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Indonesian Legal Readiness: Regulation of Right to be Forgotten in Relation to Big Data

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Abstract
Big Data is one of the new technological breakthroughs that marks the Industrial Revolution 4.0. Big Data has been widely used by entities in Indonesia to obtain and share data and information effectively and efficiently. In connection with this, through this paper the author intends to connect the Big Data phenomenon with the Right to be Forgotten (RBF) concept stipulated in Law No. 19 of 2016 concerning Information and Electronic Transactions, because both are related to electronic data and information. The aim is to see the compatibility between the two. In related of the matter above, it was found that the regulation of RBF in Indonesia does not seem to support the existence of Big Data. This is because RBF arrangements in Indonesia have weaknesses, including, first, the absence of rules regarding the type of information that can be requested to be removed through the RBF mechanism; second, Indonesian law cannot reach the jurisdiction of other countries if the data and information shared through Big Data technology are outside Indonesian territory; third, the absence of benchmarks to determine whether the request for removal of electronic information and data is accepted or rejected.
Keywords: Big Data, Right to be Forgotten, Indonesian Law

INTRODUCTION

Today human life is in the convergence of information technology into the industrial world, or what is called the Industrial Revolution 4.0. This is marked by the presence of new technological breakthroughs in a number of fields including artificial intelligence, Internet of Things, and big data (Lee, 2018). This convergence will fundamentally change the way of life, patterns of work and human relations. In its scope and complexity, the transformation is different from what humans have experienced before (Tjandrawinata, 2016). Therefore, a country needs to prepare itself as well as possible to respond to these changes.

The ideal step that needs to be taken by a country that upholds the law is by establishing a legal framework that supports the Industrial Revolution 4.0. This was done by Indonesia through Law No. 11 of 2008 concerning Information and Electronic Transactions as amended by Law No. 19 of 2016. The law is considered as a pioneer in laying the basis for regulation and protection in the field of IT and Electronic Transactions. But the question is whether the presence of the law can be said that Indonesia is ready to face the Industrial Revolution 4.0?

Through this paper the author will examine Indonesia's readiness in the field of law through the ITE Law in order to adapt the transformation process to the Industrial Revolution 4.0. The benchmark used was regarding the Right-to-be-Forgotten (RBF) arrangement associated with big data as one of the technological breakthroughs that marked the existence of the Industrial Revolution 4.0. Therefore, the method used is normative law, with a legal approach and comparison. This article will begin with an explanation of big data, and RBF in Indonesia and European Union. Furthermore, the author will explain the relationship between big data and RBF and how this supports the Industrial Revolution 4.0.

PROBLEM STATEMENT

How is the Right to be Forgotten arrangement in relation to Big Data? Does the RBF support the existence of Big Data?

OVERVIEW OF BIG DATA

The definition of the Industrial Revolution 4.0 is very diverse because it is still in the research and development stage (Roblek et al, 2016) . Angela Merkel as quoted by Hoedi Prasetyo and Wahyudi Sutopo, argues that Industry 4.0 is a comprehensive transformation of all aspects of production in the industry through the incorporation of digital and internet technology with conventional industries (Prasetyo and Sutopo, 2018). In addition, Andreja Rojko in his article entitled "Industry 4.0 Concept: Background and Overview" stated that Industry 4.0 was considered a technology that would open the way to a new generation of industrial manufacturing systems that would be very different from those available. Industry 4.0 is a natural transformation of industrial production systems triggered by the trend of digitalization (Rojko, 2017). Internet of Things (IoT), Cyber Physical System (CPS)[1], are terms that are often used in defining Industry 4.0 (Erboz, 2017; Lee, 2008). Actually not only IoT, and CPS which is often associated with Industry 4.0 there are still some other aspects[2], one of which is Big Data (Rüßmann et al, 2015).

