

The Design of Consumer Legal Protection Arrangements in Indonesia Based on Artificial Intelligence

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Abstract. *The consumer protection in Indonesia from year-to-year increased weakness, based on the data from the Ministry of Industry and Trade of the Republic of Indonesia that the percentage of consumer complaint services in 2022 increased by 93%. Then, the data from the Indonesian Consumers Foundation (YLKI) in 2022 received 882 consumer complaints in Indonesia. This number increased by 64.86% compared to 2021 with 535 complaints. This article aimed to identify and analyse how to design legal protection arrangements for consumers in Indonesia based on Artificial Intelligence (AI). The results of the study showed that the design of legal protection arrangements for consumers in Indonesia was based on Artificial Intelligence (AI), by revising the Law No. 8 of 1999 concerning Consumer Protection, by including articles that accommodated Artificial Intelligence in legal protection of consumers in Indonesia, both carried out by the Indonesian Consumers Foundation (YLKI) and by the Consumer Dispute Settlement Agency (BPSK), which guaranteed fairness, certainty and benefits for both consumers and for business actors in Indonesia.*

Keywords: Artificial Intelligence; Consumer; Protection.

1. Introduction

The legal protection for consumers in Indonesia has been legally regulated since 1999 as the enactment of the Law No. 1999 concerning Consumer Protection. This law had never been revised until now, even this law was born as the first law of the 1998 reform which demanded that there were improvements, not only in government institutions, but also improvements in the economic and business fields in Indonesia.

In the general explanation of the Law No. 8 of 1999 concerning consumer protection, it was explained that the presence of a consumer protection law was

caused by the main factor that was a weakness of consumers, the level of consumer awareness of their rights was still low. This was mainly due to the low level of consumer education. Therefore, the Consumer Protection Law was intended to be a strong legal basis for the government and non-governmental consumer protection organizations to make efforts to empower consumers through consumer coaching and education.

The explanation above showed that consumer protection in Indonesia was still very weak, especially in the era of trade using digitalization or online, because of juridically, the existing laws had not yet regulated consumer protection online, and this had not been maximized even there were already laws regulating it among the laws. Law No. 8 of 1999 concerning Consumer Protection, Law No. 19 of 2016 concerning Electronic Transaction Information, and most recently there was Law No. 27 of 2022 concerning Protection of Personal Data.

It has been 24 years since the Law No. 8 of 1999 concerning Consumer Protection was still being used even though it has been left behind in the midst of the times in the digitalization era that has used Artificial Intelligence (AI) / Artificial Intelligence, which had an impact on all aspects of consumer protection in Indonesia¹. This new innovation had the capacity to receive, store, manipulate, transfer all consumer and business data in Indonesia. Because AI was able to analyze data, understand patterns, and study the surrounding circumstances to make a decision.

Based on the explanation above, it was necessary to design consumer protection arrangements in Indonesia in the current digitalization era as the program of the Ministry of Trade of the Republic of Indonesia. It emphasized that digital consumer protection was an important step in the development and transformation of trade to traditional markets. The use of digitalization in trade in Indonesia to assist logistics systems, warehousing, product distribution, price management and so on in order to create an efficient and profitable trade for all parties. In addition, digitalization also developed new economic opportunities and opportunities that provided protection to all parties, especially consumer protection².

Based on data from the Ministry of Industry and Trade of the Republic of Indonesia, the percentage of consumer complaint services related to online transactions still dominated 6,911 services or 93 percent of the total number of consumer services received during 2022. For example, refund issues, purchases

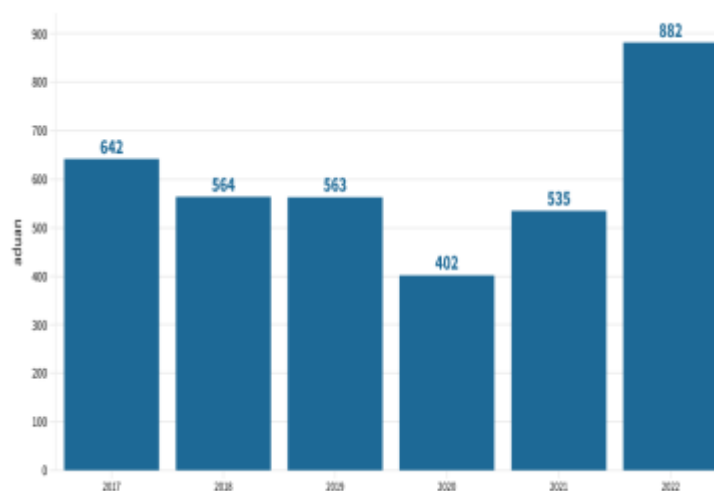
¹ Rofiq Hidayat, "Seeing the Urgency of Revision of the Consumer Protection Act", in <https://www.hukumonline.com>, accessed on 9 July 2023.

