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Case Study

# Considering state administrative decrees (SAD) by artificial intelligence from the transparency principle in Indonesia (Case study: The ministry of law and human rights of the republic Indonesia)

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**Abstract:** Artificial Intelligence (AI) has now touched the realm of government, such as in the creation of State Administrative Decrees (SAD/Keputusan Tata Usaha Negara/KTUN). The involvement of AI in this realm leaves questions regarding the application of its transparency aspects based on the Indonesian legal context. This article aims to understand the phenomenon of using AI for SADs in Indonesia and to find out the application of the principle of transparency generally and contextually in terms of using AI for SADs. This research is normative-empirical research with a conceptual and statutory approach by conducting literature studies and respondent interviews. As a result, SADs as a product of government administrative action in several cases have been using AI and have received normative recognition. On the other hand, there is legislation that regulates the general aspects of SAD transparency, especially related to public information openness and personal data protection. AI transparency itself can be divided into two concepts, namely: technical transparency and justifiable transparency. Justifiable transparency is considered more convenient and suitable to be applied in Indonesia.

**Keywords:** SADs; artificial intelligence; principle of transparency

## 1. Introduction

Since the rapid and massive development of artificial intelligence (AI), the Indonesian Government has gradually integrated this technology into various aspects of public services. The adoption of AI into the public service systems is supported by the enactment of Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (PR 95/2018). Hereinafter referred to the Presidential Regulation, AI is defined as artificial intelligence technology that has cognitive functions to carry out learning and problem-solving as humans do. Some examples of AI applications in the public administration sector include the use of fingerprint and facial recognition in Singapore immigration services [1], Electronic Self-Assessment Tax Reporting Application (E-SATRIA) in reporting taxes at the Bandung City Regional Revenue Management Agency [2], processing business permits by a Trade Virtual Assistant [3], intellectual property application [4], and many other examples [5]. Thus, the aim of the AI application described above is for fast and accurate decision-making [6].

In the context of the public service, the government action (bestuurs handling) should be defined as any act or action carried out by the government (bestuurs orgaan) in the discharge of its functions (bestuurs function) [7], State Administrative Decree (SAD) is interpreted as a written decision issued by a Government Agency and/or

Official in administering government [8,9]. It could be said that all government administrative matters will ultimately result in the issuance of the SAD [10].

Furthermore, the formation of SAD as an instrument of government administration must comply with the general principles of good governance (Asas-Asas Umum Pemerintahan yang Baik). This is intended to prevent state administration officials from exceeding their authority, to provide judges with a test tool for assessing a state administration decision in the form of a decree (beschikking), and to establish a basis for plaintiffs to sue if they feel being aggrieved by SADs [11]. In Law 30/2014 concerning Government Administration, one of the principles that must be fulfilled is the aspect of openness [8]. By analyzing the relationship between "transparency" and "openness", there is no demarcation that truly separates both terms so they are often interchanged for the same purpose [12].

The development of society contributes to the wider application of the concept of transparency. First, the rise of the internet and communications technology has increased the amount of government information accessible to the public [13]. Likewise, the government continuously processes large amounts of people's data. This process requires government openness towards the community [14]. The second influence is the emergence of new public management (NPM) as a way of organizing government activities [15,16]. NPM urges openness with the assumption that increasing the visibility of operating public services can encourage an increase in the quality of government performance. It is generally agreed that transparency is essential for accountability to develop. Therefore, without information about SAD-making, it is impossible to hold officials accountable [17,18].

The utilisation of AI in public services such as creating SAD also raises to a number of issues. As in Veredict Number 89/G/2021/PTUN-JKT which states that when automatic decisions processed in electronic systems are only treated in a "taken for granted" manner, without awareness of the risk of errors in SAD making, the function of automatic public administration appears to be superseded by artificial intelligence machines or other information technology means. It means the basic principle of the rule of law regarding the accountability of every bearer of legal authority will be disturbed at the most fundamental and essential point by the emergence of errors in fact and errors in law [19].

