahan Penyakit Kulit Di Desa Banyu Urip," *Jurnal Abdimas Mandiri* 9, no. 2 (2025): 322–29, https://doi.org/10.36982/jam.v9i2.5856.
[21] Muhammad and Nugroho, "Perlindungan Hukum Terhadap Pengguna Aplikasi E-Commerce Yang Terdampak Kebocoran Data Pribadi."

burden of proof regarding the existence or absence of fault in a claim for compensation rests with the business actor, as stipulated in Article 28, indicating greater protection for consumers.

b. AI-Based Skin Health Analysis Services as Part of Electronic Services and Systems.

The development of digital technology has driven a transformation in consumer services, including in the health and skincare sector. One emerging innovation is the use of Artificial Intelligence (AI) technology in skin condition analysis services. This technology enables digital systems to automatically identify various skin characteristics using data processing and artificial intelligence algorithms. AI-based skin health services are generally used to help users identify their skin condition and receive appropriate treatment recommendations.

Technically, AI-based skin health analysis services work by utilizing digital image processing technology. The system typically asks users to upload or take a photo of their face using a digital device, and then the AI algorithm analyzes the skin characteristics visible in the image. The analysis results can cover various skin conditions, such as dryness, oiliness, dullness, acne, or other skin concerns that require special attention. Based on this analysis, the system then provides treatment or product recommendations that are deemed appropriate for the user's skin condition.[22]

From these characteristics, Artificial Intelligence-based skin health analysis services have several main characteristics, firstly the system works automatically using data processing algorithms and pattern recognition technology.[23] Second, the analysis process is performed without direct medical intervention during use, so the results are derived entirely from system processing. Third, there is an element of personal data collection and

[22] Andromeda and Dwijaksara, "AI in Dermatology: A Systematic Review on Skin Cancer Detection."
[23] Enni Soerjati Priowirjanto, "Urgensi Pengaturan Mengenai Artificial Intelligence Pada Sektor Bisnis Daring Dalam Masa Pandemi Covid-19 Di Indonesia," *Jurnal Bina Mulia Hukum* Vol. 6, No (2022): 255–72.

processing in the form of user facial images, which constitutes sensitive biometric data. Fourth, the system output is product recommendations that are directly related to consumer purchasing decisions.[24] These characteristics indicate that AI-based skin health services are not merely information tools, but rather digital systems that have the potential to influence users' consumption behavior and economic decisions.

In the context of consumer protection law, AI-based skin health services can be qualified as services as defined in Law Number 8 of 1999 concerning Consumer Protection (UUPK). Article 1 number (5) of the UUPK states that a service is "any service in the form of work or performance provided to the public for the benefit of consumers." AI-based skin analysis services clearly constitute a performance or service provided to the public for their benefit. Although not physically tangible, services under the UUPK do include digital and electronic services. Therefore, when consumers use AI-based skin health services, a legal relationship arises between the consumer and the business actor in the form of the provision of services.

Qualification as a service has important legal consequences. First, the business actor is obliged to guarantee the quality and standard of the services provided. Second, the business actor is obliged to provide true, clear, and honest information regarding how the system operates and the limits of its accuracy. Third, if losses occur as a result of using these services, the business actor can be held accountable as stipulated in Article 19 of the UUPK.

In addition to being a service, AI-based skin health analysis services are also part of an electronic system from an information technology law perspective. Based on Article 1 number (5) of Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016 (ITE Law), an electronic system is “a series of electronic

[24] Nadia Intan Rahmahafida and Whitney Brigitta Sinaga, “Analisis Problematika Lukisan Ciptaan Artificial Intelligence Menurut Undang-Undang Hak Cipta,” *Jurnal Pendidikan Dan Konseling* 4, no. 6 (2022): 9688–96.

devices and procedures that function to prepare, collect, process, analyze, store, display, announce, send, and/or disseminate electronic information." AI-based skin health analysis services fulfill these elements because they consist of software, data processing algorithms, and digital procedures that collect and analyze electronic information in the form of photos of the user's face.

