
Jurnal Dinamika Hukum

Vol. 24 Issue 2, 2024

E-ISSN 2407-6562 P-ISSN 1410-0797

National Accredited Journal, Decree No. 21/E/KPT/2018

DOI: doi.org/10.20884/1.jdh.2024.24.2.3869

This work is licensed under a Creative Commons Attribution 4.0 International License (cc-by)

Ensuring Personal Data Protection in Telemedicine Services

Normalita Destyarini
Universitas Duta Bangsa Surakarta
✉ normalitadr@gmail.com

Submitted: 25/10/2023

Revised: 08/03/2024; 25/07/2024; 08/08/2024

Accepted: 09/08/2024

Abstract

The development of technology utilization in the business sector in various fields makes it challenging to provide consumer protection. Then it is necessary to know that the Personal Data Protection of telemedicine service users provides consumer protection accommodation. There are aspects of protection for consumers as service users of personal data. Control of personal data should be carried out by companies that use technology in their business activities, in this case, the organizers of electronic systems as required by existing regulations. The protection of consumers has been accommodated in the Consumer Protection Law (1999). Problems with data leaks that occur in Indonesia are problems experienced by consumers as users of digital services. Protection of personal data is a basic right of citizens and, therefore, the role of the State as the competent authority in the management and regulation of personal data. To ensure the accommodation of personal data protection in the business development of digital start-up companies, it is necessary to study the accommodation of personal data protection as a form of protection for consumers in the Consumer Protection Law (1999) by Digital Start-up Companies as service providers. A normative research method with conceptual and legal approaches is used to explain the facts. The results of this study show that the Consumer Protection Law (1999) has not provided regulatory accommodation that provides data protection for consumers of telemedicine. Output from this research can be a guideline for consumer protection practices in digital start-ups as required by the Consumer Protection Law (1999) and recommendations for relevant stakeholders in digital start-up services.

Keywords: Consumer Protection; Personal Data Protection; Start-Up.

Copyright©2024 Jurnal Dinamika Hukum.

Introduction

Technology is a tool that can facilitate various daily lives, and this convenience creates opportunities in the development of a business model so as to improve performance (Massa et al., 2017). The use of technology makes people compete in creating innovative business ideas. By 21st century is characterized by information technology (Putri & Saefudin, 2021), so it brings modernization in business development as a result of the use of technology, a business model addresses this called digital start-up. Digital start-ups in Indonesia reached 2,482 business entities by 2023, based on startupranking.com (*Top Startups Worldwide*, 2023). This data shows that the development of digital start-ups is high in demand as indicated by the number of business entities. Just like other business fields, digital start-ups have a specialty in the services offered. The services offered can be

in the education, finance, social, e-commerce, health, and fashion sectors. The business model is used as the identity of a start-up entity to increase the interest and value of a business.

The specificity of the business field by digital start-ups can be based on the needs of the community or business entities formed as a solution to problems with access to health by utilizing technology, providing easy access to health for the community to be evenly distributed, one of the efforts to improve the aspect of the method. The utilization of technology, especially with the existence of *telemedicine*. *Telemedicine is a technology-based health service provider remotely utilizing the service of analyzing a disease, treatment, and preventive service provider of disease and injury* (Serper & Volk, 2018). *Telemedicine* provides consultation services with doctors, purchasing drugs, both traditional medicines and drugs and processed foods. The existence of *telemedicine* in Indonesia is very helpful for the government in providing equal access to health services.

Telemedicine services involve various parties in carrying out their services. Provision of health consultation services carried out by health professionals (Arrang, 2021) such as doctors; in this case, there are requirements for doctors who provide consultation services in the telemedicine platform to have a practice license, provisions regarding the circulation of processed food, traditional medicines, and drug purchase services in collaboration with pharmacies that become partners, of course, with provisions under the platform to third parties as providers of drug delivery services ordered by consumers. Various *telemedicine* platforms have policies for each service they have and apply to the parties who become partners in each service contained in telemedicine.

