

Protection of Consumer Privacy in the Use of Big Data in the Digital Economy

Digital Economy,
Big Data and
Consumer Privacy

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ABSTRACT

This research aims to see the extent of use of Big Data technology in Indonesia, both by government and private institutions, the challenges faced in its implementation, and its impact on consumer privacy. The research method used is a literature study with a traditional-conceptual approach. The main data sources are published journals related to the topic being studied and several reports from social media. In conclusion, the use of Big Data in Indonesia has begun to develop both in the business and public sectors. The current challenge is how companies can optimize the data they have, and regarding privacy violations, legal certainty and an understanding of ethics in the use of information technology are needed.

Keywords: *Big data, digital economy, traditional-conceptual, consumer protection*

INTRODUCTION

Human life which was once simple has transformed into a very modern life today. In the era of increasingly advanced information and communication technology, everything can be solved in a practical way. Information and communication technology provides great benefits in simplifying various aspects of human life. Currently, the world of information cannot be separated from technology. The use of information and communication technology by society has encouraged the development of increasingly sophisticated technology over time (Saefullah, 2020). Of course, Indonesia is a country that has great potential in developing technology, especially internet-based ones. This then indicates that the flow of globalization cannot be stopped from entering Indonesia along with technological advances that continue to increase.

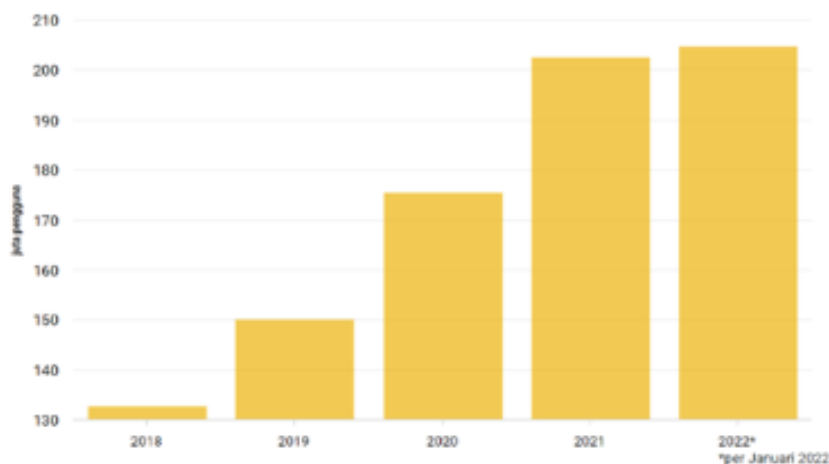


Figure 1. *Number of internet users in 2018-2019 (Annur, 2022)*

Based on data from the Central Statistics Agency (BPS), Indonesia's population is projected to be 275.77 million people in 2022. (Rizaty, Monavia Ayu, 2022). More than 50% of people have been connected to the internet network throughout 2018-2022, at least

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according to the We Are Social report, namely that there were 204.7 million internet users in Indonesia as of January 2022. Meanwhile, the internet penetration rate in Indonesia reached 73.7% of the total population in early 2022 (Annur, 2022).

So, the term "everything is digital" is appropriate to describe this decade. The availability of digitally recorded social data is increasingly abundant, creating a sea of data known as Big Data. For industry and practitioners, Big Data provides opportunities to formulate business strategies and innovation in processing, analyzing and storing data with high volumes, levels of volatility, speed and effectiveness. Those who are able to manage and utilize data in large volumes, with a wide variety, high complexity and fast addition of data can achieve great benefits. However, the availability of abundant data also demands a data analysis mechanism that is comprehensive or at least representative of the Big Data population.

Even though there are many applications for analyzing Big Data available on the internet, access to Big Data itself is still very limited (Pujiantodkk, 2018). With this background, researchers intend to explore further regarding "Consumer Privacy Protection in the Use of Big Data in the Economy Digital".

METHOD

This research adopts a traditional conceptual approach using a literature review. A literature review is writing that discusses a topic or research results that have been published without involving scientific methods. There are two general approaches to writing literature reviews, namely the traditional approach and the systematic approach.

In this research, a traditional-conceptual approach is used that combines knowledge and research results related to Big Data to provide an in-depth understanding of the topic. Primary data in this literature review includes journals that are relevant to the topic studied and several reports from social media. Therefore, the focus of this research is clearly to understand consumer privacy protection in the use of Big Data in the digital economy. .