Big Data is not a stand-alone technology, technique, or initiative. Big Data is a trend that covers a large area of business and technology. This refers to technology and initiatives that involve data that is so diverse, fast changing, or very large in size that it is too difficult for conventional technology, expertise, and infrastructure to be able to handle it effectively (Megantara and Warnars, 2016). But it needs to be underlined that Big Data is not only talking about volume data. Size is important, but there are still some important attributes of Big Data that need to be known, namely data variety, and data velocity (Russom, 2011). Big Data refers to 3V: Volume, Variety, and Velocity. Volume (data capacity) is related to the size of data storage media that is very large or may not be limited to units of petabytes or zettabytes; Variety (diversity of data) related to the type of data that can be processed starting from structured data to unstructured data; while Velocity (speed) is related to the speed of processing data generated from various sources, ranging from batch data to real time (Kemenkominfo, 2015).

Speaking of Big Data, the question that can be asked is what data are we talking about in relation to the concept? According to Xiaomeng Su, these data are web data; text data (e-mail, news, Facebook feed, documents, etc); time and location data (GPS, mobile phone, Wi-Fi); smart grid and sensor data; and social network data (such as Facebook, LinkedIn, Instagram) (Su, 2018). Big Data technology has the ability to handle all data diversity. In general, there are two groups of data that must be managed, as follows.

1. Structured data, namely data that has a type, format, and structure that has been defined. The data can be transactional data, OLAP data, traditional RDBMS, CSV files, simple spread sheets.
2. Unstructured data, namely data groups that do not have an inherent structure. Simply put, the data doesn't have a specific format, so to make it structured data requires more effort, tools, and time. These data are generated by internet applications such as data log URLs, social media, e-mail, blogs, videos, and audio (Maryanto, 2017).

OVERVIEW OF RIGHT TO BE FORGOTTEN

RBF is not a new concept (Vijvinkel, 2016). This concept is a further development of the right to personality or known as right to be let alone. The right of personality was first used in the settlement of the Melvin case v. Reid regarding claims for personal life, in 1931 in

California. Melvin is a former prostitute who has left her dark days. In connection with her former life, Doroty Davenport Reid raised the story of Melvin's life in a film called The Red Kimono. Reid uses Melvin's name in both the film and the advertisement. Melvin objected to the action and demanded that Reid withdraw the film with claims of personality rights. The California court stated that Doroty Davenport Reid's actions were "unnecessary and indifferent and effective and desirable from those who should act in our social intercourse [...]." The Court further conveyed their views as follows: [...] eight years before the production of "The Red Kimono", appellant had abandoned her life of shame, had rehabilitated herself and had taken her place as a respected and honored member of society. This change having occurred in her life, she should have been permitted to continue its course without having her reputation and social standing destroyed by the publication of the story of her former depravity with no other excuse than the expectation of private gain by the publishers. One of the major objectives of society as it is now constituted [...] is the rehabilitation of the fallen and the reformation of the criminal. [...] Where a person has by his own efforts rehabilitated himself, we, as right-thinking members of society, should permit him to continue in the path of rectitude rather than throw him back into a life of shame or crime (Davidson, 2014; Melvin v. Reid, 112 Cal.App.285 (Cal.Ct.App.1931)).

The Court's decision at that time won Melvin's claim, and stated that provisions regarding the Right to Personality were recognized by American law through the district of California (Brunette, 1972). One of the reasons used by judges at that time was right to be let alone (Pratama, 2016). Indeed, at that time the California Court did not openly use the term right to be forgotten in its verdict, but the meaning contained in the decision was the same as the RBF concept known in the current European Union countries.

In principle, the RBF gives authority for everyone to determine and enjoy their personal lives free from stigma and / or disturbed by anything, including past events related to that person – only this is limited in the scope of the use of technology, such as the internet (Mantelero, 2013). The individual has the right to protect himself from past information relating to his life so that it does not become material for other parties to attack or demean him (Sudibyo, 2016). All of this is related to the concept of individual autonomy.

RBF is only limited in the use of internet technology because the development of internet technology is the only media that has the ability to record and disseminate information about someone without being aware of that person. There has been a digital revolution that has changed the media ecology as a whole, namely from the pattern of conventional media-based communication information, to internet-based media technology (Sudibyo, 2016). With the existence of such dissemination capabilities, all information relating to a person can be accessed by anyone, without being limited by locus, and tempus.