The definition of consumers in the general provisions of the Consumer Protection Act states that consumers are every person who uses goods and or services available in the community for the benefit of themselves, their families, other people, and other living things. Providing protection to consumers is closely related to the legal protection of consumer interests in the form of rights. Article 4 of the Consumer Protection Law (1999) provides rights in the form of comfort, security, and safety in consuming goods and services. The development of technology makes choices for consumers to consume services, in this case, telemedicine services. Consumer Protection of service users with a form of achievement provided by the community to be utilized by consumers. Providing rights for consumers in the form of convenience, security, and safety in consuming services, providing convenience in the form of ease of use that provides time efficiency, services can be guaranteed, applications and systems are easy to use,

cheap, and safe. Providing rights in the form of safety and security of a digital service in the form of a service system supervised by the relevant authorities. So that telemedicine service users can be equated with the right to obtain consumer protection.

The telemedicine service business model has developed since 2015, along with the issuance of Minister of Health Regulation Number 90 of 2015, by regulating the service patterns of healthcare facilities in remote and very remote areas using telemedicine (Nurfikri et al., 2022). Services owned by telemedicine in Indonesia include doctor consultations, drug and food sales, and health information. The Ministry of Health is an authority that has the authority to supervise the issuance of Ministry of Health Regulation No. 14 of 2021 by fulfilling the requirements for applying for a registration mark. The granting of a registration mark on telemedicine with the type of service in the form of: a) Doctor consultation service facilities accompanied by online sales of drugs and food; b) Drug and food sales facilities hereinafter as Pharmaceutical Electronic System Operator (PSEF).

Research related to Cindy Aulia Khotimah's discussion of consumer protection in buying and selling transactions will discuss consumer protection accommodations in buying and selling transactions carried out in *e-commerce* using the legal basis approach of the Information and Electronic Transaction Law (2008) and derivative regulations of PP PSTE and dispute resolution carried out online. As a differentiator, this research will discuss consumer protection in digital start-ups in the field of health services using the approach of the Consumer Protection Law (1999).

Further research conducted by Kadek Rio Ramadi Natha (Natha. et al., 2022) by knowing the legal protection of consumers in electronic commerce and the settlement of consumer personal data leaks for marketplace users. The difference between this research and what we are researching is by looking at the accommodation of providing personal data protection in the form of consumer protection belonging to service users, in this case, consumers of services provided by digital start-ups in the telemedicine platform with drug and food selling services. Furthermore, research from Krystyna Nizioł (Nizioł, 2021) about challenges using artificial intelligence creates new threats to consumers and transaction use of artificial intelligence creates new challenges of consumer protection law may pose risks for consumers. In this case, the researcher provides formulation to prevent legal risk by using telemedicine to consumer, for example, protecting their privacy on the internet, the nature of which to understand at the time of concluding the contract. The result from this research can be

recommended for stakeholders who are related to healthcare technology by focusing on consumer data protection of telemedicine. Gives an insight into academics and practitioners who understand the potential and challenges of data protection and also educates consumers about using telemedicine.

The use of electronic services requires protecting the security of users (in this case, consumers) from risks that may arise from data leaks caused by inadequate security of data storage. The user is required to enter basic personal information such as name, email her address and phone number in the form of the user form. Basic personal data protection as mentioned, is a derivative of privacy protection (Guo et al., 2024). All data is now connected to other electronic service systems. Therefore, there is a need for research on the protection of consumer personal data as a form of consumer protection. The authors work on the consideration of personal protection as a form of consumer protection in digital emerging services, in this case telemedicine, building on previous research.

The urgency of this research is to see the accommodation of consumer protection of personal data in telemedicine start-up services with online drug and food sales facilities in the face of a legal vacuum in protecting consumers from data branches as users of digital services, in this case, telemedicine as health services based on e-commerce in Indonesia as regulated by the Consumer Protection Law (1999). Problems that can arise from the use of telemedicine include the security of consumer health information and inaccurate and unclear reporting between doctors and patients. Users of telemedicine services are said to be service users; in this study, the services referred to are telemedicine services, which can be in the form of doctor consultation services and sales of drugs and food. Indonesia already has regulations related to consumer protection. However, in this case, there is still a legal vacuum in the form of arrangements for consumers who use services in the Consumer Protection Law (1999).

