
EMERGING ISSUES OF UNFAIR COMPETITION IN INDONESIA'S E-COMMERCE MARKET

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Abstract: *E-commerce already covers the entire spectrum of commercial activities. Transacting electronically still causes debate in the legal and non-legal fields. From a competition perspective, e-commerce on the one hand provides an opportunity to compete, but on the other hand there is also anti-competitive potential. For this reason, the purpose of this paper is to examine the potential for unfair business competition in e-commerce. The problems to be studied are: What competition issues exist in e-commerce and what problems are faced by the competition agency regarding the issue of competition in e-commerce. Based on the results of the discussion and analysis, it is concluded that: the issue of competition in e-commerce consists of infrastructure issues and transaction issues. In the issue of infrastructure, the perspective of business competition will arise problems of interconnection agreements between providers that lead to vertical integration, which of course will reduce the benefits of competition in internet access. On the issue of e-commerce transactions, in addition to providing convenience in transactions and efficiency in business transactions from the perspective of business competition, it will provide potential difficulties in determining market relevance, price dispersion, and price discrimination as well as the possibility of dominant position power and even monopoly in interconnection and the existence of potential price cartel.*

Keywords: *E-Commerce, Unfair Competition, Infrastructure Issue, Transaction Issue, Competition agency.*

JEL Code: *K4*

1. Introduction

National economic development in the globalization era must be able to support the growth of businesses in order to be able to produce a variety of goods and/or services containing technology that can improve the welfare of the multitude, while at the same time ensuring that the traded goods and/or services do not cause consumer losses (Ng and Kee 2017). The opening of the national economy due to the process of economic globalization must continue to ensure improvement of the welfare of the people, as well as the quality, amount, and security of goods and or services they obtain in the market (Shangquan 2000).

Meanwhile, competition among entrepreneurs in business and economy is a necessity. Competition can be observed from two sides, from the side of entrepreneurs or producers, as well as from the side of consumers. On the producer side, competition regards how an enterprise determines competitive strategies, whether fair or cutthroat. On the consumer side, competition is related to how high prices are offered and how many choices are available (Chakravorti and Roson 2004). Both of these factors will determine the level of prosperity of consumers or society. As such, one of the aims of competition policies is to increase popular welfare by improving the welfare of consumers and producers (Zhao, Delft, Thomas and Buck 2019).

To respond to the demands of free market and globalization, and in an effort to create an efficient economy, in 1999 Indonesia enforced Law No. 5 of 1999 on the Prohibition of Monopolistic Practices and Unfair Business Competition. The enforcement of this law will surely affect the practices of internal and external trade of Indonesia, thus being able to create more fair business practices and improve the efficiency of the economy. The two kinds of efficiencies to be achieved by the law is efficiency for producers and efficiency for the people.

Business activities contain a mutually needy relationship among entrepreneurs and consumers (users of goods and/or services) and among entrepreneurs themselves. The interest of entrepreneurs¹ is to obtain profits from transactions with consumers, while the interest of consumers is to obtain satisfaction through the fulfillment of needs for certain goods and/or services (Ndofirepi 2020). The relationship among entrepreneurs with other entrepreneurs regards the same opportunities for every citizen. In these relationships, there is often an inequality between two parties. Consumers² are often in a weaker bargaining position, and as a result, may become targets of exploitation from entrepreneurs who socially and economically are more strongly positioned (United Nations Conference on Trade and Development 2018).

1 An entrepreneur is any individual or enterprise that, whether as a legal entity or not as a legal entity that is established and resides or conducts activities in the legal territory of the Republic of Indonesia, whether on their own or collectively through agreement, conducts business activities in various economic fields; see Article 1 Paragraph (3) Law No. 8 of Year 1999 on the Protection of Consumers, *juncto* Article 1 Paragraph (5) of Law No. 5 of Year 1999 on the Prohibition of Practices of Monopoly and Unfair Competition.

2 Consumers in this context is as regulated in Article 1 Paragraph (2) of Law No. 8 of Year 1999 on the Protection of Consumers: "every person that utilizes goods and/or services available in society, whether for the interests of oneself, family, other people, or other living creatures, and does not resell them". The understanding of consumers in this law is as end users.