Although the problem in the decision above focuses on the principle of accountability for government decisions, fulfillment of this principle cannot be achieved without the principle of transparency. Without transparency, all other principles will fail to be achieved [20]. In addition, in reviews of black box theory, it is stated that AI does not have sufficient accessibility for the data subjects or is too complex so the rules or principles used in the algorithm cannot be understood by the data subjects. The existing systems are often protected by trade secrets so they are not open to review. This results in AI in terms of decision-making being not open/transparent and not fulfilling the intuitive aspect of being explained [21]. In fact, this aspect of openness/transparency is needed to determine fairness in decision-making [21].

Existing literature explains that the need to understand new socio-economic aspects after the emergence of AI is due to the widespread adoption of AI and its impact in every line of life, such as in the realm of the labor market, protection of

human rights, and health services [22]. Furthermore, in the Indonesian context, the principle of transparency will greatly influence the public's willingness to adopt electronic-based service systems (e-government) [23]. The public sector has also experienced a dualism: between the responsibility to protect society from the potential dangers of algorithms, and simultaneously the temptation to increase efficiency by using the algorithms themselves [23]. However, there has been no specific discussion regarding the transparency aspect of AI in making SAD according to Indonesian law accompanied by empirical examples.

Therefore, this transparency problem is an aspect that needs to be explored further to find out the extent of AI's legitimacy in making SAD based on existing law. This article aims to determine the phenomenon of using AI for SAD in Indonesia. Furthermore, this article also seeks to understand the general and contextual concepts of applying the principle of transparency in the creation of SAD by AI in Indonesia.

## 2. Research method

This research is normative-empirical legal research. The normative method is research that explores and identifies data from the literature [24]. Whereas, the empirical method is learning how the law works in society, whether the effectivity, compliance, roles, or others [25]. This research contains a statutory and conceptual approach. The statutory approach aims to know about the conflict of norms and a conceptual approach will try to figure out the research problems from the absence of law [26]. Normative research methods are used to examine secondary data consisting of primary legal materials and secondary legal materials related to AI transparency in the SAD realm. The empirical method is used to obtain primary data through interviewing respondents to find out the current practice of using AI for SAD in Indonesian government agencies. The data then analyzed qualitatively.

## 3. Result and discussion

### 3.1. The phenomenon of using AI in forming government SADs

#### 3.1.1. Concept of SADs

The form of government action based on public legal authority (publiek bevoegdheid) is a decision (beschikking) which is a unilateral will (eenzijdige schriftelijke wilsverklaring) by a government organ (bestuursorgaan) aimed at concrete events with individual character, in order giving legal consequences [27]. According to Law 30/2014 jo. Law 6/2023, SAD is a written decree issued by government bodies and/or officials in the administration of government [8,9]. The government bodies and/or officials here are elements that carry out government functions, both within the government and other state administrators [8,9]. This SAD is also positioned as a form of public legal action by the government in its capacity as ruler (bestuur als overheid) thereby creating a vertical public legal bond with the people [7]. After the existence of Law 30/2014, the scope of SAD became wider. This expansion means that SAD is not limited to legal government actions (recht handelingen) but also factual government actions (feitelijke handelingen) [10]. Apart from that, the expansion is also related to the meaning of state administrative

bodies/officials which include the executive, legislative, judiciary, and other authorities [10] (p. 70). SAD according to Law 30/2014 jo. Law 6/2023 can take the form of Permits, Concessions, and Dispensations [8,9].

Furthermore, SAD is also categorized as public information according to Law No. 14 of the year 2008 concerning Openness of Public Information (Law 14/2008) [28]. According to Law 14/2008, decisions from public bodies are required to be made available at all times in terms of their results and considerations [28]. So, the government as a public body that issues the SAD is obliged to comply with its aspects of transparency as ruled in the law.

In carrying out government administration, it shall base on the principle of legality, human rights protection, and natural justice. More specifically, SAD must be based on statutes and the principle of natural justice/the general principles of good administration [8]. The statutes are both the basis for authority and the basis for establishing or implementing SAD [8]. One of the principles contained in the principle of natural justice is the principle of openness which is considered the same as the principle of transparency [8]. This discussion will be delivered in the next section.