Research Problems

How is the Consumer Protection Law (1999) as form to accommodate data protection users of telemedicine as health services based on e-commerce?

Research Methods

This research method is normative juridical using a statutory and conceptual approach. The statute approach examines the laws that are in accordance with the legal issues in this study, and the conceptual approach uses the theory as the basis for the object of discussion so as to build opinions as the research raised is carried

out to describe the conditions in the field. Digital start-ups as mandated in the Consumer Protection Law (1999). data analysis is carried out by conducting a review of the literature to be studied and a review of the regulations relating to the legal issues to be studied. So, from this research can be known the implementation of consumer protection in business.

Discussion

1. **Personal Data Protection of Users Telemedicine Health Services Based on E-Commerce as Consumer Protection Form.**

In the digital era, consumer protection is urgently needed because causing many cases of lack of technology, particularly in the context of a digital start-up business, which has become increasingly important. The legal frameworks that govern consumer rights have evolved to address issues such as data privacy, security of transactions, and deceptive practices. One of the key legal aspects is ensuring that service providers offer a secure and reliable system for their e-business operations (Chawla & Kumar, 2022). When discussing accommodation from service providers in the legal context, aspects such as the quality of service, fulfilment of service expectations, and how services comply with legal standards are considered. Service providers must also be prepared with strategies for service recovery and improvements that orient towards customer satisfaction, which, in turn, affects customer loyalty.

The establishment of business entities in Indonesia is guided by Indonesian laws and regulations by providing indicators of fulfilment for legal subjects or persons, and this was chosen as an effort for the business carried out by the business entity to be included in legal steps so that the business entity in carrying out business activities obtains legal protection by pocketing the status of a legal entity. Determination of the form of a business entity by analyzing the advantages and disadvantages of the business form so that it depends on the needs of the owner of the business entity in legalizing the business entity, according to their respective needs (Sardjono et al., 2013). A business needs ideas to provide interest for consumers, so innovation is needed in the form of developments in the business model. The use of a business model as a real company attribute and a formal representation of how the business works (Priscyllia, 2019). Furthermore, consumers determine to use services by holding an agreement between telemedicine providers by the parties can agree by selecting on agree section button (Sudewo & Mahardika, 2022); as we know, clickwrap agreement.

The digital era is shown by the use of technology as a challenge to the form of business models. It makes demands for the business sector to change business

models by utilizing technology to support the digital economy era (Rindfleisch et al., 2017). The development of electronic services through the form of a business model, in this case with a digital start-up business model, both in terms of providing services and goods. Education, financial services, trade, and health sectors such as Telemedicine.

The existence of Telemedicine as an electronic system provider must obtain a license from the relevant ministries, namely the Ministry of Communication and Information Technology and the Ministry of Health; in this case, digital start-ups are included in the category of electronic pharmacy service providers by obtaining a license as an electronic pharmacy system provider must include consumer personal data protection accommodations. These provisions are intended to provide consumer protection in the form of legal certainty so that legal certainty can be realized.

Telemedicine as a solution in providing access to health facilities. Telemedicine services in Indonesia can be in the form of online doctor consultations (telehealth-based), access to health information, to the purchase of drugs and food (health services) with a doctor's prescription included or not. Providing these services with drug purchase services, the telemedicine platform is referred to as a Pharmacy Electronic System Provider (PSEF). Telemedicine, as a technology-based business model, makes a difference by utilizing technology so that there are electronic procedures in the form of collection, processing, analysis, and storage so that it can display and send electronic Information. Electronic Information contains personal data of identified service users that can be combined with other Information either directly or indirectly through electronic and or non-electronic systems.

It should be noted that there are seven telemedicine services registered with the Indonesia Ministry of Health that provide personal data protection accommodations as objects in this research. These services can be seen in the mention of the rights and obligations of digital health services platforms in managing personal data. The guarantee of personal data protection provided by Telemedicine by ensuring the internal security of the consumer data storage system, accommodating storing Data until a request for deletion of Data or withdrawal of consent to the acquisition, collection, storage, management, and use of Data by Users through User Services by legal authority.