As an electronic system, service providers are required to fulfill the obligations stipulated in the ITE Law and its implementing regulations, including the obligation to guarantee the reliability, security, and protection of users' personal data. This is particularly relevant given that the system processes facial data, which is considered sensitive. If a data leak or system error occurs that harms users, legal liability may arise under the provisions of information technology law.[25]

Furthermore, in the perspective of Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions (PP 71/2019), an AI-based skin health analysis system can be qualified as an electronic agent. Article 1 number (8) of PP 71/2019 states that an electronic agent is "a device of an electronic system created to automatically perform an action on certain electronic information that is organized by a person." In this context, an Artificial Intelligence system is a device that automatically analyzes electronic information (facial photos) and produces output in the form of acne level diagnosis results and product recommendations.

c. Analysis of Consumer Protection in Cases of AI Misdiagnosis in Skin Health Services

Normatively, consumers have a strong legal basis to file a lawsuit if they experience losses due to an AI diagnosis error in Skin Health Services.

[25] Rahayu Nugroho, "Asimetri Informasi Dalam Layanan Kecerdasan Buatan: Studi Empiris Di Tiga Kota Besar Indonesia," *Indonesian Journal of Consumer Protection* 8, no. 1 (2024): 67–89.

Article 4 of the UUPK provides consumers with rights, including the right to comfort, security, and safety in consuming goods and/or services, as well as the right to receive compensation or redress if the services received are not in accordance with or not as expected. In the context of Artificial Intelligence-based skin health services, skin analysis services are included in the service category. If the diagnosis results provided by the system are inaccurate and cause real losses, then it can be qualified as a service that is "not as expected." In addition, if the information provided regarding the level of system accuracy, usage limitations, or risks is not conveyed clearly and honestly, then the information may also violate the consumer's right to truth as regulated in Article 4 letter (c) of the UUPK.

Furthermore, Article 19 paragraph (1) of the Consumer Protection Act states that business actors are responsible for providing compensation for consumer losses resulting from the use of traded goods and/or services. This provision opens up space for consumers to demand compensation if it can be proven that the losses experienced have a causal relationship with the results of the AI diagnosis.

The author argues that the use of artificial intelligence systems in skin analysis places the facial detection process as a crucial element. All product recommendations provided by AI-based skin health care systems rely on the algorithm's interpretation of the user's facial image. If the system makes an error in reading skin conditions, for example in identifying the level of skin sensitivity, the level of acne inflammation, or the condition of the skin's protective barrier, the resulting recommendations could potentially be inaccurate to the user's actual needs. In such situations, consumers risk using products with active ingredients that are too strong or inappropriate for their skin condition. According to the author's analysis, such recommendation errors can have quite serious consequences, as the use of

inappropriate active ingredients can worsen skin conditions, trigger irritation, and disrupt the skin's natural balance.[26]

The author also believes that artificial intelligence systems have limitations in understanding the complexity of human skin conditions. Skin conditions are influenced not only by visual factors that can be detected through digital images, but also by various other factors such as hormonal levels, previous product usage history, individual health conditions, and environmental factors. These factors often cannot be fully identified through image analysis alone. Therefore, in the author's opinion, AI systems for skin analysis should be positioned as an aid, not as the sole basis for decision-making in determining which skincare products to use.

Based on the product's user experience, the author observed that after using the recommended product, a single pimple appeared on an area of the face that had not previously experienced similar problems. While the appearance of a single pimple does not necessarily indicate serious skin damage, this condition still demonstrates that skin responses to a product can vary and do not always align with initial analysis or recommendations. In the author's opinion, this demonstrates the crucial role of identifying skin conditions before product use, especially when product recommendations are derived through technology-based analysis systems.