### 3.1.2. General concept related to AI

The concept of AI was created by John McCarthy and his colleagues in 1955 when they proposed the nature of automation in human intelligence. In simple terms, AI is the development of computer systems that can perform tasks that normally require human intelligence [29]. The European Commission put forward the definition of AI, namely a system that displays intelligent activities by analyzing their environment and taking action, with a certain level of autonomy, to achieve a certain goal [30]. AI-based systems can be pure software that works in cyberspace (such as voice assistants, image analysis software, search engines, etc.) [30]. There is also AI embedded in hardware (robots, autonomous cars, drones, etc.) [30]. However, until now experts have not agreed on the definition of AI. Apart from that, there are terms like artificial intelligence, machine learning, and automated decision making which are also often used interchangeably for the same object [22].

Experts' disagreement regarding the definition of AI is a consequence of the difficulty in defining "intelligence" itself, which is subjective [31]. Moreover, the meaning of intelligence has also changed, for example, online maps applications were initially categorized as artificial intelligence features, but over time are categorized as ordinary features [31]. It is not surprising that several jobs which can be categorized as AI are now described with the word "automation". Therefore, when human can understand what a technology does, the system is no longer categorized as AI anymore [31] (pp. 13–14). This change in categorization is often called the "AI Effect" which makes AI abilities something ordinary/normal. However, in general, experts recognize two categories of AI based on its own intelligence capabilities, namely first, General AI/Strong AI (Strong AI) and the second category Narrow AI/Weak AI (Weak AI). However, "collaboration" between humans and AI (intelligence augmentation) is believed to be more relevant than being a competition, where collaboration can beat the work done by humans alone or computers alone [31] (p. 16).

In general, in terms of public services, the basic workings of AI can be divided into two algorithm models, namely "rule-based/symbolic AI" and "machine learning-

based AI". Both types of AI are fundamentally relevant in terms of public services and are often offered by vendors to the governments. Furthermore, there is also a hybrid type of AI, where in this combination machine learning is useful for studying correlations and patterns which then determine how rule-based AI can work optimally [31] (p. 39).

Rule-based AI based on the formula "If X then Y", which first calculates all possible actions that have been programmed. This is different from machine learning which works by studying the data entered and then finding patterns and correlations [31] (p. 39). Hence, in this research, what is meant by AI is either rule-based, machine learning, or hybrid. The use of this broad meaning is a consequence of the broad definition of AI. Thus, the attention for AI in making SAD is not limited to complex systems such as machine learning or hybrid systems but also simpler systems such as rule-based systems [31].

### 3.1.3. Practices of using AI in making SAD

Various report and research whether conducted by national or international institutions show that the use of AI in public administration is improving public service in terms of effectiveness, accuracy, high objectivity, and convenience features. The convenience may occur by the features, such as pictures, voice, and automatic system, and decreasing the administrative-works load for humans. Therefore, the government can focus on substantive and crucial affairs [5,32,33].

In the event of using AI for SADs, there are two possible models in terms of application. First, decisions that are purely based on AI automation systems (determinative applications). Second, decision-making partly uses an automated system from AI (supportive application). The second model leaves space for human involvement in the SAD-making process [34]. If we refer to the concept of collaboration between AI and humans (Intelligence Augmentation), then with the help of AI, public officials can process and check large amounts of data to provide more appropriate services to the public [31]. According to the models of AI explained above, the AI concept in SAD can be based on rule-based, machine learning, or hybrid programming with determinative or supportive applications.

Regarding implementation in various countries, Italy has used AI to detect tax evasion through machine learning [35]. AI called "The Vera" compares tax compliance data, income, property ownership history, bank accounts, and electronic transactions to find irregularities in tax payments. Taxpayers who are found to have irregularities will be demanded to explain these irregularities [36]. Still related to taxation, tax authorities in Spain use AI to estimate the income of Micro, Small and Medium Enterprises in the context of future payments from taxpayers [37]. Meanwhile, in Denmark, authorities in the business sector use an intelligent control platform with machine learning which is capable of carrying out automatic checks to select companies or businesses that tend to commit embezzlement/fraud compared to other companies or businesses [37].

In Indonesia, based on Law No. 11 of 2008 concerning Electronic Information and Transactions as amended by Law 19 of 2016 (EIT Law), it can be identified that AI is an electronic agent [38]. An electronic agent is a device from an Electronic System created to carry out an action against a Certain Electronic Information is

automatically held by Persons. Article 1 number (6a) of the EIT Law stated the administrator here can be any person, state administrator, business entity and community. However, AI as an electronic agent is not explicitly regulated in the Law [39]. According to the Law, responsibility for the legal consequences of AI (as an electronic agent) is borne by the electronic agent organizers themselves or the service users themselves [39]. Thus, in this case, the government can become one of the organizers of electronic agents in casu AI for government activities accompanied by accountability.