Electronic Pharmacy System Providers registered with the Ministry of Health . Electronic pharmacy system providers conducting business activities in the digital start-up business model must be registered by the relevant ministries, this makes pharmaceutical, electronic system providers subject to PP 71 of 2019

concerning Pharmaceutical Electronic System Providers as an electronic service provider; this is because the business activities carried out by digital start-ups into software must provide assurance and reliability of proper operation and ensure service continuity. Electronic system service providers must provide assurance in the form of the availability of service level agreements made between service providers and service users. This agreement is intended to show that the parties, in this case, service users in digital telemedicine start-ups, agree on the process of providing services and facilitation in the event of a case, information security agreements for information technology services used, and information security and internal communication facilities.

Accessing the website at (psef.kemenkes.go.id) mentioned Telemedicine Services Registered as Pharmaceutical Electronic System Providers (PSEF), which provide health services based on e-commerce; the author has collected this shown data:

Table 1. Electronic Pharmacy System Providers registered by the Ministry of Health

PSEF Registered	Personal Data Collected
www.goapotik.com	<ul style="list-style-type: none"> a. Full name, address, phone number, email b. Bank account and/or credit card, e-wallet, financial information, history transaction, prescription medicine c. Location riil, IP address, geo-tagging
www.klikdokter.com	<ul style="list-style-type: none"> a. Full name, address, phone number, email b. ID Photo, gender information, health record, prescription medicine c. information on family members, friends, beneficiaries, beneficial owners, proxies, persons under trust, trustees, guarantors, other guarantee providers, and/or other individuals; d. Location riil, IP address, geo-tagging
https://www.alodokter.com/	<ul style="list-style-type: none"> a. Personal information: Full name, address, phone number, email b. Health information: gender, known health conditions, medications, allergies, vaccinations, medical history, health targets, health journal entries, as well as prescriptions, reports, laboratory results, and medical files c. Bank account and/or credit card, e-wallet, financial information, history transaction d. Operational data: cookie, log server

k24klik.com	name, phone number, address, and other personal data when registering
www.sehatq.com	Webstite under maintainance
vivaapotek.co.id	full name, place and date of birth, gender, address, ID number, user location, user contact, and other supporting documents and data as requested in the account registration summary and in the application summary.
halodoc.com	full name, government issued identification card number, address, date of birth, nationality, gender, mobile phone number (including but not limited to: IP address, location information, your device data, IMEI number, the name of the application that has been attached to your device), bank and credit card details, e-mail address, your picture, biometric data, marital status, personal health information, insurance information, financial information and other data classified as personal data.

Source: psef.kemenkes.go.id

Mentioned in Table 1. All PSEF collect personal data from users as customers for telemedicine services. Customers are the individuals or organizations paying for the telemedicine service. The paying customer is not necessarily the same as the consumer who uses the service. Although one entity may purchase the service, the benefits of the service may reach beyond the customer to a separate consumer (Chen et al., 2013). The provision of consumer protection is regulated in the Consumer Protection Law (1999), and it can be said that consumers who use the services as the definition of consumers as service users have the right to comfort, security, and safety in consuming services. Consumer obligations by reading information instructions and procedures for the use or utilization of services for the sake of security and safety provided by business actors, in this case, telemedicine service providers, making payments in accordance with the agreed exchange rate in this case by paying the service tariff determined by the service provider.

By using services, users must know if there is an information security agreement on the personal data of consumers as users of the services of digital start-ups, according to which the information collected is in the form of information, statements, ideas, and symbols containing values, meanings, and messages, which contains both data and messages. Facts and instructions for viewing, hearing, and reading may appear electronically or electronically protected in a variety of packages and formats as information and communication technology develops. Internal communication methods related to internal

information processing of digital start-up companies, such as government regulation of electronic system providers. With the services provided by Telemedicine Digital Startup, the development of information and communication technology in the health sector is done electronically.