In addition, globalization and free trade, which is supported by advances in telecommunication and information technologies, have expanded the movements of the flow of transactions of goods and or services across the borders of countries, leading to varied offerings of goods and or services, both produced internationally and domestically (Anderson and van Wincoop 2004). The media for marketing and transaction used to spread or compete in business is not only conventional, but also through the Internet via what is known as e-commerce. This growth and advancement in technology and information has also affected developments in business transactions.

John Nielson, one of the leaders of Microsoft, stated that within a period of 30 years, 30% of sales transactions to consumers will be carried out through e-commerce (Adolf 2004). E-commerce has grown quite rapidly, seen from the high value of investments around the world. To visualize, according to a study conducted by the University of Texas, the market value of e-commerce in North America had reached 301 billion US dollars. In Western Europe, according to Data Monitor, the market value of e-commerce had reached 775 million US dollars and increased to 8.6 billion US dollars in 2003. In Asia, for Japan, according to the *Daily Yomiuri*, it was estimated in 2003 that the revenue from e-commerce businesses to consumers reached 1 trillion yen, around 8.2 billion US dollars, while Korea in 1998 had already possessed an e-commerce market worth 20.8 billion US dollars (Kaliski Jr. 1993). In relation to the growth of e-commerce in Indonesia, e-commerce transactions themselves are predicted to continue to increase. It was estimated that the transactions in Indonesia reached US\$ 100 million in 2000 and would increase to US\$ 200 million in 2001. Considering the above data, the e-commerce market is very much competitive. Competition grows tighter and the number of entrepreneurs continue to increase from day to day.

There is a serious issue that has not attracted much attention. That serious issue concerns the law. What is expressed by Karim Benyekhlef (1995) below becomes interesting to consider:

"...Yet, one cannot claim to fully comprehend and understand this phenomenon if one reduces it to only its technical component. Obviously, the latter might seem much more spectacular than its legal counterpart. However regardless of how impressive electronic highways may become, it remains undeniable that their integration and acceptance in the social and economic fabric will be dependent notably on the legal guarantees they can provide. In other words, the consumer will only be inclined to use these new services if they can offer a degree of legal security comparable to that provided in the framework of traditional operations..."

Karim Benyekhlef has the opinion that a person cannot be said to have completely understood the phenomenon of cyberspace if the understanding of that person is only limited to the technical aspects of cyberspace and the person has not yet realized the legal issues coming from it.

Shopping or performing transactions in the virtual world through the Internet is very much different from shopping or performing transactions in the real world. Doubts arise regarding laws and legal jurisdictions that bind the parties that perform the transactions. In the field of civil-business law, activities in the virtual world occur in the form of con-

tracts for e-commerce. Trade contracts no longer constitute the paper-based economy, but digital electronic economy. In competition law, a form of competition will occur in the virtual world, whether conducted fairly or unfairly (Gerbrandy 2019).

The e-commerce industry has been positively welcomed by the Indonesian people; this is seen from the growing number of start-up companies that have roles to play in online selling services. According to Faisal Basri, the role of ICT (Information Communication Technology) becomes even more important in the economy, with the rapid growth of e-commerce; this has even spread to small- and middle-scale entrepreneurs (Basri, *et.al.* 2008).

Based on the results of research conducted by Google and Temasek entitled “Economy SEA, Unlocking the \$200 billion digital opportunity in Southeast Asia” in August 2016, it was stated that in 2025 Indonesia would control 52 percent of all activities of e-commerce in Southeast Asia. The explained reasons that most supported this are the size of the population of Indonesia, growth of internet access, and the geography of Indonesia, which are all factors that provide a huge opportunity for e-commerce to become the primary choice for transactions.

On the other hand, there are challenges to be faced in e-commerce transactions, of which the major challenges are talent/engineering, funding capital, payment mechanism, Internet infrastructure, logistics infrastructure, and lack of consumer trust. The growth of e-commerce in Indonesia is already impressive; this can be seen from a report titled “Lifting the Barriers to E-Commerce in ASEAN” published by A.T. Kearney, where e-commerce is predicted to achieve values of \$25-30 billion (Rp. 320.8-385 trillion) within the next several years. This is certainly not a small number in the growth of business of a country.