In PR 95/2018, the definition of AI is also explained as an artificial intelligence technology in machines that have cognitive functions to carry out learning and problem-solving as humans do [6]. According to the Presidential Regulation, in general, AI also has several main features in public services, namely [40]:

1) Perception of the environment, including attention to complexity in the real world;
2) Information processing, including collecting and interpreting input data;
3) Decision-making both in consideration and learning in terms of taking action, performance of tasks (adaptation and reaction to environmental changes) with a certain level of autonomy; and
4) Achieving certain goals which is the main reason for the existence of the AI system itself.
5) The existence of these norms provides normative recognition of AI's involvement in the creation of SAD in the context of public services and government administration in general.

According to the Presidential Regulation, AI has the potential to be used in the electronic-based government to reduce administrative burdens. For example, in terms of filling out documents, searching for documents, translating voice/writing, and drafting documents. In addition, the Presidential Regulation also opens up the possibility for AI to assist in solving complex problems such as social problems, health, and financial transactions. This technology is prospected to be supported by big data analytic technology in the interest of producing analytical information on large, unstructured, and complex data [6].

Examples of the application of AI in administrative services in Indonesia can be found in various products that have been launched by the government. For example, in the city of Bandung, there is an e-SATRiA (Electronic Self-Assessment Tax Reporting Apps) service which is related to online tax reporting for taxpayers with a self-assessment system without requiring them to visit the tax office directly [41]. Therefore, taxpayers simply access the application, log-in, and report their taxes due to issuing the payment number [41].

Besides the services mentioned above, the Ministry of Law and Human Rights of the Republic of Indonesia also provides several public services that involve automation systems in the process. Based on the interview with Chrisna Adi, Directorate General of General Legal Administration, Ministry of Law and Human Rights on 16 October 2023, legalization of establishment and changes to deeds related to legal entities (limited liability companies) uses an electronic system. The system can receive and check data/documents related to deeds of establishment/modification to the legal entities. Specifically, the process is carried out by checking the suitability of the data with the databases related to civil registration, permit, and so on.

For example, the examination by the legal entity establishment system is related to the name of the legal entity submitted by the applicant. The proposed name then being reviewed automatically by the system toward the existing database of legal entity names to ensure that there are no similarities in the names of legal entities. Besides, the Civil Registration Number of the applicant and related parties will also be checked based on the data stored by the authorized agencies. If there is a discrepancy between the data, the system will automatically reject the application by including the reason for the rejection. Nevertheless, it should be understood that the system cannot validate the substances of the documents uploaded into the system, it is only limited to the data filled in in the electronic forms. If there is an objection to the system's decision, the applicant has the right to send a challenge letter to the Directorate. This system also cannot make adjustments independently like the machine learning concept. It follows the rules set by the programmers. Therefore, from a general identification, the electronic system in the case uses the concept of a rule-based algorithm. This case can provide a concrete case of the use of AI, even though still in a modest scheme.

## 3.2. The transparency principles in SAD-making using AI

### 3.2.1. General concept of transparency in making SAD

Definition of Transparency in the Indonesian Dictionary is still limited to a linguistic definition which does not provide sufficient information in a legal context. Some difficulties arise from defining transparency because of the variety of meanings depending on the context [12]. Generally, researchers prefer to provide a definition that may be sufficient for the discussion, or even not define it at all. Hence, the discussion becomes more focused on the analytical framework alone. Both approaches are still useful to help understand the diversity of meanings of transparency and provide a more concrete analysis [12] (p. 29). In the end, providing definitions according to context is an option in discussing transparency regarding government and individual-government relations [12] (p. 29).