² Anisa Indraini, "Ministry of Trade Encourages Merchants to Go Digital, Data Protection Becomes Serious Attention", in <https://www.kemendag.go.id>, accessed on 9 July 2023.

of goods that did not comply with agreements or damage, goods not received by consumers, unilateral cancellations of business actors, arrival times of goods that were not as promised, fraud, and use of social media applications that did not work³.

Meanwhile, the data from the Indonesian Consumers Foundation (YLKI) in 2022 received 882 consumer complaints in Indonesia. This number increased by 64.86% compared to 2021 with 535 complaints. The most complaints were related to financial services, namely 32.9 percent. In detail, of the total complaints related to financial services, as much as 44 percent are about online loans (*pinjol*), 25 percent were about banks, 12 percent were about electronic money, 11 percent were about leasing, 7 percent were about insurance, and 1 percent were about investments⁴. As in Graph I below:

Graph I: Number of Consumer Complaints 2017-2023



Source: Indonesian Consumers Foundation (YLKI).

Graph I above showed that consumer protection in the era of digitalization or online in Indonesia still had many weaknesses, so many consumers in Indonesia were harmed by business actors. Based on the preliminary description above, this article attempted to identify and analyze how to design AI-based legal protection arrangements for consumers in Indonesia.

2. Research Methods

Normative legal research method was used to examine legal rules, legal principles, or legal doctrines that were in accordance with the legal issues in this

³ Elsa Catriana, "Ministry of Trade Serves More Than 7,000 Consumer Reports Throughout 2022, Electronic Trading Systems Dominate", in <https://perindag.babelprov.go.id>, accessed on 9 July 2023.

⁴ Isna Rifka Sri Rahayu, "YLKI Received 200,000 Complaints During 2022, Mostly Related to Financial Services", in <https://money.kompas.com>, accessed on 9 July 2023.

study, using two approaches, the statutory approach, and the conceptual approach. Then, library research or document studies in collecting legal materials was used.⁵ Primary materials in the form of laws and regulations, institutional decisions, courts (jurisprudence), legal cases, and expert opinions to obtain meaning and interpretation in accordance with legal protection for consumers by using AI⁶. The legal material was analyzed using deductive reasoning by drawing conclusions from a general to a specific matter

3. Result and Discussion

3.1. The Legal Protection for Consumers

The legal protection was the protection of human dignity, as well as the recognition of human rights owned by legal subjects (humans), based on legal provisions of arbitrariness or as a collection of rules that was able to protect one thing from another. Regarding to consumers, it meant that the law provides legal protection for consumer rights from companies or products that result in non-fulfilment of consumer rights as stipulated in the Law No. 8 of 1999 concerning Consumer Protection. Lutfitasari Ratna, "Legal Protection for Consumers PT. PLN (Persero) Balikpapan Related to Power Outages," *Journal of Lex Suprema 2* (2020): 362–377.

In legal protection for consumers in Indonesia, of course it referred to the theory of legal protection as put forward by Philip M. Hadjon that there were two kinds of means of legal protection:

- a) Means of Preventive Legal Protection. In this preventive legal protection, legal subjects were given the opportunity to submit objections or opinions before a government decision gets a definitive form. The goal is to prevent disputes from occurring. Preventive legal protection was very significant for government actions based on freedom of action because with the existence of preventive legal protection, the government was encouraged to be careful in making decisions based on discretion. In Indonesia there was no specific regulation regarding preventive legal protection.
- b) Means of Repressive Legal Protection. Repressive legal protection aimed to resolve disputes. Handling of legal protection by the General Courts and Administrative Courts in Indonesia was included in this category of legal protection. The principle of legal protection against government actions was based on and originates from the concept of recognition and