From the perspective of legal protection theory, this situation demonstrates the importance of implementing preventive legal protection. Preventive protection aims to prevent losses before they are actually experienced by consumers. According to the author's analysis, preventive protection in the use of AI technology in the skincare industry must be implemented through several concrete steps. First, business actors must ensure that the artificial intelligence system used has undergone a rigorous testing process and has an adequate level of accuracy. Second, the system

[26] Bhakti Wiranti, "Urgensi Aspek Psikodermatologi Dalam Perawatan Kulit: Memahami Keterkaitan Emosi Dan Kesehatan Kulit," *Jurnal Ilmiah Multidisiplin Indonesia* 2, no. 1 (2024): 224–44.

must be supported by a representative database to be able to recognize variations in skin conditions across various user groups. Third, business actors must provide transparent information regarding how the system works, the level of technological accuracy, and its limitations.[27]

The author also argues that information transparency is a crucial aspect of consumer protection in the digital technology era. Consumers often assume that recommendations provided by artificial intelligence systems have a high degree of certainty. However, in reality, these systems are subject to error. If businesses fail to adequately explain the limitations of the technology, consumers may be misled into believing the recommendations are entirely accurate. This situation has the potential to cause harm to consumers, as product use decisions are based on information they don't fully understand.

In the case of AI-based healthcare services, even though the analysis is performed automatically by the AI-based system, legal responsibility remains with the business entity as the service provider and electronic system provider. This aligns with Government Regulation Number 71 of 2019, which states that all legal consequences of the use of electronic agents are the responsibility of the electronic system provider. In other words, AI does not have the capacity to be a legal entity; it is merely a tool used by businesses.

The principle of liability that can be applied in this context tends to be closer to strict liability, meaning that the business actor remains responsible for losses arising from the products or services marketed, without first having to prove that there is an element of direct fault by the consumer. The consumer only needs to prove that there is a loss and a causal relationship with the use of the service.[28]

[27] Rina Dwi Lestari, "Perlindungan Hukum Bagi Pasien Dalam Telemedicine," *Cakrawala Informasi* 1, no. 2 (2021): 51–65.
[28] Nugroho, "Asimetri Informasi Dalam Layanan Kecerdasan Buatan: Studi Empiris Di Tiga Kota Besar Indonesia."

Debate may arise as to whether misdiagnosis is simply a system failure or is caused by external factors, such as substandard photo quality or use of the product outside of the instructions provided.[29] This is where the relevance of evidence and due care standards become crucial in determining liability. If a dispute arises due to a misdiagnosis, consumers have two options for resolution: non-litigation and litigation.

Non-litigation dispute resolution can be conducted through the Consumer Dispute Resolution Agency (BPSK), as stipulated in the Consumer Protection Law. The BPSK has the authority to resolve disputes through mediation, conciliation, or arbitration. This mechanism is relatively faster and simpler than court proceedings.[30] In addition, consumers can also take administrative complaints to relevant agencies, such as consumer protection authorities or electronic systems supervisory authorities.

The availability of litigation and non-litigation mechanisms reflects the Indonesian legal system's commitment to providing access to justice, which aligns with SDG 16 (Peace, Justice, and Strong Institutions). SDG 16 emphasizes the importance of ensuring access to justice for all and building effective, accountable, and inclusive institutions. In the context of technology-based consumer protection, access to dispute resolution mechanisms is crucial because technological complexity can create an information gap between businesses and consumers.

2. Forms of Legal Responsibility of Business Actors for Consumer Losses Due to AI Diagnosis Errors in Skin Health Services

a. The Concept of Legal Responsibility in Civil Law

[29] Sari Pratama, "Implementasi Artificial Intelligence Dalam Sektor Ekonomi Digital Indonesia," *Jurnal Teknologi Dan Ekonomi Digital* 11, no. 4 (2023).
[30] Merin Ananda Putri, Elviandri Elviandri, and Rio Arif Pratama, "Analisis Yuridis Terhadap Penggunaan Artificial Intelligence (AI) Dalam Transaksi Bisnis Online Pada Aspek Privasi Data Dan Keamanan Konsumen," *AURELIA: Jurnal Penelitian Dan Pengabdian Masyarakat Indonesia* 4, no. 2 (2025): 2054–66, https://doi.org/10.57235/aurelia.v4i2.5439.