By clickwrap agreement for costumers as telemedicine users, clickwrap agreement applies to both parties, in this case, the customer as a user with the service provider, so as to cause legal consequences, rights, and legal responsibilities. Just like transactional business, wrap agreements make it a take-it-or-leave-it principle. By agreeing to the terms of service, the user, as a consumer of telemedicine services, registers by writing on the service in the form of personal data. Personal data is data relating to an identified and or identifiable individual, either directly or indirectly, through electronic systems, either individually or in combination with other information. You are free to take legal action against an individual's (in this case, consumer's) personal data. As a manifestation of the right to protection of personal data, individuals, as owners of personal data, have the authority to determine the conditions to be met in a commodity society (Priscyllia, 2019). Aspects of data and information have long been considered in economics, including beliefs about agent types, type screening, signaling, market segmentation, incentive-compliant contracts, and voluntary disclosure (Katz, 2019) of consumers' personal data.

Consumers as users have a beneficial value for a good or service in general as users, users and or utilization of goods and services for certain purposes (Robi Maula, 2022). There are intermediate consumers as users and or utilizers of other goods and or services or to trade them, with commercial purposes with the same objectives as business actors. End consumers as users, users and utilization of goods to meet their own, family, or household needs, not for resale (Natalia, 2017). From these three definitions in this study, it is concluded that consumers are users, users and or utilization of goods and or services for certain purposes.

Consumer protection is influenced by legal awareness, regulation, and attention to service quality, especially regarding data privacy and transaction security. Protecting for consumer personal data as a telemedicine user in the Consumer Protection Law (1999) is a form of rights in the form of right to comfort, security and safety in using services, providing information related to the conditions and guarantees of goods listed in the terms and conditions of service contained in the telemedicine platform, due to the obligations that must be carried out as a telemedicine service user by reading following the information instructions and procedures for using services for security and safety under the agreed payment.

2. Indonesia Regulation that Provides Consumer Protection on Telemedicine Digital Start-Up Business

Consumer protection is realized by providing legal certainty (Julyano & Sulistyawan, 2019) to protect for personal data that has value so that it can be exchanged for service products that are used, either indirectly or directly without the knowledge of the User (Malgieri & Custers, 2018). Data belonging to individuals may contain information that has economic value (Custers & Malgieri, 2022). Therefore, consumers as users and utilization of services in digital start-up services for certain purposes. In using telemedicine services, there is a legal event of storage, management and use of data belonging to the User, in this case, the consumer. The legal event is born with an agreement by the service user, in this case, the consumer of his personal data to the service provider.

To consumers, in this case, users of digital start-up services on telemedicine as mandated by the Consumer Protection Law (1999). The purpose of consumer protection of their personal data with the elements of legal certainty and information disclosure and access to information; service providers must implement this goal. In this case, digital start-ups providing their services can be equated with consumers in the Consumer Protection Law (1999).

First, the element of legal certainty that must be fulfilled in providing personal data protection is indicated by the existence of an information security agreement, and this means that there is a guarantee of personal data protection in the form of a guarantee that the law functions as a rule that must be obeyed so that the implementation of the element of legal certainty is obeyed as a rule. Service providers must provide the element of information disclosure and access to information, in this case, digital start-ups in the field of telemedicine health that have been registered on the Ministry of Health platform as Pharmaceutical Electronic Facility Providers in the form of information on personal data collected by service providers, in this case, digital start-ups must be open by informing consumers that there is a service platform used to carry out business activities, in this case, it can be done through online sites, applications.

Second, the purpose of consumer protection, as contained in the Consumer Protection Law (1999), is to increase consumer empowerment in choosing, determining and demanding their rights as consumers. Implementation provides opportunities for consumers (Kim et al., 2019). The implementation provides an opportunity for consumers (Kim et al., 2019) to choose in the form of a choice of services provided by service providers, in this case in telemedicine services in the form of doctor consultations accompanied by the provision of prescriptions, provision of drugs to the latest information about health, to further determine and

demand their rights as consumers as regulated in a separate section in the Consumer Protection Law (1999) in the section on Consumer Rights and Obligations Article 4 which includes accommodation of consumer rights in personal data protection in the form of:

- a. The right to consolation, security and security in expending merchandise and administrations Consumers as users of digital start-up services in the health sector, in this case telemedicine, with the security of the data that the service provider has collected.
- b. The right to revise and be clear and honest about the terms and warranties of goods and services;

True, clear and honest information about the condition of the service, in this case, the services provided as offered in digital start-up services, digital start-ups in the form of telemedicine, the services provided are in the form of doctor consultations by explaining the services provided, the stages of conducting consultations. In the drug purchase service, consumers can be enabled to order drugs with prescriptions online. For this process, there is information containing consumer personal data that service providers must protect in the form of a history of illness suffered by consumers. Consumers get protection as a result of the imprudence of digital start-ups as service providers and the right to obtain compensation, while the service guarantee is to provide accommodation for the protection of user personal data mentioned in the service.