⁵ Helmi Chandra SY, "The Design of Constitutionality Limiting the Term of Office of the Village Head After the Constitutional Court Ruling", *RechtsVinding Journal*, Vol. 12 No. 1, April 2023: 129–143. DOI:<http://dx.doi.org/10.33331/rechtsvinding.v12i1.1105>

⁶ Tri Sulistianing Astuti, & Luthfi Widagdo Eddyono, "Dynamics of Regulations and Legal Certainty of Central Government Authorities for the Management of Geothermal Indirect Utilization", *RechtsVinding Journal*, Volume 11 Number 3, December 2022: 493-510. DOI: <http://dx.doi.org/10.33331/rechtsvinding.v11i3.1017>.

protection of human rights because according to history from the west, the concept of recognition was born, and the protection of human rights was directed at limitations and placing the obligations of society and the government. The second principle that underlies legal protection against acts of government was the rule of law principle. Associated with the recognition and protection of human rights, the recognition and protection of human rights takes the main place and can be linked to the goals of a rule of law. Philipus Hadjon, *Legal Protection for Indonesian People* (Surabaya: Bina Ilmu, 1987), p. 30.

Satjipto Raharjo, argued that legal protection was an effort to organize various interests in society so that there are no collisions between interests and can enjoy all the rights granted by law. Satjipto Rahardjo, *Legal studies* (Bandung: Citra Aditya Bakti, 2012), p. 53–54. In this case consumer rights were both regulated in the 1945 Constitution of the Republic of Indonesia in Article 28F which confirmed that: "everyone had the right to communicate and obtain information to develop his personality and social environment, and has the right to seek, obtain, possess, store, manage, and convey information using all types of available channels. Then, in the Law No. 8 of 1999 concerning Consumer Protection as regulated in Article 4 Consumer rights were:

- a. the right to comfort, security and safety in consuming goods and/or services;
- b. the right to choose goods and/or services and obtain said goods and/or services in accordance with the exchange rate and conditions as well as promised guarantees;
- c. the right to correct, clear and honest information regarding the conditions and warranties of goods and/or services;
- d. the right to have their opinions and complaints heard about the goods and/or services used;
- e. the right to obtain proper advocacy, protection, and efforts to resolve consumer protection disputes;
- f. the right to obtain consumer guidance and education;
- g. the right to be treated or served properly and honestly and not discriminatory;
- h. the right to obtain compensation, compensation and/or reimbursement, if the goods and/or services received are not in accordance with the agreement or not as they should be;
- i. the rights regulated in the provisions of other laws and regulations.

Based on the explanation above, it was very important that legal protection for consumers in Indonesia was increased in order to fulfill constitutional rights and statutory rights of consumers to obtain their rights as consumers in Indonesia, especially now that more and more transactions were made online or known as

e-commerce. Given the weak bargaining position of consumers. Legal protection for consumers required taking sides with consumers' weak bargaining position. Therefore, legal protection for consumers was a big problem, with global competition that continued to grow. Legal protection was urgently needed in competition and many products and services place consumers in a weak bargaining position⁷. Even before the Law No. 8 of 1999 concerning Consumer Protection existed, there were already 20 (twenty) laws whose substance protected the interests of consumers, but consumers were in a weak position.

Philosophically, consumer protection had been explained in the preamble to the Law No. 8 of 1999 concerning Consumer Protection, which explained that the purpose of consumer protection to increase the dignity of consumers needed to increase awareness, knowledge, concern, ability and independence of consumers to protect themselves and developed attitudes responsible business actor.

Sociologically, the Law No. 8 of 1999 concerning Consumer Protection was because the general public does not yet know a certain level of feasibility and legality of a product that was sold both offline and online. This was seen by the existence of a law that provides or ensures that the public had certainty in law whereas, in consumer protection law indirectly has the goal of increasing quality and guaranteeing consumers in carrying out a transaction activity with full responsibility. For consumers, information about an item or service was something that was very important before making transactions online⁸.