Conceptually, legal liability can be understood as the obligation to bear the legal consequences of an unlawful act or omission that results in harm. In civil law, liability is not always synonymous with moral wrongdoing, but rather the obligation to remedy the situation resulting from a violation of legal rights or obligations.

Article 1365 of the Civil Code states:

"Every unlawful act that causes harm to another person, obliges the person through whose fault the harm occurs to compensate for that loss."

This provision forms the general basis for civil liability outside of contractual relationships. The formulation of this article identifies four main elements: (1) the existence of an unlawful act; (2) fault; (3) loss; and (4) a causal relationship between the act and the loss.

On the other hand, liability in contractual relationships arises from a breach of an agreement. Article 1239 of the Civil Code states that every obligation to do or not to do something must be resolved by providing compensation for costs, losses, and interest if the debtor fails to fulfill their obligations. Thus, legal responsibility in civil law can originate from agreements (contracts) or from statutory provisions.

In the development of civil law doctrine, several basic principles of liability are known which determine the extent to which a person can be held responsible.[31]

1. Fault Liability (Responsibility Based on Fault)

This principle is a classic principle in civil law. A person can only be held liable if proven to have committed a fault (schuld), whether intentional (dolus) or negligence (culpa). This principle is clearly reflected in Article 1365 of the Civil Code, which requires "due to fault" as the basis for compensation.

[31] Muhammad Dafi Akbar et al., “Pemanfaatan Dan Permasalahan Artificial Intelligence Dalam Kehidupan Manusia Serta Pengaturannya Secara Hukum.”

In a fault liability system, the injured party (the plaintiff) has the burden of proving the defendant's fault. This means that without proof of fault, a lawsuit cannot be granted. This principle emphasizes the subjective aspect of the perpetrator and is often challenging in complex or technology-based cases.

2. Strict Liability (Absolute Responsibility)

Unlike fault liability, strict liability does not require proof of fault. Responsibility arises solely from the loss caused by a specific activity or product. This principle developed in the context of high-risk activities and consumer protection.

In Indonesian law, strict liability is not explicitly mentioned in the Civil Code, but its application can be found in various special laws, including consumer protection regimes. This concept is relevant in situations where consumers find it difficult to prove technical fault on the part of a business actor, particularly in the use of advanced technology systems that are "black box" in nature.[32]

Strict liability places the risk on the party who benefits economically from an activity. Philosophically, this principle is based on the principle of distributive justice, which states that the party who controls and profits from an activity must also bear the risk of losses.

3. Presumption of Liability

This principle lies between fault liability and strict liability. Under presumption of liability, the perpetrator is presumed responsible until proven otherwise. In other words, there is a reversal of the burden of proof. This principle provides greater protection to the injured party because the defendant must prove their innocence. In practice, this principle is often applied in consumer protection law. Doctrinally, this principle accommodates the need for protection in unequal relationships between the parties.

[32] Nur Fitria Alayida, Tsabita Aisyah, Rahma Deliana, "PENGARUH DIGITALISASI DI ERA 4.0 TERHADAP PARA TENAGA KERJA DI BIDANG LOGISTIK."

3. Responsibilities Based on UUPK

The responsibility of business actors for consumer losses in Indonesian law is normatively based on Law Number 8 of 1999 concerning Consumer Protection (UUPK). Article 19 paragraph (1) of the UUPK expressly states that business actors are responsible for providing compensation for damage, pollution, and/or consumer losses resulting from consuming goods and/or services produced or traded. This provision confirms that any loss arising from the use of goods or services is essentially the responsibility of the business actor as long as there is a causal relationship between the product/service and the loss experienced by the consumer.[33] In the context of AI-based skin diagnostic services, the system can be classified as a "service" within the meaning of the Consumer Protection Law (UUPK) because it provides technology-based analysis that generates product recommendations to consumers. If the analysis results are incorrect and cause irritation, inflammation, or worsening of the skin condition, consumers have a legal basis to seek compensation under Article 19 of the UUPK.