The starting point of the appearance of the RBF was when the case between Mario Costeja González against Google Spain SL, and Google Inc. was decided in 2014 by the Court of Justice of the European Union (CJEU). The case originated from La Vanguardia's report on the bankruptcy case experienced by Mario Costeja González, a Spanish citizen, in 1998. González filed a lawsuit on March 5, 2010 at the Agencia Española de Protección de Datos (AEPD) – an institution in Spain that authorized to handle cases of personal data violations – against La Vanguardia for the news, and also to Google Inc. and its subsidiary in Spain, Google Spain SL. González's lawsuit is based on the fact that every time someone enters his name into the Google search engine, Google will display links to two pages of La Vanguardia, January 19 and March 9, 1998, which contained news of González's bankruptcy in 1998 (Case C-131/12, 2014, Paragraph 14).

Based on the above, González made two demands, namely as follows:

1. La Vanguardia be required either to remove or alter those pages so that the personal data relating to him no longer appeared or to use certain tools made available by search engines in order to protect the data;
2. González requested that Google Spain or Google Inc. be required to remove or conceal the personal data relating to him so that they ceased to be included in the search results and no longer appeared in the links to La Vanguardia (Ibid., Paragraph 15).

González expressed his opinion that the news attached to the La Vanguardi website was entirely irrelevant to his current condition, because the problem was resolved several years ago. On July 30, 2010, the AEPD decided to reject González's first claim on the grounds that La Vanguardia's actions were considered legally valid under the orders of the Ministry of Labor and Social Affairs in order to find as many auction participants as possible. Nevertheless the AEPD granted González's claim to Google Inc. and Google Spain SL with the following considerations.

[...] in this regard that operators of search engines are subject to data protection legislation given that they carry out data processing for which they are responsible and act as intermediaries in the information society. The AEPD took the view that it has the power to require the withdrawal of data and the prohibition of access to certain data by the operators of search engines when it considers that the locating and dissemination of the data are liable to compromise the fundamental right to data protection and the dignity of persons in the broad sense, and this would also encompass the mere wish of the person concerned that such data not be known to third parties. The AEPD considered that that obligation may be owed directly by operators of search engines, without it being necessary to erase the data or information from the website where they appear, including when retention of the information on that site is justified by a statutory provision (Ibid., Paragraph 17).

Based on the above considerations, there are a number of things that need to be underlined from the AEPD's opinion, namely first, search engine operators – in this case Google – are subject to the Data Protection Act, where in processing data Google is responsible and acts as an intermediary in the community information. Secondly, AEPD has the authority to ask Google to withdraw data, and prohibit access to certain data by search engine operators when it relates to basic rights to protect data and dignity in a broad sense. This also includes the person's desire to withdraw the data so that it is not known by third parties. Third, obligations imposed on Google can be carried out directly, without the need to delete data or information from the website where the information or data appears, including when the information stored on the site is justified by legal provisions.

Google Inc. and Google Spain SL felt disadvantaged by the AEPD decision, so they filed a lawsuit separately against the AEPD decision to Audiencia Nacional (National High Court). However, Audiencia Nacional did not directly respond to Google's lawsuit due to the existence of unclear legal aspects. Therefore, Audiencia Nacional asked CJEU as the highest court in the European Union to give its views regarding this case. On May 13, 2014, CJEU finally gave a decision regarding the Google case. In its decision several times CJEU mentioned RBF for example in Paragraphs 20 and 91. In connection with the RBF, the CJEU gave its conclusions as quoted by Mohammad Iqsan Sirie below.

1. If the data about a person is processed by a search engine operator, and it violates the fundamental rights of the person, then the search engine operator cannot do the processing under the pretext of legitimate interests (for example seeking profits);[3]

2. Someone can ask the search engine operator to delete a link to a third party web page that contains information about that person that appears on the search results made by internet users through the search engine of the operator, provided that the information is considered (a) inaccurate, (b) inadequate, (c) no longer relevant or (d) excessive from the initial purpose of using the information (Ibid., Paragraf 92-94); and
3. If information about a person is deemed very necessary to be known by the public or in the public interest[4], the above provisions can be deviated and the operator does not need to delete or do anything. (Sirie, 2016).