The need for legal protection for consumers because consumers were considered to be in a weak position due to an unequal position with business actors in Indonesia, both in the economic, social and educational fields. This imbalance concerned the education sector and the bargaining position held by consumers is weak. Often consumers were powerless in the face of a stronger position from business actors, especially in online transactions⁹.

Juridically, the purpose of consumer protection was regulated in Article 3 of the Law No. 8 of 1999 concerning Consumer Protection, explaining that consumer protection aimed:

⁷ Rifan Adi Nugraha, Jamaluddin Mukhtar, & Hardika Fajar Ardianto, "Legal Protection for Consumers in Online Transactions", *Serambi Hukum Journal* Vol. 08 No. 02 August 2014-January 2015: 91-102.

⁸ Ni Made Dwi Andhari, & Desak Putu Dewi Kasih, "Legal Protection of Consumer Rights Regarding Transactions of Counterfeit Goods on Online Buying and Selling Sites, *Journal of Kertha Semaya*, Vol. 9 No. 6 of 2021: 926-935. DOI: <https://doi.org/10.24843/KS.2021.v09.i06.p02>.

⁹ Chandra Adi Gunawan Putra, I Nyoman Putu Budiarta, & Ni Made Puspasutari Ujjanti, "Legal Protection of Consumers in the Perspective of Community Legal Awareness, *Journal of Legal Analogy*, Volume 5, No 1, 2023: 86-92. DOI: <https://doi.org/10.22225/ah.5.1.2023.86-92>.

1. to increase consumer awareness, ability and independence to protect themselves;
2. to raise the dignity of consumers by preventing them from negative excesses in the use of goods and/or services.
3. to improve consumer empowerment in choosing, determining, and demanding their rights as consumers.
4. to create a consumer protection system that contains elements of legal certainty and information disclosure as well as access to information.
5. to grow awareness of business actors regarding the importance of consumer protection so that honest and responsible attitudes grow in doing business.
6. to improve the quality of goods and/or services that guarantee the continuity of the business of producing goods and/or services, health, comfort, security and consumer safety.

Advances in technology make it very easy for both consumers and for businesses. Thus, consumer protection for buying and selling online was urgently needed in obtaining information rights to obtain legal certainty in entering into online purchase and sale agreements, so consumers received clear and detailed information about the goods to be purchased, in purchasing goods online according to orders consumer purchases, it was necessary to have clear legal certainty, so there was no violation of consumer rights in Indonesia¹⁰.

Especially with advances in technology, many business actors in Indonesia use technology to develop their business by using the term startup (technology-based business). As for businesses using startups such as: e-commerce (marketplaces, Mall Direct to Consumer), transport & food (transport, food delivery), online media (advertising, gaming, video on demand, music on demand) online travels (flights, hotels, vacation rentals) & financial service (Payment, Remittance, Lending, insurance, investing). Then, there is Health-Tech in the health sector and Ed-Tech in the education sector (Kharisma 2021, 431–45).

Based on the explanation above, it was a challenge in itself for the Law No. 8 of 1999 concerning Consumer Protection, which had a weakness because it had not yet regulated consumer protection in the technological era where many businesses made use of technology, this was utilized by global business people and business players to sell unsafe and understandable products using technology or online. This condition was exacerbated by weak and inadequate

¹⁰ Andi Nurfadhila Brilyana Baso, Asnawi, & Aris Setyanto Pramono, "Legal Protection of Consumer Rights to Information Online Buying and Selling Reviewed Based on Law Number 8 of 1999 Concerning Consumer Protection", *Res Justitia Journal: Journal of Legal Studies*, Volume 3 Number 1 January 2023: 119-128. DOI Issue: 10.46306/rj.v3i1.

consumer education regarding the adverse effects of using unsafe and substandard goods. Therefore, all parties wanted the best possible legal protection for consumer protection¹¹.

Meanwhile, in the international world, consumer protection had long been regulated as in UN Resolution No. 39/248 of 1985. This resolution explained that consumer interests that must be protected included:

- a. Protection of consumers from hazards to their health and safety.
- b. Promotion and protection of the socio-economic interests of consumers.
- c. Availability of sufficient information for consumers to provide their ability to make the right choice according to personal wishes and needs.
- d. Consumer education.
- e. Availability of effective compensation efforts.
- f. Freedom to form consumer organizations¹².