With recent developments in the world of business, meetings among entrepreneurs are no longer needed (business has a faceless nature). Technology has made it possible for business relationships to be established through technologies connected to the Internet. Entrepreneurs no longer need to meet face-to-face to conduct transactions; they only need to express demands or make offers using software designed to conduct business in cyberspace.

Even so, there is still much work to do to resolve issues and further develop e-commerce. These issues include trust by society, distribution, guarantees, and taxes for e-commerce actors.

Many actors of e-commerce have even stated that the Indonesian market is unique, particularly after the ASEAN Economic Community forced Indonesian e-commerce actors to prepare for the influx of foreign actors who certainly wish to capture some of the Indonesian market. Caution needs to be heeded and issues need to be resolved, including the issue of how most online purchases have only been conducted in major cities. Many Indonesian people have a lack of trust with e-commerce transactions because of their fear of fraud and the lack of reputation that e-commerce actors have (Sanusi 2001).

In regard to payment systems, a major challenge in e-commerce is fostering the trust of society, especially with consideration to payment methods. Many e-commerce actors still utilize conventional payment systems that are not directly related to transactions that

are carried out online. There are also issues of logistics, specifically efficiency and effectiveness of logistics, which regulate the shipment of goods. Delays in product delivery, incorrect shipping, and damaged goods are certainly major threats for e-commerce actors.

Also important is the issue of competition in e-commerce, which becomes the primary focus of this paper, covering issues of infrastructure and transactions. Both of these issues certainly will have positive and negative impacts on competition. Meanwhile, aspects of Indonesian competition law that are formulated in Law No. 5 of Year 1999 do not have paradigms that are based on cyberspace transactions. Yet, actual practice in the field has indicated that there have been many business transactions carried out over the Internet (as e-commerce). Various questions arise concerning the ability of positive laws in responding to these new developments or issues, how cases of competition are resolved in e-commerce, and so on. Considering that e-commerce is quite complex, as many parties are involved not just in B2C (Business-to-Consumer) relationships, but also B2B (Business-to-Business) relationships, there is still the possibility of competition to occur, and there is even the potential to commit violations of Law No. 5 of Year 1999 in various forms. These conditions are what led to the examination of issues of competition in e-commerce.

2. Research Problem

Based on the previously explained background, the following are the problems that are examined in this working paper:

1. What issues of competition are present in e-commerce?
2. What kinds of issues are faced by the Indonesia Competition Agency (KPPU) concerning issues of competition in e-commerce?

3. Results and Discussion

3.1. Issues of Competition in E-Commerce

Electronic transactions are legal actions that are carried out using a computer, computer networks, or other electronic media. Because of the presence of legal actions in electronic transactions³, for there to be legal relationships among parties, there also needs to be an electronic contract. Electronic transactions in the context of this paper are called e-commerce, as will be explained in Part 2. E-commerce is trade that is carried out through networks using protocols without owners, which takes place after the process of standard openings. The Internet is used as the facility/medium of carrying out transactions. Issues of competition in e-commerce cover issues of infrastructure and transactions.

3 Electronic transactions are legal actions that are carried out using a computer, computer networks, and/or other electronic media; Article 1 Number 3 of Law No. 11 of Year 2008 on Electronic Information and Transaction.

3.1.1. Infrastructure Issues

The focus in the case of e-commerce is the protection of competitive Internet access. Providers have freed tariffs for interconnection among users of the same provider and implemented tariffs for smaller operators. An example is the merger between WorldCom/MCL and WorldCom/MCL/Sprint. Several experts in business competition have stated that different interconnection agreements can disrupt competition. “Balkanization” occurs if the largest provider decides to sacrifice universal access to obtain a strategic advantage in providing services such as telephone calls through Internet and video conferencing.