Article 19 paragraph (2) stipulates that compensation may take the form of a refund, replacement of services of equivalent value, health care, or the provision of compensation in accordance with statutory provisions. This provision is important because it shows that the responsibility of business actors is not only limited to financial compensation alone, but also includes responsibility for health impacts arising from the use of services. In the context of AI diagnosis which is directly related to skin conditions, the potential loss is not only economic loss, but also physical and even psychological loss due to performance disturbances. Therefore, the application of Article 19 must be understood progressively to accommodate non-material losses that may arise from AI-based system errors.[34]

[33] Nadia Intan Rahmahafida and Whitney Brigitta Sinaga, “Analisis Problematika Lukisan Ciptaan Artificial Intelligence Menurut Undang-Undang Hak Cipta.”
[34] Nugroho, “Asimetri Informasi Dalam Layanan Kecerdasan Buatan: Studi Empiris Di Tiga Kota Besar Indonesia.”

Although the Consumer Protection Act does not explicitly use the term strict liability, the construction of Article 19 suggests a tendency toward expanded liability. The article's wording does not require explicit proof of fault, but rather focuses on the existence of losses resulting from the use of goods or services. This opens up room for interpretation, suggesting that in consumer disputes, the burden of proof should not fall entirely on the consumer. In practice, the doctrine of reverse burden of proof has developed, whereby business actors must prove that the loss was not due to a fault in their product or service.[35] In the case of AI-based healthcare services, consumers are at a particularly technical disadvantage because they lack access to the algorithm, training data, or the system's internal mechanisms. Therefore, to realize the principles of fairness and balance as stipulated in the Consumer Protection Law, reversing the burden of proof is crucial.

In addition to the provisions of Law Number 8 of 1999 concerning Consumer Protection, the responsibilities of business actors in providing technology-based skin health services are also related to the regulation of trade through electronic systems as stipulated in Government Regulation Number 80 of 2019 concerning Trade Through Electronic Systems. This regulation emphasizes that business actors conducting trade activities through electronic systems are required to provide reliable, secure systems and be responsible for the services provided to consumers. In the context of Artificial Intelligence-based skin health services, the system used to analyze skin conditions and provide product recommendations is part of the digital service mechanism provided through electronic platforms. Business actors as providers of electronic systems have an obligation to ensure that the systems used have undergone adequate testing, have a level of accuracy that can be accounted for, and are accompanied by clear information regarding how the technology works and its limitations. If there is an error in diagnosis or recommendation that causes harm to consumers, then the business actor

[35] Nugroho.

remains responsible for the services provided, because Artificial Intelligence technology is essentially only a tool in the service delivery process, while legal responsibility remains with the business actor who operates the system.

Theoretically*, strict liability* means that a business actor is responsible without needing to prove fault. In the context of complex and high-risk technologies, this approach is often used to protect the injured party. Given that AI-based skin care services operate automatically and consumers are completely dependent on the system, the argument for applying liability close to *strict liability* is justified. The risk of algorithmic errors, data bias, or analytical inaccuracies is entirely within the control of the business actor as the service provider..

4. Responsibilities Based on the ITE Law and PP 71/2019

In addition to the Consumer Protection Law (UUPK), liability for AI-based services must also be analyzed based on Indonesia's digital legal framework, specifically Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016 concerning Amendments to the ITE Law and Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions. In the ITE Law, an electronic system is defined as a series of electronic devices and procedures that function to prepare, collect, process, analyze, store, display, and/or disseminate electronic information.[36] Based on this definition, AI-based healthcare services clearly fall into the category of electronic systems because they process data in the form of consumer facial photos to produce information in the form of diagnostic results and product recommendations.

[36] Pratama, "Implementasi Artificial Intelligence Dalam Sektor Ekonomi Digital Indonesia."