RESULTS AND DISCUSSION

Data and business are two things that are interrelated and cannot be separated. In the current technological era, data and its analysis have become a very important part of supporting business decision making. Comprehensive data analysis is not only an important skill for companies, but is also a determining factor in dominating the market and is the basis for future business development. Knowing examples of Big Data applications in business has significant importance.

The following are several examples of the application of Big Data technology in various business models:

1. Detecting and Preventing Fraud. One application of Big Data in business is the detection and prevention of financial fraud. Big Data can be used to identify fraudulent claims and data breaches. This challenge is generally faced by organizations, industries and companies today. With the help of Big Data analysis equipped with machine learning, fraud prevention becomes more effective in detecting criminal activity and preventing unlawful activities. For example, many banks now keep comprehensive transaction histories, so they can detect fraud better.

2. Sentiment Analysis Another application of Big Data in business is sentiment analysis. It is important for companies to know consumers' emotions when interacting with their business. With Big Data, companies can analyze consumer feelings and gain a clear understanding of their feelings. The advantage of this application is that Big Data can provide various solutions to increase business advantages compared to competitors. Many large companies invest significant resources and funds to maintain customer satisfaction and build loyalty.

3. Recommendation Engines In today's digital era, businesses strive for a high level of personalization using recommendation engines. Business organizations can harness the potential of Big Data through this approach. Companies that do not take advantage of

Big Data may lose customers and sales opportunities. The potential for business advancement that can be gained with Big Data has no limits. With Big Data, companies can easily discover previously unseen opportunities, which in turn can generate more profits (Pane, 2014).

Challenges of Big Data Implementation

The main challenges in using Big Data include the complexity of the Big Data exploration process, the lack of clear governance in the use of Big Data, limited time and costs, the limited availability of software for analyzing data in Indonesian, and the lack of skilled human resources in development. Big Data. Therefore, current challenges focus more on how companies can optimize the data they have to provide a positive impact (Pujianto, et al, 2018).

Protection of Consumer Privacy in the Use of Big Data in the Digital Economy It cannot be denied that the existence of Big Data has great opportunities. promises to revolutionize businesses because of its ability to automate things and provide real-time access. Some people welcome Big Data technology because they see the positive potential for humans and the digital economy. However, there are also people who are still worried about Big Data because they see the potential dangers that may arise when companies have unlimited access to monitor consumers.

The concept of privacy is becoming increasingly important in today's era because of technology that is able to record and store information. personal data in new forms, such as fingerprints, faces, and even the retina of a person's eyes. Privacy is a concept that respects a person's autonomy, authority and dignity by respecting the existence of personal space. In the digital era, personal information is no longer limited to data such as telephone numbers, home addresses, dates of birth and family names. Personal information can also be taken from online financial transaction data, health conditions via health applications, photos or images uploaded online, as well as locations that can be easily accessed via social media and so on. With the ever-increasing amount of data in the digital world, privacy protection towards users is decreasing. This is due to the increasing difficulty of protecting each individual's privacy from external threats as the amount of data increases.

Another factor that strengthens this is the public's high interest in the digital world, which ultimately makes privacy increasingly worthless. Of course, improper use of Big Data like this will be detrimental to consumers, and consumers are often in a lower position in dealing with company behavior (Pujianto et al., 2018).

Possible Solutions

Create a consumer protection system that involves open access and transparency of information, as well as guaranteeing legal certainty. The public must also be given an understanding of the functions and benefits of information technology and its rapid development, so that they can follow it.

Provide protection to consumers from deceptive and confusing business practices.

Integrate the implementation, development and regulation of consumer protection with protection areas in other sectors.

Providing a comprehensive understanding to the public about ethics in information technology to protect themselves from abuse of privacy, both by individuals and by the state. Thus, only data necessary for the country's development will be collected, not personal data which should not be disseminated (Pujiantodkk, 2018).

CONCLUSION

Big Data is a phenomenon that covers various aspects in the world of business and technology. The term Big Data refers to the technology and efforts involved in processing data that is very diverse, rapidly changing, or has a size so large that it is difficult to handle effectively by conventional technology, expertise, and infrastructure. In Indonesia, the use of Big Data has begun to develop both in the business and public sectors. The challenges currently faced are more focused on how companies can optimize the data they have so that they can have a positive impact. As the amount of data in the digital world increases,

privacy protection for users also decreases, therefore, efforts are needed from the government to provide legal certainty, and it is important for society to have a comprehensive understanding of ethics in information technology to protect themselves from abuse of privacy. .

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