

Personalized Pricing as a Form of Price Discrimination Based on Behavior in E-Commerce from the Perspective of Business Competition Law

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Abstract

This chapter examines personalized pricing in e-commerce as a form of behavioral price discrimination and evaluates its implications for Indonesia's business competition law. It argues that algorithm-driven personalized pricing, enabled by big data and consumer profiling, aligns with first-degree price discrimination and may create risks of behavioral exploitation that challenge the fairness principles as stipulated in Law Number 5 of 1999. Despite its economic justification as an efficient strategy, the practice potentially violates the prohibition against unjustified discriminatory pricing when consumers in similar circumstances receive different prices without objective grounds. Using a doctrinal legal method through statutory and conceptual analysis, the chapter is aimed to assess to what extent personalized pricing fits within existing legal norms and underscores the need for clearer regulatory guidance to address discriminatory algorithmic pricing in e-commerce.

Keywords

Personalized Pricing, Price Discrimination, Algorithmic Pricing, Behavioral Price Discrimination.

INTRODUCTION

The development of the internet and information technology has significantly influenced business practices. The internet not only serves as a means of communication but also as the primary tool for conducting modern economic activities. One of the most significant impacts of this development is the emergence of electronic commerce (e-commerce), which is the process of buying and selling goods and services through electronic media, both between consumers and between companies, with computers as intermediaries for business transactions (Pradana, 2015). In the context of ever-tighter global competition, the use of e-commerce has become an important element for companies to maintain competitiveness and expand their market reach.

This rapid growth is also reflected in the increase in the value of e-commerce transactions in Indonesia. Based on data from the Ministry of Trade, the value reached IDR. 512 trillion in 2024, a 12-fold increase compared to seven years earlier, which was only IDR. 42.2 trillion. This figure even exceeded Bank Indonesia's projection, which estimated the transaction value to be Rp. 487 trillion (Tech in Asia, 2025). This increase indicates that more companies are integrating digital technology into their business activities, whether to expand their market, reduce operational costs, or improve transaction efficiency. Thus, e-commerce not only represents a change in consumer patterns, but also serves as an important indicator of the national economy's transformation towards a more competitive digital era.

However, behind the convenience and efficiency offered, the development of e-commerce also brings new challenges in market behavior and business competition patterns. The transformation from conventional trading systems to digital trading has caused a shift in the way businesses interact with consumers (Saida, 2025). The competition, which previously focused on product price and quality, is now shifting towards marketing strategies that emphasize consumer experience, transaction convenience, and service speed (Sudirjo, 2024).

In addition, the characteristics of e-commerce that enable businesses to reach consumers on a large scale have given rise to increasingly fierce competition among service providers. To maintain their position in the market, companies no longer rely solely on product quality, but they are also required to understand the needs, preferences, and behavior of their consumers. Marketing strategies have shifted from a mass approach to a more individualized approach (Erwin, 2024), where companies strive to tailor their product offerings and prices to suit the characteristics of their consumers.

In this context, the development of information technology plays an important role in shaping business strategies in the digital age. Through the use of big data and algorithms, businesses are able to collect and analyze various consumer behavior data generated from online activities, such as search history, frequency of visits, time of purchase, and product preferences (Rahayu, 2025). The data is then processed to build consumer profiles, enabling companies to understand individual shopping patterns and tendencies.

This large-scale data analysis capability provides opportunities for e-commerce players to develop more precise marketing strategies, including determining the most appropriate price for each segment or even individual consumer. The use of data-based algorithms has changed the way businesses make pricing decisions, as the system is now able to adjust offers in real time based on user behavior on digital platforms (Andini, 2024). In other words, data and algorithms do not merely serve as marketing tools, but have become strategic tools in determining the structure of competition and distribution of profits in the digital market.

This shift in business orientation led to the emergence of personalized pricing practices. Through this approach, businesses can set different prices for different consumers, based on certain considerations derived from consumer interactions on digital platforms. Although this strategy is considered economically capable of increasing efficiency and competitiveness, on the other hand, this practice raises ethical and legal questions, especially if price differentiation is carried out without a clear basis or transparency towards consumers.

Economically, personalized pricing is often seen as a form of market efficiency. Through this approach, businesses can adjust prices to the purchasing power and preferences of individual consumers, thereby optimizing sales potential. According to Venegas, personalized pricing systems enable companies to strike a balance between maximum profit and consumer satisfaction, as each user is offered a price that is considered most appropriate to their ability to pay and the perceived value they place on a product (Venegas, 2021).

However, such efficiency is not always identical to fairness. On the other hand, personalized pricing practices have the potential to create information imbalances between businesses and consumers, where consumers are unaware of the basis for the prices they are charged. When price differences are not explained transparently, there is a risk of behavioral exploitation, especially when consumer data is used to estimate individual willingness to pay (Walsh, n.d.). In this context, personalized pricing practices can transform from an efficient strategy into a form of behavioral price discrimination that negatively impacts market fairness and consumer protection.