All of these objectives were certainly achieved if consumer protection laws were applied consistently. To realize this hope, among others:

1. The consumer protection law must be fair to both consumers and producers, so it did not only burden producers with responsibility, but also protected their rights to do business honestly.
2. The law enforcement apparatus must be provided with adequate facilities and be accompanied by responsibility.
3. Increasing consumer awareness of their rights.
4. Changing the value system in society towards an attitude that supported the implementation of consumer protection¹³.

To achieve the above objectives, legal protection for consumers in Indonesia must be in line with the theory of legal protection which was to provide legal protection for the dignity of consumers, as well as recognition of human rights for consumers in Indonesia with the aim of fulfilling their constitutional rights and consumer rights as regulated in the Law No. 8 of 1999 concerning Consumer Protection, which truly protected the dignity of consumers in Indonesia because by providing consumer protection only by providing legal protection for the people of Indonesia.

3.2. The Consumer Legal Protection Based on Artificial Intelligence

Advances in technology in general facilitated human work in all fields. There was no exception for consumer protection in the era of technology or what was

¹¹ Ali Mansyur, & Irsan Rahman, "Law Enforcement of Consumer Protection as an Effort to Increase the Quality of National Production", *Journal of Legal Renewal*, Volume II No. January 1 - April 2015: 1-10. DOI: <http://dx.doi.org/10.26532/jph.v2i1.1411>.

¹² Niru Anita Sinaga, & Nunuk Sulisrudatin, "Implementation of Consumer Protection in Indonesia", *Scientific Journal of Aerospace Law*, Volume 5 No.2, Maret 2015: 71-87.

¹³ Celina Tri Siwi Kristiyanti, *Consumer Protection Law*, (Jakarta: Sinar Grafika, 2008), p. 10-11.

known as online trading or e-commerce. However, in practice there were several problems that arise with regard to consumer rights in e-commerce transactions, among others:

- a. Consumers could not immediately identify, see or touch the goods to be ordered;
- b. Unclear information about the products offered and/or lack of certainty whether consumers had obtained various information that is worth knowing, or that was needed to make a decision in a transaction;
- c. Unclear legal subject status of business actors;
- d. There was no guarantee of transaction security and privacy as well as an explanation of the risks associated with the system used, especially in terms of electronic payments using either a credit card or electronic cash;
- e. Unbalanced risk imposition, because in general for buying and selling on the internet, the payment had been paid in advance by the consumer, while the goods were not necessarily received or followed later, because the guarantee that exists was a guarantee of delivery of goods not receipt of goods;
- f. Transactions that were borderless across national borders raised questions about which country's legal jurisdiction was enforced¹⁴.

Arfian Setiantoro, et al explained that legal protection arrangements for consumers in e-commerce transactions needed to include the following matters:

- a. Legal protection from the side of business actors, business actors were obliged to include their identity on the website, as stipulated in the Law No. 19 of 2016 concerning Electronic Transaction Information.
- b. Legal protection from the consumer side, there was a guarantee of protecting the confidentiality of consumer personal data, as stipulated in the Law No. 27 of 2022 concerning Personal Data Protection.
- c. Legal protection for consumers from the product side, where business actors were required to provide clear and complete information about the products offered, as stipulated in the Law No. 8 of 1999 concerning Consumer Protection.
- d. Legal protection for consumers from the transaction side, not all consumers understood how to transact through internet media so in this case, business actors needed to clearly and completely stated the transaction mechanism and other matters relating to transactions (stipulated in the Terms and Conditions)¹⁵.

¹⁴ Arfian Setiantoro, Fayreizha Destika Putri, Anisah Novitarani, & Rinitami Njatrijani, "The Urgency of Consumer Legal Protection and E-Commerce Dispute Resolution in the Era of the ASEAN Economic Community", *RechtsVinding Journal*, Volume 7, Number 1, April 2018: 1-17. DOI: <http://dx.doi.org/10.33331/rechtsvinding.v7i1.220>.