The case mentioned above is considered an important precedent, because the concept of the RBF was tested and implemented for the first time in a real case. This CJEU decision also contributed to the strengthening of the RBF concept which is explicitly regulated in European Union legislation through Regulation 2016/679, also known as the General Data Protection Regulation (GDPR). Perhaps this also inspired Indonesia to introduce the RBF in its national law. In this regard, below will be explained about the regulation of RBF in the European Union and in Indonesia, as follows.

Right to be Forgotten in the European Union

As mentioned above, the concept of RBF in the European Union is institutionalized through Regulation 2016/679 or GDPR. This Regulation lays down rules relating to the protection of natural persons with regard to the processing of personal data and rules relating to the free movement of personal data. This Regulation protects fundamental rights and freedoms of natural persons and in particular their right to the protection of personal data (Article 1 GDPR).

In GDPR, RBF is specifically regulated in Article 17. This article gives the data subject the right to obtain from controller the erasure of personal data concerning him or her without undue delay, and the controller have the obligation to delete personal data without undue delay where one of the following grounds applies as stated in Article 17 (1):

1. the personal data are no longer needed in relation to the purposes for which they were collected or otherwise processed;
2. the data subject withdraws consent on which the processing is based according to point (a) of Article 6 (1), or point (a) of Article 9 (2), and where there is no other legal ground for the processing;
3. the data subject objects to the processing pursuant to Article 21(1)[5] and there are no overriding legitimate grounds for the processing, or the data subject objects to the processing pursuant to Article 21(2)[6];
4. the personal data have been unlawfully processed;
5. the personal data must be deleted for compliance with a legal obligation in Union or Member State law to which the controller is subject;
6. the personal data have been collected in relation to the offer of information society services to a child who is not yet 16 years old and does not get the consent of the child's parent/guardian.

Although a person's personal data is possible to be deleted by the controller, the implementation of the RBF is not absolute. This means that there are certain conditions that can make the controller reject requests from the owner of personal data to delete data relating to him or her in accordance with Article 17 (3). The implementation of the RBF is excluded for the following reasons:

1. for implementation the right of freedom of expression and information;
2. for compliance with a legal obligation which requires processing by Union or Member State law to which the controller is subject or for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
3. For the public interest in the health sector;
4. The purpose of archiving is for public interest, scientific research or history, or statistics;
5. For the establishment, implementation or defense of legal claims.

If you want to compare it with the RBF in the case of Google, the RBF stipulated in Article 17 of the GDPR has a wider scope. The article contains several new things such as factors that can be used as an excuse for data managers to reject requests for deletion of one's personal data. Nevertheless, there are two things that need to be underlined in the two sources of law mentioned above, namely first, the request for the removal of personal data by the data owner must be based on clear reasons; second, the implementation of the RBF does not apply absolutely, but has certain limitations (Sirie, 2016).

Right to be Forgotten in Indonesia

The concept of RBF is a developing concept in the field of cyber law. This concept itself was born from the desire to restore the control function of personal information circulating on the internet to each individual. This concept began to develop in the European Union in 2010, in which Viviane Reding - who was then Vice-President in the European Commission responsible for Justice, Fundamental Rights and Citizenship - confirmed that: Internet user must have effective control of what they put online and be able to correct, withdraw or delete it at will. [...] more control also means being able to move your data from one place to another, and to have it properly removed from the first location in the process. (Reding, 2010)

The concept of the RBF has not only developed in European Union countries, but has developed and spread to Asia, specifically Indonesia. Indonesia is a country in Asia that first adopted the RBF concept into its national law through Law No. 19 of 2016 as a change to Law No. 11 of 2008 concerning Information and Electronic Transactions. Indonesia regulates the implementation of this RBF through Article 26 (3) and (4) Law No. 19 of 2016. The article regulates as follows:

(3). Each Electronic System Operator must remove Electronic Information and/or Electronic Documents that are not relevant which are under their control at the request of the Person concerned based on a court decision.

(4). Each Electronic System Operator must provide a mechanism for the elimination of Information and/or Electronic Documents that are not relevant in accordance with the provisions of the Laws and Regulations.