- c. The right to have your opinions and complaints heard about the goods and services you use

Realized in the form of a complaint service on the platform used by digital start-ups. Legal events on consumer personal data of digital start-up service users in the form of data hacking containing personal information of consumers as service users on the service are misused by being disseminated and used by others unlawfully. The occurrence of theft due to malware virusinfection. In connection with the activities carried out by consumers, special attention should also be paid to risk areas such as data theft, identity theft, and taking control of personal computers.

There is growing information asymmetry between firms and consumers in the digital economy, as firms leverage existing and new technologies to gain insights into consumer preferences and behaviours that may not be fully

recognized by consumers themselves. While market failures can result from firms obfuscating their data policies, the literature has shown that market failures can occur in situations where consumers are fully rational and have full information regarding how their data will be used (Kim et al., 2019).

Furthermore, there are regulations related to business activities carried out by digital start-ups; as a business unit, digital start-ups, in this case as a company that organizes electronic systems, must comply with the provisions of PP 82/2012 as a form of providing legal certainty for consumers who in providing services to their services, follow the provisions in the form of certification of the feasibility of electronic systems to find out that electronic systems are functioning properly. The establishment of *self-regulation* standards owned by digital start-ups maintains the security of consumers' personal data. Conversely, this technology provides more verification techniques than documents written on paper (Barkatullah & Djumadi, 2018). Digital signatures can guarantee that communications are sent by the parties to the transaction, not by fraudsters. Another advantage is that the recipient knows that what is received is the same as what was sent, without any changes.

Government Regulation No. 82/2012 on Electronic System Operators has provisions for digital start-up business entities to carry out provisions in the form of electronic system feasibility certification to determine whether the electronic system is functioning properly. The establishment of *self-regulation* standards owned by digital start-ups in the form of guarantees for the security of consumers' personal data is maintained. Regulations such as PP 82/2012 align with the Consumer Protection Law (1999) as users of digital start-up services ensure consumer data security. There is a theory of obligation and compulsion, obligation and guarantee of rights to citizens, which is intended to create a system of order designed by law that can run well and orderly. Order in law in the form of legal order in the form of legal sanctions (Fuady, 2014).

The foundation of this research with the theory of obligation and coercion in the implementation of the legal system makes the existence of law must be able to provide a system of order so that it can run in an orderly and good manner. The work of a legal system is the existence of a legal subject in carrying out legal acts that cause legal consequences so that the legal subject must be responsible for the consequences caused. Concerning digital start-up business activities, legal actions occur when consumers use services owned by digital start-ups by carrying out the provisions determined by the service provider. From these legal actions, legal consequences can arise in the form of rights and obligations; in the event that they are violated, the subject of the law obtains sanctions. Privacy offences should be

prepared to identify such violations of traditional personal, residential and communication privacy.

Sanctioning (Poernomo, 2020) has a goal for legal subjects not to commit and or repeat unlawful acts that have been regulated in a regulation so that order can be created in social life. The position of digital start-ups as a legal subject in the form of a legal entity as a company. When consumers use digital start-up services, they bind themselves to agree on the rights and obligations that arise, and the agreement must be obeyed and implemented as the agreement's contents (Muhammad Sjaiful, 2015). The sanctions given to digital start-ups for negligence in providing consumer protection for personal data as stipulated in the Consumer Protection Law (1999) are contained in Article 19, which states that business actors have the responsibility to provide compensation for damage and pollution due to the use of services traded. The responsibility that must be given by digital start-ups, in this case, is if there is a leak of personal data to cause theft for consumers both in material and immaterial form. The failure of digital start-ups with telemedicine services to protect the personal data of consumers, in this case, users, if it is related to the legal basis of the Consumer Protection Law (1999), does not provide fulfilment of rights in the form of providing security, comfort and safety in using services.