In the context of national law, the potential for personalized pricing practices as a form of behavior-based price discrimination needs to be examined from the perspective of Competition Law as regulated in Law Number 5 of 1999 concerning Prohibition of

Monopolistic Practices and Unfair Business Competition (*Larangan Praktek Monopoli dan Persaingan Usaha Tidak Sehat*). This regulation explicitly prohibits business actors from engaging in discriminatory practices against other business actors or consumers. Article 6 of Law Number 5 of 1999 states that business actors are prohibited from entering into agreements that result in one business actor receiving goods and/or services at a price that is different from the price received by other business actors in the same position, unless based on objective reasons. This provision emphasizes that setting unequal prices without clear rational grounds can be categorized as a form of price discrimination that has the potential to cause unfair competition.

However, the provisions referred to in Article 6 of Law Number 5 of 1999 were essentially created in the context of economic transactions that were still conventional in nature, where price discrimination occurred through market mechanisms as understood in the general sense, namely places or economic institutions where buyers and sellers, either directly or indirectly, could conduct transactions involving goods and/or services. This means that although the law recognizes that transactions can take place indirectly, its scope does not yet cover the dynamics of the digital market, which depends on algorithms and the processing of consumer behavior data.

In this context, it should be noted that the term “digital market” itself has not been explicitly defined in Law No. 5 of 1999. The nomenclature “market” in the law still refers to the conventional concept, which does not fully represent the complexity of the relationship between business actors, platforms, and consumers in the digital space. As a result, monitoring unfair business competition practices in the digital market poses a challenge for the KPPU, especially when algorithmic mechanisms create new forms of price discrimination that are difficult to identify within the existing legal framework (Rohmat, 2022).

Thus, the practice of personalized pricing raises important questions in the context of the application of Article 6 of Law Number 5 of 1999, particularly regarding whether algorithmically determined price differentiation between consumers in the same position can be considered a form of price discrimination prohibited by competition law. Although this practice is often viewed as an economic efficiency strategy, the lack of clarity in the basis for pricing and the imbalance of information between businesses and consumers creates the potential for unfairness in digital transactions.

RESEARCH QUESTION

1. What are the concepts and characteristics of personalized pricing as a form of behavioral price discrimination in e-commerce activities?
2. Can personalized pricing in e-commerce be categorized as a form of price discrimination that violates the principles of fair business competition according to Law Number 5 of 1999 concerning Prohibition of Monopolistic Practices and Unfair Business Competition?

RESULT AND DISCUSSION

1. Concept and Characteristics of Personalized Pricing Practices as a Form of Behavioral Price Discrimination in E-Commerce Activities

Digital transformation in the trade sector has brought fundamental changes to pricing mechanisms. In conventional trading systems, the price of a good or service is generally standardized and determined based on production costs, profit margins, and general supply and demand conditions. However, in the context of e-commerce, developments in information technology have enabled businesses to set different prices for each consumer through a mechanism known as personalized pricing. This practice is part of a behavioral price discrimination strategy, which utilizes consumer data as the main basis for determining prices (OECD, 2018).

Conceptually, personalized pricing can be understood as an individual pricing method tailored to specific consumer characteristics. These characteristics are obtained through the collection and analysis of digital data, such as product search history, purchase frequency, brand preferences, geographic location, access time, and the type of device used (Pramiarsih, 2024). This data is then processed by an algorithm to predict consumers' willingness to pay for a product. Thus, consumers who are considered to have higher purchasing power or a greater level of dependence on a platform may be charged higher prices than other consumers.

From an economic perspective, this practice is an extension of the long-established concept of price discrimination. Price discrimination is defined as the practice of selling the same goods or services at different prices to different consumers without any significant difference in production costs (Christianingrum, 2025). Personalized pricing is similar to first-degree price discrimination, where businesses attempt to extract maximum consumer surplus. However, the difference lies in the means and scale. While first-degree price discrimination is difficult to implement in classical theory, digital technology makes it realistic and systematic (Triwijayati, 2024).

The main characteristic of personalized pricing in e-commerce activities lies primarily in its consumer behavior-based nature. The behavioral data collected is not static, but dynamic and continuously updated in line with consumer interactions on digital platforms. This allows businesses to make continuous price adjustments. Thus, prices no longer reflect collective market value, but rather a reflection of individual consumer behavior (Ezrachi, 2016).

Second, personalized pricing is not transparent. Consumers are generally not informed that the price they pay is personalized. In fact, consumers are often unaware that the same product may be offered at different prices to other consumers at the same time. This lack of transparency creates significant information asymmetry between businesses and consumers (Sugiyanto, 2024). In the context of consumer protection and business competition, this situation puts consumers in a weak position because they do not have access to enough comparative information.

Third, this practice is carried out automatically through algorithms. The use of artificial intelligence and machine learning enables pricing decisions to be made without direct human intervention. Although this improves operational efficiency, this mechanism raises legal accountability issues because it is difficult to identify the party responsible for potential losses

incurred by consumers (OECD, 2017). Algorithms become instruments that can indirectly result in systemic price discrimination.