Vertical integration occurs on the connections of “last mile” providers such as providers of cable or satellite TV, home telephone, and cellular connections. When these providers act as Internet Service Providers (hereinafter called ISPs), offer access to the Internet, or operate their portals, they choose to control incentives by integrating with those providers. Vertical integration also occurs when “last mile” providers integrate with respect to content, and in this case, there may be additional risks in reducing competition in the content market. Competition agencies will have difficulty in selecting ever-larger economic scales and competitive benefits in Internet access. Competition agencies are required to develop experts who understand how software or code can be used to discriminate suppliers of various competing products.

The potential of violations of competition issues in e-commerce, in particular concerning the issue of infrastructure, is the occurrence of vertical integration among provider connections. Article 14 Law No. 5 of Year 1999 on the Prohibition of Practices of Monopoly and Unfair Competition states that:

“Entrepreneurs are forbidden to create agreements with other entrepreneurs that are aimed to dominate the production of a number of products included in a series of production of certain goods and/or services wherein each series of production constitutes the results of preparation or continued processing, whether in a single direct or indirect series, which may lead to the occurrence of unfair competition and/or losses to society.”

What is meant by dominating the production of a number of products included in a series of production, which is commonly called vertical integration, is the domination of a series of production processes of certain goods from start to finish, or continued processes of certain provided services by certain entrepreneurs. The practice of vertical integration, although it may result in inexpensive goods and services, may cause unfair competition that threatens the economic foundations of society. Such practices are forbidden so long as they cause unfair competition and/or losses to society.⁴

As previously mentioned above, in the context of infrastructure, the issue of competition is the presence of vertical integration in the context of services regarding connections among providers. However, in relation to Article 14, there must be proof that an

4 See Article 14 of Law No. 5 of Year 1999 on the Prohibition of Practices of Monopoly and Unfair Competition.

agreement has occurred, and it should be proven that it has resulted in unfair competition or losses to society (rule of reason).

3.1.2. *Transaction Issues*

The framework and difference of e-commerce has not been clarified, nor have the effects of e-commerce been determined, whether pro- or anti-competitive. The most fundamental difference is between B2C (business-to-consumer) and B2B (business-to-business) interactions. The domain B2B has grown more rapidly than B2C. There have also been various ways to establish prices as through catalogs, auctions, and the analogy of methods found in the exchange of stocks and commodities.

Because of the standardization of protocols, the Internet has reduced the fees needed to exchange information between computers, which has the potential of reducing fees for searching and transactions. This enables e-commerce to expand product and geographical markets, and to be more transparent and competitive.

The difficulty experienced by competition institutions is the difficulty in determining whether online and traditional markets belong in the same relevant market. The answer depends on each market as well as the traditional enterprises involved in the developments of B2C and B2B, and the online shipment of products, as in automobile distribution, wherein traditional distribution is affected by the anti-competitive B2C.

Several barriers in the development of e-commerce that causes it to separate/differ from traditional ways include (Qin, Chang, Li, Li 2014):

- Lack of familiarity in financing and the shipping system
- Difficulty in identifying actors and securing compensation if disputes occur

These barriers are more problematic for B2C than B2B relationships.

E-commerce should be able to expand geographical markets, but there are several barriers, including languages, taxation, regulations, roadblocks, shipment, and lack of payment security systems, as well difficulties in identifying actors and enforcing contractual rights, and regulatory difficulties due to differing national laws concerning price cuts, advertising, RPM (Resale Price Maintenance), and exclusive regions (OECD 2017). All of these barriers more affect B2C than B2B relationships.

Though e-commerce is not limited by space or time, e-commerce is limited by computer code. As an example, various search engines (such as Yahoo!, Google, and so on) promise consumers and entrepreneurs lower costs in accessing information taken from computers and servers around the world. However, the search engines may be affected in various ways by limiting code or restricting access to web sites.

There is strong proof of price dispersion in B2C for similar items. This dispersion may be reduced in developed e-commerce, and the consumer will be more familiar in this regard. In the long term, e-commerce may expand markets and make them more transparent so that occurrences of strong markets, price dispersion, and price discrimination may be reduced.