The provision of sanctions for personal data leakage specifically does not accommodate the Consumer Protection Law (1999). Consumers, as users of services owned by digital start-ups, are only given compensation as promised guarantees or warranties. Meanwhile, as data has been collected, digital start-up services in the health sector, do not accommodate these guarantees. Guarantees that can be provided by digital start-ups in the form of legal compliance so that they can fulfill their obligations as legal subjects, in this case, have been tested for certification of the feasibility of electronic facility service providers.

The provision of sanctions against digital start-ups in the event of failure to provide protection of personal data belonging to consumers who do not fulfill the elements of the purpose of personal data protection as mentioned above obtains sanctions in the form of compensation as contained in the Consumer Protection Law (1999). The legal force against the non-fulfilment of consumer protection makes the Consumer Protection Law (1999) does not provide the strength of legal protection for consumers who use services at digital start-ups.

Conclusions

The purpose of consumer protection of personal data owned by consumers with the elements of legal certainty and information disclosure, and access to information; service providers must implement this goal. In this case, digital start-ups in providing their services can be equated with consumers contained in the Consumer Protection Law (1999). The scope of regulation in the Consumer Protection Law (1999) in the service business sector, in this case, the business in digital start-ups, can regulate the protection of service users owned by digital start-ups. Consumer rights in the form of comfort, security and safety in consuming goods and services as mandated in Article 4 of the Consumer Protection Law (1999). Security guarantees as service users by being given the protection of personal data provided to services.

Providing consumer protection as a digital service user, namely telemedicine as a digital start-up, in the form of providing a sense of security in using the service; in this case, telemedicine consumers have a sense of security over personal data collected and processed by the service providers. As a digital start-up service provider in Indonesia, it must have been registered as a pharmaceutical electronic service provider by the relevant Ministry of Health. By being registered as a pharmaceutical electronic service provider, there is supervision on implementing pharmaceutical electronic services to guarantee the user's sense of security as mandated in the Pharmaceutical Electronic System.

References

- Barkatullah, A. H., & Djumadi. (2018). Does self-regulation provide legal protection and security to e-commerce consumers? *Electronic Commerce Research and Applications*. <https://doi.org/10.1016/j.elerap.2018.05.008>
- Chawla, N., & Kumar, B. (2022). E-Commerce and Consumer Protection in India: The Emerging Trend. *Journal of Business Ethics*, 180(2), 581–604. <https://doi.org/10.1007/s10551-021-04884-3>
- Chen, S., Cheng, A., & Mehta, K. (2013). A Review of Telemedicine Business Models. *Telemedicine and E-Health*, 19(4), 287–297. <https://doi.org/10.1089/tmj.2012.0172>
- Custers, B., & Malgieri, G. (2022). Priceless data: why the EU fundamental right to data protection is at odds with trade in personal data. *Computer Law & Security Review*, 45, 105683. <https://doi.org/10.1016/j.clsr.2022.105683>
- Fuady, M. (2014). Teori-Teori Besar Dalam Hukum (Grand Theory). In *Kencana Prenadamedia Group*.
- Guo, Z., Hao, J., & Kennedy, L. (2024). Protection path of personal data and privacy