Article 15 paragraph (1) of the ITE Law states that every electronic system provider is obliged to provide an electronic system reliably and safely and is responsible for the proper operation of the electronic system. The phrase "responsible for the operation of the electronic system" has important implications, because it shows that the provider cannot escape responsibility for system errors on the grounds that the system works automatically. In the context of AI, automation does not eliminate the legal responsibility of business actors. Precisely because the system is designed and controlled by business actors, responsibility for errors, malfunctions, or algorithmic bias remains with the electronic system provider.

Government Regulation 71 of 2019 further recognizes the concept of electronic agents, namely devices within an electronic system designed to automatically perform actions on certain electronic information held by humans. AI-based skin health services can be qualified as electronic agents because the system automatically processes data and generates recommendations without direct human intervention in each transaction. However, even if the system acts automatically, legal responsibility remains with the system organizer, not the technology itself. AI does not have legal capacity as a legal subject but is merely a tool or instrument operated within the scope of human or legal entity responsibility.

Therefore, from the perspective of the ITE Law and Government Regulation 71 of 2019, responsibility for AI diagnostic errors cannot be shifted to the system as an independent entity. Business actors, as operators of electronic systems, remain obligated to ensure the reliability, security, and accuracy of the systems used in interactions with consumers. If the system produces output that causes losses due to unreliability or functional failure, business actors can still be held legally accountable. This approach is in line with the principles of consumer protection and supports the realization of legal certainty and justice in the digital ecosystem.

In the context of consumer protection law and electronic system regulation, SDG 16 serves as a normative parameter for assessing whether

the Indonesian legal system has provided fair, transparent, and accessible protection for consumers in the face of developments in artificial intelligence technology.

First, from the perspective of access to justice, Article 19 of the Consumer Protection Law, which grants consumers the right to claim compensation, is a concrete implementation of the principles of **SDG 16**. Consumers harmed by AI diagnostic errors are legally entitled to redress. However, challenges arise when consumers must prove a causal relationship between the algorithmic error and the harm suffered. In complex and opaque AI systems *(black box systems)*, access to justice can be hampered by information gaps and technical capabilities between businesses and consumers.[37] Therefore, the application of the reversal of the burden of proof in consumer disputes is crucial to ensure that the principle of access to justice does not stop at the normative level, but is truly effective in practice.

Second, SDG 16 also emphasizes the importance of effective and accountable institutions. In the context of the ITE Law and Government Regulation 71 of 2019, the obligation of electronic system administrators to ensure system reliability and security is a manifestation of the principle of accountability. Article 15 of the ITE Law, which states that electronic system administrators are responsible for the reliable operation of the system, demonstrates that the state places strict legal responsibility on the entities controlling the technology. This is in line with SDG 16 because it reflects a regulatory framework that demands accountability for the impact of technology on society.

Implementation challenges arise when existing regulations do not specifically address standards for accuracy, algorithm transparency, or audit mechanisms for AI systems. Without robust oversight and clear evaluation mechanisms, the obligation of *"reliability"* has the potential to

[37] Putri, Elviandri, and Pratama, "Analisis Yuridis Terhadap Penggunaan Artificial Intelligence (AI) Dalam Transaksi Bisnis Online Pada Aspek Privasi Data Dan Keamanan Konsumen."

become an abstract and difficult-to-measure norm. From the perspective of SDG 16, this situation highlights the need to strengthen oversight institutions and reform regulations to keep pace with the development of digital technology.

Third, SDG 16 underscores the importance of the rule of law and legal certainty. Unclear standards of accountability in AI cases can create uncertainty for both consumers and businesses. For consumers, this uncertainty has the potential to undermine their ability to assert their rights. For businesses, this uncertainty can create instability in business planning.

Within the framework of **SDG 16**, harmonization and strengthening of more specific regulations regarding accountability in the use of AI are needed, including the possible application of the principle of strict liability for high-risk services. Clear legal certainty will increase public trust in legal institutions and in the technology itself.