¹⁵ Ibid,

AI technology, basically was a "machine" that had the ability to do various things that were considered to require intelligence when humans operated it ¹⁶. AI referred to concepts and capabilities that seek to emulate human intelligence through experience and learning. AI entered the world of trading companies in many forms that used highly trained neural networks to support human investors. Whereas in digital companies AI controlled production, using AI algorithms predicted and prevented churn violations in the telecommunications industry. Using AI robotics solutions (self-driving trucks in mining or robotic household help). Thus, digital companies increasingly used AI to augment human tasks¹⁷.

AI was operationalized by using large amounts of digital storage data (Big Data), and the development of robot technology to improve the quality of human life. As explained by the prime minister of Japan, Shinzo Abe said that the concept of the industrial revolution 4.0 and society 5.0 did not have much difference, the industrial revolution 4.0 used AI while society 5.0 focused on the human component.

Robot technology was currently always being developed by humans who were always being developed by scientists every year, so the robot became the most perfect Humanoid Robot/robotics like humans, of course AI was controlled with AI technology as its mind or brain. The AI technology product that was currently most in demand by the international community was self-driving car technology. Therefore, AI technology was starting to become a legal issue nowadays because artificial intelligence technology became a legal subject and produced an object protected by law. Because this technology understood human language commands, recognized a person's face, drive a vehicle, even the most sophisticated artificial intelligence operated production machines in a company.

The development of AI's ability to identify a problem was even considered to exceed the ability of human intelligence. Supported by the ability to calculate complex (computing power) accompanied by the ability to process large amounts of data (big data), this intelligent computer program had a much higher learning ability than humans. The various sophistications possessed by AI, its capabilities were also utilized in providing consumer protection in Indonesia¹⁸.

¹⁶ Hari Sutra Disemadi, "The Urgency of Special Regulations and Utilization of Artificial Intelligence in Realizing Personal Data Protection in Indonesia", *Journal of Wawasan Yuridika*, Vol. 5, No. 2, Sept. 2021: 177-199, DOI: <http://dx.doi.org/10.25072/jwy.v5i2.460>.

¹⁷ Rahmat Dwi Putranto, *Legal Technology New Paradigm of Law in the Digital World*, (Jakarta: Kencana, 2023), p. 105-106.

¹⁸ Ibid,

Yustina Dhian Novita, and Budi Santoso, explained several factors that could affect the effectiveness of the enactment of regulations related to consumer protection in the digital business era:

1. Legal structure. The government was a legal structure that influences the effectiveness of a regulation in its function as a policy maker.
2. Legal substance. Regulations that became the legal basis for consumer protection in digital transactions did not yet regulate technical matters.
3. Culture or culture of business actors as well as consumers and the government. In buying and selling through digital transactions, buyers and sellers tended not to understand each other's rights and obligations, as well as things that are prohibited for sellers as business actors as regulated by Law Number 8 of 1999 concerning Consumer Protection¹⁹.

Legal protection for consumers was as follows:

1. Protection of consumer safety. The security meant here was security for the public in consuming goods in the sense that the food/drink that was purchased and when consumed did not endanger the health and safety of their body and soul.”
2. Protection of their right to obtain information. Communities as consumers must be given complete, clear, honest information about the goods they buy and then consumed them to meet their own needs and that of their families.
3. Protection of their right to be heard. The public as consumers also had complaints and suggestions for an item, so their complaints/complaints and suggestions must be heard by business actors. This was because there is a reciprocal relationship between producers and consumers. In this case, the slogan stating that the buyer is the king is actually implemented by business actors.
4. Protection of the right to choose products. Consumers have the right to choose the product they will buy according to their financial capabilities, needs and tastes.
5. Protection of their rights to receive advocacy. Consumers also need advocacy from competent parties if they experience problems using goods.
6. Protection of their rights to be served or treated correctly, honestly and not discriminatory. This is related to the position of consumers who are needed by producers. If there are no consumers who are willing and able to consume the goods/products sold by producers, then trade will not take place, meaning that producers will go bankrupt.

¹⁹ Yustina Dhian Novita, & Budi Santoso, “The Urgency of Updating Consumer Protection Regulations in the Digital Business Era”, Indonesian Journal of Legal Development, Volume 3, Number 1, Year 2021: 46-58. DOI: [10.14710/jphi.v3i1.46-58](https://doi.org/10.14710/jphi.v3i1.46-58).