The use of the concept/term "transparency" in this research will be equated with the concept/term of openness [12] (p. 29). The reason is that both of them focus on the availability and accessibility of information. Transparency in the context of government is providing the public with the information they need so that the public can ascertain and understand the state of their surrounding and predict how their actions can influence and not cause difficulties with the surrounding conditions [12] (p. 29). This definition is broader than just providing information because aspects of the quality of the information itself are also needed which leads to the certainty and understanding of the information. Moreover, this definition also demands convenience procedures because complicated procedures will make it difficult for someone to understand which correlates with the implementation of transparency itself [12] (p. 31).

The definition above also generally includes what is regulated in Indonesian laws and regulations, especially related to public information openness [8,28,42]. Several laws specify the meaning of transparency/openness, such as providing correct, honest, and non-discriminatory information by paying attention to personal rights, groups, and

state secrets [8]. Some provisions also require the public institution to make accessible the information about the services [43]. Transparency in the context of public information still has limitations, such as not being able to interfere with personal data [44].

The law related to personal data protection also regulates similar things regarding transparency in the processing of personal data, including those conducted by the government/public bodies [42]. Public bodies as data controllers who carry out data processing are obliged to process in a limited and specific manner, legally and transparently. Transparent here is defined as the processing of personal data carried out by ensuring that the personal data subject is aware of the personal data being processed, how the personal data is processed and that any information and communication related to the processing of personal data is easy to access and understand. In the personal data protection regime, automatic processing is classified as processing personal data with a high risk, so that an assessment must be carried out by the data processor, in this case, the issuing-SAD government [42]. If the decision-making is solely on automated systems, profiling, and gives rise to legal consequences or has a significant impact on personal data subjects, the data subjects have the right to submit objections [42]. As a result, the automatic processing of people's data through AI to create SAD shall apply the provisions regarding personal data protection besides public information openness.

### 3.2.2. Context of transparency principles in making SAD using AI

The issues that arise from AI transparency in the administrative are first, related to the government's responsibility to provide openness/transparency following the SAD, second, related to the right of the affected/plaintiff to know and fight back, which is related to the essence of the principle of fair hearing [45]. In terms of responsibility for providing transparency, there is a debate currently emerging as differentiated in the **Table 1** [45]:

**Table 1.** Different demand for technical transparency and justification transparency.

| Technical transparency | Justification transparency |
|---|---|
| Openness of source code and algorithms, where AI transparency in terms of making SAD also includes transparency regarding data and algorithms. This explainability also includes the model (design) of the AI itself and its relationship to the decisions made by individuals. | The decision must be able to be known why the decision is a good thing. |

The two concepts above correlate with the general theory of government transparency responsibility to provide reasons/arguments that form the basis of SAD-making which must be provided and also understandable by the affected parties [12]. It also needs to be understood that the ease of procedures for accessing the basis for creating SAD is also an important indicator regarding the implementation of transparency [12].

In black box theory, AI is seen as not having sufficient accessibility or being too complex for data subjects because the rules or principles used in the algorithm cannot be understood by data subjects [21]. It can be said that AI can indeed produce something, even so, the process of the results created by the algorithm cannot be specifically understood [31].

Furthermore, techniques capable of producing the most suitable decisions tend to

be based on the use of aggregation, averaging, and multi-layer techniques, making it difficult to determine which features are most decisive when predictions by AI are given [46]. This results in AI in terms of decision-making being not open/transparent and not fulfilling the intuitive aspect of being explained [21]. AI's responsibility for transparency is related to clarity and justification. In addition, existing systems are often protected by trade secrets so they are not open to review [21].

Another concern is that the more information related to algorithms that are disclosed, the greater the risk of an institution's cyber security failure by third parties with bad faith (hacking) [47]. The non-openness of the AI system is certainly against the government's responsibility to provide transparency in SAD-making. However, these two problems need to be reviewed further by looking at the Indonesian legal context, as well as the nature of human and AI decision-making.

1) Considering the technical openness (technical transparency)

As explained previously, technical openness is related to open access to knowing the source of code, data, algorithms, and models related to decision-making by AI. However, as previously discussed, access to AI algorithms can be difficult because the algorithms are protected by trade secrets so people who desire to test the decisions cannot access the AI algorithm [21]. Apart from that, the secret also covers the input data (for AI training), structure, and model of the AI itself [48]. Because, in general, with trade secrets, a company can hide its business methods and practices [49]. The phenomenon raises a question, are these trade secrets really a strong justification for preventing AI transparency in Indonesian law. This question can be answered by looking at the position of intellectual property, especially trade secrets, concerning public information disclosure and personal data protection law.