Fourth, SDG 16 also relates to transparency and the protection of human rights. AI skin diagnostic services process biometric data in the form of facial photographs, which is considered sensitive personal data. Misdiagnosis not only impacts skin health but can also impact an individual's psychological well-being and dignity. Therefore, business actors' responsibility extends beyond financial compensation to protecting consumers' rights to security, safety, and privacy. Regulations that ensure algorithm transparency, provide clear information to consumers, and provide easily accessible complaint mechanisms are all part of implementing SDG 16.[38]

5. AI Accountability Construction for Skin Health Service.

[38] Setiawan Permana, "Transparansi Algoritma Dan Hak Konsumen Dalam Era Digital," *Jurnal Ilmu Hukum Digital* 12, no. 3 (2024): 201–24.

Theoretically, there are three main liability models: *fault liability, presumption of liability, and strict liability*. In the context of AI skin diagnosis, the fault liability model has fundamental weaknesses. Consumers will have difficulty proving algorithmic errors, training data bias, or internal system failures. The complexity of AI technology makes proving fault a nearly impossible burden for consumers. Therefore, applying pure fault liability has the potential to weaken consumer protection.

The presumption of liability model appears more relevant in this context. In this model, the business actor is considered responsible until it can prove that the loss was not caused by a system error. This model aligns with the spirit of Law Number 8 of 1999 concerning Consumer Protection, which positions consumers as the party that must be protected in an unequal relationship. The *presumption of liability* also reflects the principles of balance and fairness, as the business actor has full access to the design, development, and evaluation of the AI system.[39]

However, in certain contexts, an approach closer to strict liability may be considered, particularly if the AI service relates to health and safety issues. Skin diagnostics, while not a formal medical procedure, are still related to health conditions and can influence consumer treatment decisions.[40] In situations where the risk of loss concerns physical and psychological aspects, the application of the principle of absolute responsibility becomes normatively argumentative because the risk is entirely within the control of the business actor as the party that obtains economic benefits from the technology.

Thus, the most relevant model for AI-based healthcare is a combination of presumption of liability with a tendency toward strict liability for aspects concerning consumer safety and security. This model

[39] Abdul Hadi, "Pembaharuan Hukum N Nasional Dalam Upaya Perlindungan Data Pribadi Di Era Distrupsi."
[40] Muhamad Ammar Muhtadi, "Hukum Perlindungan Konsumen Dan Etika Bisnis Di Era Teknologi Kecerdasan Buatan: Perlindungan Pengguna Dan Tanggung Jawab Perusahaan."

strikes a balance between consumer protection and legal certainty for businesses.

Conclusion

Consumer protection against misdiagnosis of skin care by AI in Skin Health Services in Indonesia has a normatively adequate legal basis in Law Number 8 of 1999 concerning Consumer Protection (UUPK), and is strengthened by Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016 concerning Amendments to the ITE Law and Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions. AI-based skin health services can be qualified as services in the perspective of UUPK and as a system and electronic agents from an information technology legal perspective. Therefore, consumers who suffer losses due to misdiagnosis have the right to comfort, security, accurate information, and the right to claim compensation. The principle of reversing the burden of proof in the Consumer Protection Law (UUPK) is an important instrument in addressing the complex and opaque nature of AI. Furthermore, the availability of dispute resolution mechanisms, both through non-litigation and through legal channels, reflects a commitment to access to justice and institutional accountability, which aligns with the values of SDG 16 ***(Peace, Justice, and Strong Institutions).*** However, strengthening specific regulations related to AI standards and oversight is still needed to ensure optimal legal certainty.

The legal liability of business actors for consumer losses resulting from misdiagnosis in AI-based Skin Health Services is more relevant using the principle of Presumption of Liability. This principle places business actors as the party deemed responsible until proven otherwise. This is important because consumers generally lack the technical ability to prove errors in algorithms or AI systems. Furthermore, business actors are the parties that design, control, and derive economic benefits from the use of

such technology. Therefore, imposing responsibility on business actors through the principle of Presumption of Liability aligns with the objectives of consumer protection as stipulated in Law Number 8 of 1999 concerning Consumer Protection.

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