Based on the provisions of Article 26 (3) and (4), there are at least four things that need to be considered, namely:

1. Requests to delete information and/or electronic documents can only be done by the person concerned;
2. Requests to delete information and/or electronic documents are submitted to the local court.
3. The Electronic System Operator must delete the information and/or electronic documents of the person concerned if there is already a court decision;
4. Electronic System Operator must provide a mechanism for the removal of irrelevant electronic information and/or documents.

As a comparison material with RBF recognized in the European Union and also the Google Case, it is necessary to state what is meant by the Electronic System Operator, i.e everyone, the state administration, business entity, and the community that provides, manages and/or operates an Electronic System, either individually or jointly to users of Electronic Systems for their own needs and/or the needs of other parties (Article 1 Point 6a Law No. 19 of 2016).

Then what is meant by electronic systems is a series of electronic devices and procedures that have the function to prepare, collect, process, analyze, store, display, announce, transmit, and/or disseminate electronic information (Article 1 butir 5 Law No. 19 of 2016). Electronic information can be in the form of one or a set of electronic data, including but not limited to writing, sound, images, maps, designs, photos, electronic data interchange (EDI), electronic mail, telegram, telex, telecopy or the like, letters, signs, numbers, Access Codes, symbols, or processed perforations that have meaning or can be understood by people who are able to understand them (Article 1 Point 1 Law No. 19 Tahun 2016).

Based on the explanation above, it can be understood that the RBF imposed in Indonesia is different from the RBF in the European Union as stipulated in the Google case decision and Article 17 GDPR. RBF in Law No. 19 of 2016 is implemented in a very broad scope, not limited to "search engines" that must delete information and/or electronic documents (Widyasari, 2016). Then, the RBF rules based on the Google case decision and Article 17 GDPR are not only addressed to the data owner. Both of these legal sources regulate the RBF in such a way that the application is balanced and does not violate even to discredit the rights or interests of other parties. In addition, the two legal sources also include the minimum requirements for deleting the data in question (Article 17 (3) GDPR). This is different from Law No. 19 of 2016 which makes court decisions as a check and balance in the application of RBF. In connection with that, Iqsan Sirie expressed his opinion as follows:

Check and balance in Article 26 paragraph (3) - court determination - is worrying because without a clear rule of law regarding the implementation of the RBF, the judge has no reference and has the potential to provide excessive legal provisions - like a blind person who pioneered the wilderness, which is likely will get lost (Sirie, 2016).

INDONESIAN READINESS IN LEGAL ASPECT TO FACING INDUSTRIAL REVOLUTION 4.0

In implementing Big Data technology, there are four important elements that become challenges, namely data, technology, processes, and Human Resources (Sirait, 2016). The four things are explained as follows:

1. Data. The concept of data is usually referred to as 'raw' data, which is a collection of texts, numbers and symbols without meaning. Therefore the data must be processed, or provided the context before it can have a certain meaning (Cambridge, 2015).
2. Technology. Technology is related to tools and infrastructure used to operate Big Data, such as analytical and computational techniques, as well as storage media (Sirait, 2016).
3. Process. The process referred to at this point is a cultural change in the use of Big Data technology. For example in an organization, before the Big Data, a leader makes decisions based solely on intuition, beliefs or assumptions. But after the Big Data technology, leaders are able to act by making decisions based on accurate data and relevant information (Kemenkominfo, 2015).
4. Human Resources. In applying Big Data technology human resources are needed with analytical expertise and ingenious creativity. The point is the ability of the person to determine new methods that can be done to collect, interpret, and analyze data, including computer programming skills (Ibid).

Based on the four elements above, data availability is the initial key for Big Data technology. Without data, Big Data technology cannot be used properly (Sirait, 2015; Ramadhan and Putri, 2018). Therefore, the data element as mentioned above will be the focus of the discussion in this section. Up to this section, readers will definitely ask how the relationship between Big Data and the RBF concept relates. The answer is simple, that RBF is a concept that provides an opportunity for someone to ask the Electronic System Operator to delete information and/or documents generated electronically. Information and/or documents are part of Big Data. The main core of Big Data technology is data itself, namely (1) data that points to objects, events, activities, and transactions that are documented, classified, and stored but not organized to be able to provide a specific meaning; and (2) organized data that can give meaning and value to recipients – or what is called information.