In Law No. 30 of 2000 (Law 30/2000), trade secrets are defined as information that is not known to the public in the field of technology and/or business, has economic value because it is useful in business activities, and is kept confidential by the owner [50]. The conditions for protecting trade secrets are if the information is confidential (only known to certain parties and not in general), has economic value for business activities, commercial and profit making, and is kept confidential through appropriate efforts [50]. The trade secret holder himself can grant a license to another party based on the agreement/permission [50]. Thus, information related to AI as a product in the technology sector can be protected by trade secrets.

Furthermore, if we look at Article 17 of Law 14/2008, it confirms that there are exceptions to the obligation for public bodies to provide public information, namely if it interferes with the interests of intellectual property rights, it could endanger the state, in the interests of business protection and unfair business competition. This means that the information cannot be accessed by public information affected/public due to those reasons [51]. Moreover, there is a lawsuit mechanism to the Administrative Court/District Court if the applicant experiences obstacles/failures in obtaining public information [28].

It also needs to be understood that Article 14 of Law 13/2000 states that a trade secret violation is if someone obtains or controls the trade secret in a manner that is contrary to statutory regulations [50]. The law also emphasized that actions that do not constitute trade secrets are when trade secrets are disclosed or used for the benefit of security, health, or public safety [50].

Regarding to the obligation of transparency in making SAD, transparency has become a fundamental principle in government administration. Apart from that, Law 30/2000 still opens up opportunities for disclosure of trade secrets if statutory regulations determine it. Meanwhile, in the context of automatic processing by AI, Article 10 paragraph (1) of Law 27/2022 as lex posteriori od Law 30/2000 applies concerning decision-making that is based only on automatic processing [42,50]. This article gives personal data subjects the right to object to such processing without prejudice to the intellectual property of the data controller/processor. Moreover, openness of public information is also part of human rights [28]. Therefore, in Indonesia the trade secret approach is not relevant in preventing transparency of SAD by AI considering that there are provisions for transparency in the processing of personal data both in principle and in regulations.

The next issue is related to the security of the system itself. Transparency of information regarding disclosed algorithms will increase the risk of an institution's cyber security failure by third parties with bad intentions (hacking) [47]. In addition, transparency regarding the model an AI makes decisions can pose a risk of leakage of personal data/AI input data itself. This leak is certainly beyond the need to provide clear information on AI decisions [52]. Therefore, how are the security risks of this system regulated in Indonesian legislation.

In accordance with Article 17 of Law 14/2008, public bodies are exempt from the obligation to provide access to information that, if disclosed and provided to the applicant, could potentially reveal personal secrets [28]. This correlates with the risk of disclosing input data/AI personal data if there is technical transparency as explained previously. Another exception is if access to the information could endanger the security of law enforcement equipment, facilities, and/or infrastructure [28].

Those laws do not explain the exact purpose of law enforcement, but theoretically, law enforcement can broadly be interpreted as law enforcement activities including all activities intended to ensure that the law as a set of normative rules is truly obeyed in all aspects of people's lives, because the law itself as a normative device that regulates and binds legal subjects in various aspects of society [53]. Narrowly, law enforcement is concerned with resolving violations and legal deviations in court or non-court [53]. It is possible that the government agencies as the party for enforcing administrative law which has ensured security matters. In the same meaning, revealing certain information regarding SAD that potential to become a security threat to the agency should be forbidden and considered an exception to transparency.

Law 27/2022 also regulates exceptions to objections to automatic data processing if it is in the interests of national defense and security, the interests of law enforcement processes, the public interest in the context of state administration, and so on [42]. The definition of national security within the framework of international law is left to the national laws of each country as long as it does not violate the principles of a democratic state [54]. In the Indonesian context, cyber security is a national security subsystem that is related to personal security so it needs to be protected by the state as accommodated in the Academic Manuscript of the Draft Cyber Security Law of the Republic of Indonesia. Therefore, cyber threats cannot be taken lightly. Even though it is an exception in terms of the objection option, the Law still classifies automation systems such as AI as high-risk processing so it is mandatory to carry out data

protection impact assessments [42]. In addition, the obligation of transparency for data controllers in data processing remains mandatory because it does not include the exceptions in the PDP Law [42].