7. Protection of the right to obtain compensation, compensation and/or reimbursement, if the goods received are not in accordance with the agreement or not as they should be²⁰.

Some examples of AI technology in e-commerce were as follows:

1. *Chatbots*: With e-commerce websites/applications available 24/7, there was a need for reliable consumer support currently provided by chatbots. The main function of chatbots was to answer consumer questions automatically, responded to simple voice commands, or provided product recommendations.
2. Recommendation tools: AI was able to perform statistical programming, predict and analyze consumer behavior, large data set that predicted which products had the potential to attract certain customers.
3. Smart logistics: AI machine learning algorithms were used to assist warehouse operations or assist the process of delivering products to e-commerce consumers.
4. AI Copywriting: AI writing tools generated writing for marketing in seconds, offering digital ad copy, social media content, and other e-commerce writing using advanced AI language models.
5. AI for healthcare: examples of the application of AI in the health world such as for: cancer treatment with gene therapy, robots for surgery, disease diagnosis using medical images, monitoring patient conditions remotely, early detection of infectious diseases, monitoring the health of pregnant women and fetuses, providing healthy lifestyle advice based on personal health data, mass screening for infectious diseases in the community, and providing personalized health education.
6. AI in Education, example: mentor virtual, voice assistant, smart content, presentation translator, global courses, automatic assessment, & personalized learning.

With all the applications of AI technology described above, consumers needed to be aware of all the benefits and risks associated with using AI. The table below listed some of the advantages and risks mentioned above:

Table 1: Advantages and Risks of Using AI

| Advantages | Risks |
|--|---|
| 1. Analyzing and summarize a large number of product reviews; | 1. Lack of traceability of AI implementation; |
| 2. Detecting discrimination in commercial practices; | 2. Introduction of program bias into decision making; |
| 3. Recognizing identity fraud; | 3. Data leakage and breach of personal privacy; |
| 4. Comparing prices across multiple | |

²⁰ Chandra Adi Gunawan Putra, I Nyoman Putu Budiarta, & Ni Made Puspasutari Ujianti, "Legal Protection of Consumers in the Perspective of Community Legal Awareness", *Journal of Legal Analogy*, Volume 5, No 1, 2023: 86–92. DOI: <https://doi.org/10.22225/ah.5.1.2023.86-92>.

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- platforms;
 - 5. **Detecting unlawful provisions in consumer contracts.**
 - 6. **More effective and efficient and provide legal protection to consumers**
- 4. Lack of transparency; And
 - 5. Unclear legal responsibilities;
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Source: <https://konsumencerdas.id>, accessed on 9 July 2023.

Based on Government Regulation of the Republic of Indonesia Number 71 of 2019 concerning Implementation of Electronic Systems and Transactions (PP 71/2019). The reason for the presence of this PP was due to the very rapid development of information technology in the context of encouraging digital economic growth and upholding state sovereignty over electronic information in the territory of the Unitary State of the Republic of Indonesia, it was necessary to thoroughly regulate the use of information technology and electronic transactions. This PP mandated that the obligations of electronic service providers applied *mutatis mutandis* (necessary changes) to electronic agent operators. Therefore, AI service providers/providers needed to understand that they were bounded by provisions related to the operation of electronic systems and transactions regulated in GR 71/2019. In addition to the general obligations mentioned above that applied to electronic agent operators as part of operating electronic systems and transactions, PP 71/2019 also stipulated several special obligations for electronic agent operators related to consumer protection. These obligations were described in table II below:

Table 2: Obligations of AI Operators

| Obligation | Information |
|--|--|
| The obligation to contain or convey specific information. | Information that must be provided by electronic agent operators included: <ol style="list-style-type: none"> 1. Organizer Identity; 2. The object being transacted; 3. Eligibility or security of electronic agents; 4. Procedures for using the device; 5. Contract terms; 6. The procedure for reaching an agreement; 7. Privacy guarantee and/or personal data protection; And 8. Telephone number of the complaint center. |
| The obligation to ensure that AI had certain features | Required features of AI must enable facilities to perform certain actions: <ol style="list-style-type: none"> 1. Making corrections; 2. Cancelling the order; 3. Providing confirmation or reconfirmation; 4. Giving the option to continue or stop the next activity; 5. Viewing information submitted through Electronic Contracts or |