Electronic System Operator today are very diverse considering the rapid development of information technology. But globally, one of the Electronic System Operator is Google. The starting point of the appearance of the RBF originated from the case of Mario Costeja González against Google Spain SL, and Google Inc. in 2014. Interestingly, Google is one of the companies believed to be a pioneer in the Big Data business sector, where in 2006 Google had introduced Google Bigbite. Bigbite is a large and fast database system used by Google to process various types of data from various services, including data from internet-based search engine services (Bahar, 2018; Hewage et al, 2018). Google's search engine service is the main problem of the RBF in the European Union, and later expanded in Indonesia as explained in the previous section.

Indonesia is said to be legally prepared in relation to the Industrial Revolution 4.0 if its legal provisions support or are consistent with the phenomenon that occurs. In this case, if the Big Data phenomenon has occurred in Indonesia, it should be regulated specifically in the provisions of Indonesian law. Or at least mentioned in certain parts of the relevant legislation. For the record, Indonesian law currently does not specifically regulate Big Data. Nevertheless, Law No. 19 of 2016 is considered to be the least able to represent the Big Data phenomenon because the law deals with data, information and electronic documents – even though it is not explicitly stated. Andrea De Mauro et al in his writing stated that "One of the fundamental reasons for Big Data is the current phenomenon, the extent to which information can be generated and made available" (Mauro et al, 2015). But the problem is that with the regulation of RBF in Law No. 19 of 2016, information and data utilized in Big Data cannot be available as originally intended. Or in other words, this provision inhibits the realization of the availability of data and information that should be provided. I need to underline that it is not the RBF concept that is problematic, but the legal provisions that are regulated through Law No. 19 Year 2016. Why is that? There are a number of things that I note relating to the weakness of RBF regulation in Indonesia which is believed to influence the existence of the Big Data phenomenon. The weaknesses in question are as follows:

1. There are no restrictions on the type of information

As mentioned earlier, Big Data is supposed to manage data to produce information. This information is expected to always be available to anyone who wants to access it. Nevertheless it becomes impossible if someone submits a request to the Electronic System Operator to delete the information on the grounds of RBF. The weakness of the regulation is that it is not clearly stated the type of information that can be applied in the RBF mechanism. Is the type of information related to personal data, social environment, business, or other information as referred to in Law No. 14 of 2008 concerning Public Information Openness. Not quite clear, only mentioned information and/or electronic documents.

What I mentioned above is certainly different from the RBF applied in the European Union, where the data and information in question is only related to personal data and information (Article 17 GDPR). The absence of this arrangement means that any type of information as long as the information is electronic information that is considered irrelevant can be the scope of the implementation of the RBF. If this is interpreted as such, then it can be ascertained that there will be conflict between the RBF and the Right to Information which is also recognized by Indonesia through Article 28 F of the 1945 Constitution of the Republic of Indonesia, and Article 14 of Law No. 39 of 1999 concerning Human Rights Human. The existence of the right to information is solely for the personal development and social environment. Therefore, this right is categorized as a constitutional right that demands state obligations in its fulfillment (Mulyana, 2015).

2. Dissemination of information through non-journalistic online media.

Locus from the application of RBF in Indonesia is so extensive, because it is not only limited to Google search engines like what happened in the European Union, it can be possible to influence the dissemination of information through non-journalistic online media, especially on social media. Keep in mind that social media is part of unstructured data that is also processed in Big Data. The application of RBF in social media will face obstacles because there are no ethical standards regarding the flow of information or digital communication on social media. According to Sudibyo, RBF is distinguished by the right to privacy. The right to privacy refers to the dissemination of information on a limited scale, while the RBF refers to the dissemination of information publicly at certain times. This distinction is difficult to operationalize on social media such as Facebook, Instagram, blogs, etc. It shows a hybridization between modes of personal, group, public, and mass. In this case there are no boundaries between private and public spaces, so it is necessary to be careful to apply the RBF (Sudibyo, 2016).