Looking at the explanation above, it can be seen that the trade secret aspect related to AI in principle does not prevent administration officials to not be transparent in making SAD based on AI. However, AI technical transparency has the potential to cause AI cyber failure and might impact law enforcement facilities' protection. AI cyber failures are included in the national security domain which places restrictions on the rights of data subjects in terms of demanding technical transparency, such as submitting objections to state administration officials regarding the creation of SAD. So, how far the technical transparency should conduct depends on the cyber failures risk estimation.

However, these restrictions do not eliminate the general transparency obligations of state administrative officials as regulated in Law 27/2022. So, it is necessary to know the position of transparency in these provisions in the case of making SAD by AI. Even though it is a national security issue, the government is still obliged to consider technical transparency as much as possible if necessary. Bearing in mind, according to Article 28 F of the Constitution, the right to obtain information is part of a recognized human right and is a manifestation of democratic national and state life [28]. So, there must be a procedure that becomes the agreement point between national interests, law enforcement facilities protection, and the fulfillment of human rights. The correlation between them can be seen in **Figure 1** below:

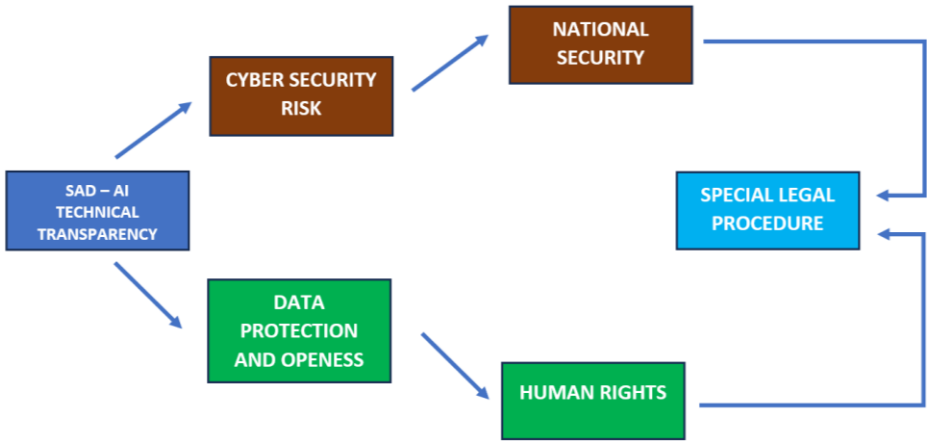


**Figure 1.** Framework of technical transparency.

2) Considering the justifiable decision making (justified)

An explanation can explain the reasons for an observed phenomenon. Often, explanations also explain the justification taken so that we can know whether the decisions taken are correct [55]. In the case of a system that issues recommendations, the existence of explanations will increase the user's desire to use the system and create a sense of user trust in the system which reduces the cognitive function of humans [55]. So, having an explanation by AI regarding recommendations or decisions taken is important to increase the user's sense of trust.

However, there is a statement that techniques to producing the most suitable decisions tend to be based on the use of aggregation, averaging, and multi-layer

techniques, making it difficult to determine which features are most decisive when AI predictions are made [46]. This results in AI in terms of decision-making being not open/transparent and not fulfilling the intuitive aspect of being explained [21]. Then is it true that decision-making techniques based on mathematical calculation models are a sole requirement to fulfill transparency?

In reality, people affected by a decision, especially by AI, are not looking for a mathematical explanation, but rather a justification for the decision, such as whether the decision is fair. Does the process comply with existing regulations? Is that biased? Is there a racial reason? and is it reasonable and reliable? In essence, is a decision based on existing rules? So, eliminating variables of ethnicity, race, religion, and skin color which end up discriminating becomes important [56].

The possibility of discrimination in AI decisions may occur, such as in the case of sales or employment decisions where decisions are based on race, gender, or skin color [57]. Of course, discriminatory decisions based on race, gender, and skin color will be contrary to existing law. Therefore, transparency in the form of justification of SAD reasons is important in terms of decision making by AI. As an illustration of the comparison of the concepts of explainable and justified, if someone rejects a loan application, the reasons for refusing the loan are what is seen as good and bad, not how part of the brain works and influences when the decision to reject is made based on MRI results.