| | |
|--|---|
| | <p>advertisements;</p> <p>6. Checking the status of transaction settlement or failure; and/or</p> <p>7. Reading the agreement before making a transaction.</p> |
| <p>The obligation to have and carry out standard operating procedures that were guided by the principles of user data security control and electronic transaction principles.</p> | <p>The principles of controlling the security of user data and electronic transactions included the following aspects:</p> <ol style="list-style-type: none"> 1. Confidentiality; 2. Integrity; 3. Availability; 4. Authenticity; 5. Authorization; And 6. Denial |

Source: <https://konsumencerdas.id>, accessed on 9 July 2023.

The Government of the Republic of Indonesia emphasized that the Indonesian state was currently in the world's battlefield (AI), which must be watched out for so Indonesia did not only become a buyer of technology made by foreigners. It meant that Indonesia must also be able to develop AI that could benefit its people and the world. Production effectiveness from the use of AI was indeed becoming popular throughout the world. It has been estimated that there was at least a 40% increase in production for companies that adopted AI in 2023. In fact, several countries had implemented AI up to 56% in their industrial sector. So, to apply AI usefully in Indonesia, the Agency for the Assessment and Application of Technology (BPPT) had published the Indonesian National Artificial Intelligence Strategy 2020-2045.

Based on the explanation above, it was necessary to revise the Law No. 8 of 1999 concerning Consumer Protection because as many as 65 articles did not regulate legal protection for AI-based consumers in Indonesia. The revision must accommodate consumer protection using AI in Indonesia. Thus, the authors emphasized that the articles that must be revised to suit legal protection for consumers using AI were as follows:

Table 3: Articles that Need to be Revised

| No | Article |
|----|--|
| 1 | Article 1 paragraph (1) Consumer protection is all efforts that guarantee fairness, benefits and legal certainty to provide protection to consumers, both offline and online . |
| 2 | Article 12 Business actors are prohibited from offering, promoting or advertising goods and/or services in marketplaces and e-commerce at special prices or rates |

within a certain time and amount, if the business actor does not intend to do so according to the time and amount offered, promoted, or advertised.

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- 3** Article 30 paragraph (1) Supervision of the implementation of consumer protection and the implementation of the provisions of the laws and regulations are carried out by the government, the public and non-governmental consumer protection organizations, may use **Artificial Intelligence (AI)**.
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- 4** Article 52 The duties and powers of a consumer dispute resolution agency may use **Artificial Intelligence (AI)**, including:
-
- 5** Article 54 (1) To handle and resolve consumer disputes, the consumer dispute settlement agency forms assemblies **through online and offline**.
-
- 6** Article 59 paragraph 2 letter e conducts inspections at certain places where evidence is suspected and confiscates goods resulting from infringement which can be used as evidence in criminal cases in the field of consumer protection **both offline and online**.

What needed to be made was a new article in the new consumer protection law later:

- 1. In Article 1 of the new law, it must explain the meaning of marketplace, e-commerce, and explain Artificial Intelligence (AI).**
 - 2. Providing legal protection to consumers used Artificial Intelligence (AI).**
 - 3. Requiring all business actors to create a website or sites regarding information on the composition of their products that was detected by Artificial Intelligence (AI) with the aim of facilitating the provision of legal protection to consumers.**
 - 4. Consumer dispute settlement trials was conducted online.**
 - 5. The consumer dispute settlement agency must make a consumer complaint application using Artificial Intelligence (AI) that detected consumer problems.**
 - 6. The consumer dispute settlement agency made an application using Artificial Intelligence (AI) which detected unscrupulous business actors.**
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4. Conclusion

The design of legal protection arrangements for consumers in Indonesia based on Artificial Intelligence (AI), by revising the Law No. 8 of 1999 concerning Consumer Protection, by including articles that accommodated Artificial Intelligence in legal protection for consumers in Indonesia whether carried out by the Indonesian Consumers Foundation (*YLKI*) or by the Consumer Dispute Settlement Agency (*BPSK*), which guaranteed fairness, certainty and benefits for both consumers and business actors in Indonesia.

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