3. Legal Enforcement

The problem of implementing RBF will be very complex if the information that has been shared has spread in the global scope. In this case, the question arises whether Law No. 19 of 2016 can be applied to the case? If the court decision is used as the basis of the Electronic System Operator to delete information about a person, is the court decision required to be adhered to by the Electronic System Operator who is outside the jurisdiction of Indonesia? Such things need to be anticipated by Law No. 19 of 2016, bearing in mind that there are no international instruments specifically regulating this matter. Moreover, the arrangement between one country regarding RBF is very different. The most obvious example is the RBF regulated in Law No. 19 of 2016 with the RBF imposed in the European Union.

4. Court decision as a check and balance rule for the implementation of RBF

The weakness of this RBF arrangement is that there is no clear standard for determining whether or not RBF can be applied. In Article 26 paragraph (3) it is conveyed that the Electronic System Operator must delete information and electronic documents that are under its control at the request of the person concerned based on a court decision. This provision implies that the information and/or electronic documents can be deleted by the Electronic System Operator if the person concerned submits an application to the court to obtain a court decision. But the question is what factors are used by the judge to approve or reject the request? Law No. 19 Year 2016 itself does not regulate this matter. This is different in the European Union where Article 17 of the GDPR explicitly states several things that become the benchmark for the operator to reject requests for deletion of data. The absence of these factors will have an impact on legal uncertainty, because between

courts with each other – including among judges – will use different considerations, as a result the decisions of one court to another will be very different.

CONCLUSION

RBF regulation in Indonesia does not seem to support the existence of Big Data. This is due to the existence of several weaknesses of the concept stipulated in Law No. 19 of 2016. The reasons are, first, the concept of RBF in Indonesia is applied extensively both in terms of the type of information, as well as the media that is the target of implementing the RBF. This affects the performance of Big Data technology, which was created from the beginning to manage data and information, and ensure that it is available to anyone who wants to access it. In other words, Big Data wants to disclose existing information and data, but RBF is trying to cover up the data and information. This applies to structured and unstructured data and information as found on social media. The widespread regulation of the RBF will also indirectly conflict with the right to information that is also recognized in Indonesia in several laws and regulations. Second, Law No. 19 Year 2016 does not regulate the benchmark for receiving information deletion requests. Third, the dissemination of information through Big Data technology is certainly done widely, not only in Indonesia. If this happens, the application of the RBF under Indonesian law cannot force an entity in another country to delete data and information circulating in the jurisdiction of its country.

I am aware that what is discussed in this paper is merely a conceptual thought, and needs to be further investigated. In this regard, I am very careful to conclude about Indonesia's readiness to face the Industrial Revolution 4.0 in terms of its law. Nevertheless, according to my observation, from the aspect of law Indonesia needs to improve. Do not let there be overlapping regulations, for example, which occur between RBF and Big Data technology. Then, Indonesia needs to immediately be able to regulate Big Data, because this has the potential to cause problems in Indonesia.

ENDNOTES

1 CPS is a technology to combine the real world with cyberspace. This merger can be realized through integration between physical and computational processes (embedded computers and network technologies) in a close loop.

2 Rüßmann et. al shapes the vision of Industry 4.0 on defining nine aspects related to the concept; these are big data, autonomous robots, simulation, horizontal and vertical integration, Internet of Things, the cloud, additive manufacturing, augmented reality, and cyber security.

3 Processing data means collecting, recording, regulating, compiling, storing, changing, using, announcing and/or other activities concerning one's personal data (generally using automation methods).

4 For example, the information in question is related to the important role or position of a person in a country, so that the community needs to know information about the person concerned.

5 Article 21 (1) states that “the data subject shall have the right to object, on grounds relating to his or her particular situation, at any time to processing of personal data concerning him or her which is based on point (e) or (f) of Article 6(1), including profiling based on those provisions. The controller shall no longer process the personal data unless the controller demonstrates compelling legitimate grounds for the processing which override the interests, rights and freedoms of the data subject or for the establishment, exercise or defence of legal claims.”

6 Article 21 (2) states that "Where personal data are processed for direct marketing purposes, the data subject shall have the right to object at any time to processing of personal data concerning him or her for such marketing, which includes profiling to the extent that it is related to such direct marketing."

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