This illustration of the thought process is relevant to standards of transparency in the human thought process in making decisions. Zerilli et.al stated that algorithms and humans both have biases, so AI transparency standards cannot immediately be made stricter than humans [58]. When humans give practical reasons for a decision, they will not show the cognitive processes that led to the decision [58]. In fact, things such as intuition, gut feelings, and brain processes are not expressed in explaining decision-making [58]. Therefore, it is adequate that the justifiable factor be an indicator of AI transparency, or simply provide the algorithm architecture design in some cases as a form of responsibility for AI decisions in knowing the intention of decisions by AI [59]. It becomes relevant that justified AI principles (reasons) will be easier to understand by people affected by the AI's decisions [56]. The understanding of the affected person regarding data processing is coherent with the meaning of transparency in Law related to personal data protection and public information openness. Therefore, predictions that provide clear reasons are an alternative to the black box conditions that exist in AI performance [60].

In Indonesia, decisions and data processing for changes and establishment of legal entities (limited liability companies) are carried out based on an automation system. Based on Article 5 Government Regulation Number 43 of 2011 concerning Procedures for Applying for the Use of a Limited Liability Company Name, this system can accept and reject a decision if it is not under existing provisions, such as regarding the naming of a limited liability company which must not have similarities in principle with other companies that have been registered previously. Based on the system, if the proposed name is substantially similar, it will be automatically rejected by indicating the reason for the rejection along with proof in the form of a name in the form of the name of another company that is deemed similar to the name proposed by the applicant as stated by Chrisna Adi. This mechanism shows that there is a justifiable

element that can be applied in creating SAD by AI, even though the AI only uses rule-based algorithms. This system is indeed easier to understand the decision-making model than the machine learning model, which turns out to be difficult to know the core mechanism of action [34]. Therefore, it is important to emphasize the justifiable principle of AI transparency at SAD.

Based on the explanation above, it can be understood that AI transparency is more about the justification aspect alone without deeply considering the clarity in terms of mathematical and other calculations. AI's ability to explain bases and arguments that can be understood is the core of achieving transparency as intended in the personal data protection and public information openness law. Apart from that, the illustration of decision-making in terms of legalization the establishment or changing the deed of a limited liability company can be an example of the justification aspect of decision-making by AI in the realm of SAD. Nevertheless, the system employing the rule-based algorithm, like the case of limited liability deeds legalization, tends to be easier to be transparent, than the machine learning one. The framework for the justifiable transparency can be seen in the **Figure 2**. [61].


**Figure 2.** Framework of justifiable transparency.

There is a demand to explain data processing not only as a mechanism for remediation by data subjects for a decision, but also in general regarding the implications of failures in designs, prototypes, field tests, and deployment of data processors. In the context of AI, the right of data subjects to obtain clarity in data processing may not require the government to dismantle their technical aspects, but rather demands the government to understand the interests of the parties involved, understand their systems for processing data, and issue policies regarding documentation and justification of key features of the design throughout the system life cycle [46]. Therefore, AI transparency in making SAD can be emphasized more regarding the justification aspect.

## 4. Conclusion

Applying the principle of transparency to public services, especially in making transparency an important thing to pay attention to in Indonesia. This paper gives a normative-empirical analysis regarding the transparency principle of AI and SAD in Indonesia, which is lack discussed in previous research. The phenomenon of using AI for SAD itself can be seen in a normative way that recognizes the existence of AI in the context of public services or government administrative actions. Empirically, the government already uses an electronic system involving AI, for example, an electronic system related to the establishment and modification deeds of legal entities (limited liability companies) organized by the Ministry of Law and Human Rights. On the other hand, various laws and regulations generally regulate aspects of transparency in the context of public information disclosure and protection of personal data. The context for implementing transparency in implementing AI-based SAD is technical

transparency and justification transparency. Technical transparency has limitations because there are aspects of national interest that must be taken into account. Meanwhile, transparency, clarity, and justification can be known by knowing the architecture of the AI model and the reasons for its decisions. The justifiable decision tends to be more convenient and suitable for ensuring transparency of using AI in SAD.

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