Fourth, personalized pricing has the potential to widen the gap between consumers. Consumers with limited access to information or technological capabilities tend to be unable to avoid higher prices. Meanwhile, more digitally literate consumers can manipulate the system to obtain lower prices. This shows that personalized pricing is not neutral, but can widen the economic gap between consumers (Ezrachi, 2017).

From a legal perspective, these characteristics indicate that personalized pricing is not merely a business innovation, but rather a practice that has serious implications for the principles of fairness, legal certainty, and consumer protection. In the context of e-commerce, this practice needs to be further analyzed within the framework of competition law to assess whether the price differences it creates are still legally justifiable or whether they reflect a form of price discrimination that is detrimental.

2. The Practice of Personalized Pricing in E-Commerce as a Form of Price Discrimination in the Perspective of Law Number 5 of 1999

Law No. 5 of 1999 concerning Prohibition of Monopolistic Practices and Unfair Business Competition (Business Competition Law) is the main instrument in maintaining a fair competitive climate in Indonesia. This law aims to prevent the concentration of economic power in certain business actors and protect the public interest from harmful business practices. In the context of the digital economy, the implementation of this law faces new challenges, including in assessing personalized pricing practices.

Article 6 of the business competition law prohibits business actors from entering into agreements that result in one buyer having to pay a different price from other buyers for the same goods and/or services. Although this norm is formulated in the context of agreements between business actors, the essence of the prohibition is to prevent unreasonable price discrimination. In the practice of personalized pricing, price differences do not always arise from explicit agreements but rather from algorithmic systems that are unilaterally determined by business actors (Nababan, 2020).

In addition, Article 19 of the business competition law prohibits business actors from engaging in activities that could hinder competition, including through discriminatory practices. In the context of e-commerce, price discrimination against consumers has the potential to cause structural impacts on the market. If large business actors utilize personalized pricing to lock in certain consumers, competitors will find it difficult to attract those consumers through competitive pricing mechanisms (Rahman, 2025).

Furthermore, personalized pricing practices can be analyzed through the concept of dominant position as stipulated in Article 25 of the business competition law. Business actors who have the ability to control the market through the possession of large amounts of consumer data have the potential to abuse their dominant position (Nazharia, 2023). In this situation, price personalization is no longer just a marketing strategy, but a tool for maintaining market dominance and eliminating competitors.

The rule of reason approach adopted in Indonesian business competition law requires an analysis of the impact of such practices on competition (KPPU, 2010). If personalized pricing

proves to increase efficiency and provide tangible benefits to consumers overall, then the practice can be justified. However, in reality, the benefits of personalized pricing are often not distributed fairly. Certain consumers are disadvantaged by higher prices without objective justification.

In addition to harming consumers, personalized pricing also has the potential to damage healthy market mechanisms. Different prices for the same product eliminate the function of price as a market signal. Consumers can no longer compare prices rationally, thereby undermining price-based competition. This condition contradicts the principles of transparency and openness that become the foundation of healthy business competition (Monti, 2007).

In law enforcement practice, the Business Competition Supervisory Commission (KPPU) has not specifically regulated personalized pricing. However, the effects-based approach allows the KPPU to assess this practice as a form of unfair business competition if it is proven to cause market losses (Rachmadi, 2022). Therefore, personalized pricing should be positioned as a form of modern price discrimination that requires a progressive interpretation of the business competition law.

Thus, the practice of personalized pricing in e-commerce can be categorized as price discrimination that is contrary to the principles of fair business competition if it is carried out in a non-transparent manner, harms consumers, and strengthens the dominance of certain business actors. Therefore, more adaptive supervision and the development of business competition policies that are responsive to the dynamics of the digital economy are needed.

CONCLUSION

Based on the discussion above, it can be concluded that the practice of personalized pricing in e-commerce activities is a digital economic phenomenon that has significant legal implications within the scope of competition law. This practice cannot be understood solely as a technology-based marketing strategy innovation, but must be placed in a legal perspective that emphasizes the principles of fairness, transparency, and equality in market mechanisms.

Conceptually, personalized pricing is a form of modern price discrimination that utilizes big data and algorithms to set prices individually based on consumer behavior. This practice approaches the concept of first-degree price discrimination because it seeks to extract maximum consumer surplus. However, its non-transparent, automated, and asymmetrical characteristics place consumers in a weak position because they do not know the basis for pricing and lose the ability to compare prices fairly.

From a competition law perspective, although the Competition Law does not explicitly regulate personalized pricing, the principles contained therein remain relevant for evaluating this practice. Differentiating prices for the same goods or services without objective reasons has the potential to violate the prohibition of price discrimination and may be associated with abuse of a dominant position if carried out by business actors who have significant data control and market power.

Thus, personalized pricing in e-commerce can be categorized as a form of price discrimination that is contrary to the principles of fair business competition if it is carried out in a non-transparent manner, is not based on objective differences, harms consumers, and has the potential to strengthen the dominance of certain business actors. Therefore, an adaptive

legal interpretation and responsive supervision are needed so that business competition law remains relevant in facing the dynamics of the digital economy.

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