- in China: Moving from monism to dualism in civil law and then in criminal law. *Computer Law & Security Review*, 52, 105928. <https://doi.org/10.1016/j.clsr.2023.105928>
- Julyano, M., & Sulistyawan, A. Y. (2019). Pemahaman Terhadap Asas Kepastian Hukum Melalui Konstruksi Penalaran Positivisme Hukum. *CREPIDO*. <https://doi.org/10.14710/crepido.1.1.13-22>
- Katz, M. L. (2019). Multisided Platforms, Big Data, and a Little Antitrust Policy. *Review of Industrial Organization*, 54(4), 695–716. <https://doi.org/10.1007/s1151-019-09683-9>
- Kim, J., Wagman, L., & Wickelgren, A. L. (2019). The impact of access to consumer data on the competitive effects of horizontal mergers and exclusive dealing. *Journal of Economics & Management Strategy*, 28(3), 373–391. <https://doi.org/10.1111/jems.12285>
- Malgieri, G., & Custers, B. (2018). Pricing privacy – the right to know the value of your personal data. *Computer Law & Security Review*, 34(2), 289–303. <https://doi.org/10.1016/j.clsr.2017.08.006>
- Massa, L., Tucci, C. L., & Afuah, A. (2017). A Critical Assessment of Business Model Research. *Academy of Management Annals*, 11(1), 73–104. <https://doi.org/10.5465/annals.2014.0072>
- Muhammad Sjaiful. (2015). Karakteristik Asas Kebebasan Berkontrak dalam Perjanjian Berbasis Syariah. *Perspektif Hukum*, 68–84. <https://doi.org/10.30649/ph.v15i1.28>
- Natalia, H. (2017). Perlindungan Hukum terhadap Konsumen dalam Transaksi E-Commerce. *Melayunesia Law*, 1(1), 111. <https://doi.org/10.30652/mnl.viii.4497>
- Natha., K. D. R., Budiarta., I. N. P., & Astiti, N. G. K. S. (2022). Perlindungan Hukum atas Kebocoran Data Pribadi Konsumen Pada Perdagangan Elektronik Lokapasir (Marketplace). *Preferensi Hukum*. <https://doi.org/https://doi.org/10.55637/jph.3.1.4674.143-148>
- Nizioł, K. (2021). The challenges of consumer protection law connected with the development of artificial intelligence on the example of financial services (chosen legal aspects). *Procedia Computer Science*, 192, 4103–4111. <https://doi.org/10.1016/j.procs.2021.09.185>
- Nurfikri, A., Karnadipa, T., & Roselina, E. (2022). Telemedicine App: What's Next After Pandemi? *Jurnal Administrasi Bisnis Terapan*. <https://doi.org/10.7454/jabt.v5i1.1036>
- Poernomo, S. L. (2020). Perlindungan Hukum Nasabah Dalam Perjanjian Telemarketing Bank. *Jurnal Hukum & Pembangunan*, 49(4), 805. <https://doi.org/10.21143/jhp.vol49.no4.2341>
- Priscyllia, F. (2019). Perlindungan Privasi Data Pribadi dalam Perspektif Perbandingan Hukum. *Jatiswara*, 34(3).

<https://doi.org/10.29303/jatiswara.v34i3.218>

- Putri, P. M., & Saefudin, Y. (2021). Electronic Medical Records as Evidence of Therapeutic Transactions. *Jurnal Dinamika Hukum*, 21(3), 532. <https://doi.org/10.20884/1.jdh.2021.21.3.3520>
- Rindfleisch, A., O'Hern, M., & Sachdev, V. (2017). The Digital Revolution, 3D Printing, and Innovation as Data. *Journal of Product Innovation Management*. <https://doi.org/10.1111/jpim.12402>
- Robi Maula. (2022). Perlindungan Hukum Terhadap Konsumen Atas Hak Informasi Dalam Transaksi Elektronik. *Seminar Nasional Hukum Dan Pancasila*, 01(04), 18–32.
- Sardjono, A., Prastyo, B. A., & Larasati, D. G. (2013). Pelaksanaan perlindungan hukum merek untuk pengusaha ukm batik di Pekalongan, Solo, dan Yogyakarta. *Hukum Dan Pembangunan*, 4, 21. <https://doi.org/http://dx.doi.org/10.21143/jhp.vol44.no4.32>
- Serper, M., & Volk, M. L. (2018). Current and Future Applications of Telemedicine to Optimize the Delivery of Care in Chronic Liver Disease. *Clinical Gastroenterology and Hepatology*, 16(2), 157-161.e8. <https://doi.org/10.1016/j.cgh.2017.10.004>
- Sudewo, F. A., & Mahardika, D. (2022). The Existence of Consumer Protection in the Perspective of Cyber Law in Indonesia. *Jurnal Dinamika Hukum*, 22(2), 418. <https://doi.org/10.20884/1.jdh.2022.22.2.3427>
- Top Startups Worldwide*. (2023).