Price dispersion among B2C actors puts into doubt the abilities of search engines and the current abilities of entrepreneurs and the government to reduce the previously

mentioned barriers in developing e-commerce. This also raises questions concerning the short-term effects of e-commerce in expanding markets and reducing market power. These questions become more significant in the case of e-commerce making it easier to quote different prices for different buyers. In addition, e-commerce opens up new ways to utilize the fact that consumers with higher incomes place higher values on time. There is already the realistic example of one vendor operating two different web sites, where the lower price in one is quoted in the other, resulting in more time being spent.

Before it can be concluded that e-commerce can increase occurrences of price discrimination, it should be kept in mind that e-commerce can expand markets and create ones that are more transparent; despite its imperfections, the Internet has become an additional source of pricing information for consumers. Further, the ease and self-confidence of e-commerce are unlimited in their growth and must be strengthened by technical developments that ensure the security of payments for online purchases. These changes in business activities can reduce the barriers of developing e-commerce in regard to facilitating the rights of consumers toward information and selection. These matters, in addition to price dispersion and price discrimination as well as benchmarking (standards used to measure comparatively similar computer programs) can reduce market power in B2C relationships and traditional markets. In this regard, price discrimination is very much needed as a part of the strategy in removing or eliminating commercial competitors.

E-commerce has the potential to reduce costs in business enterprises and increase market liquidity. E-commerce can also provide an important kind of efficiency, which is pro-competition. There is the doubt that e-commerce can reduce business costs by reducing:

- Errors in filling and shipping of orders;
- Overall costs and approval of shipping orders;
- Costs to initiate procurement in large amounts and organize auctions; and
- Occurrences of fraud.

Another advantage of e-commerce is the increased amount of liquidity due to the ever-increasing number of e-commerce users. E-commerce can cause consumers and entrepreneurs to make transactions at prices that are close to actual market prices, and to be able to do so more quickly and easily.

Further, in transactions that are related to savings, there is a benefit in using e-commerce in business. For example, B2B relationships can be used to accelerate the search for orders, cut inventories, reduce costs in supervising revenue and payment, make better and faster predictions, and increase the number of responsive consumers toward the design of a product.

Much of the expected efficiency from e-commerce can be beneficial for business by reducing costs through the creation of direct computer networks with other businesses. In this way, e-commerce can eliminate building usage fees, thus reducing barriers of market entry and leading to more competition. Lower costs and the associated price coordination can allow enterprises to specialize in what needs to be done by seeking input that has been provided.

In addition to e-commerce resulting in significant efficiency in the market, e-commerce can also create competitive difficulties such as the lack of competition in e-marketplaces. The greater liquidity that is created by e-marketplaces may be associated with strong networks (for example, e-marketplace value grows along with the number of its participants) in several markets. These consequences possibly more strongly affect B2B than B2C, because B2B relationships create more frequent interactions with participants. While the network effect may be beneficial to consumers, networks also bring further competition issues if the network is strong enough to reduce the area of several smaller networks.

In theory, the network effect does not always mean that there must always be one or a small number of e-marketplaces. In addition, the network effect may result from interconnection agreements. For that, as an alternative, no matter how, there will always be a large level of standardization in the software used to run various e-marketplaces. Further, broader networks may prove the impartiality to provide interconnection to smaller networks, even if the two may exist to obtain the same amount of traffic in the short term through the agreement. This occurs because over a longer period, broader networks are established to obtain more traffic, by way of smaller networks combining or being forced to combine with broader networks.

By using the power to forbid dominant positions and/or monopolies, competition agencies can urge for alternatives to interconnection. Whether this is reasonable or not will very much depend on the expected benefits of greater competition among e-marketplaces against other losses of efficiency caused by various factors such as high coordination costs and reduced innovation in software design.

E-marketplaces can utilize exclusivity impulse and have pro- and anti-competitive effects because e-marketplaces cannot be created without sunk cost (such as updating software); its owner(s) may be able to reach a critical period quickly and may be able to prevent free riding. Exclusivity impulse appears to be a good approach.

Exclusivity impulse is the equivalent of the "carrot and stick". The "carrot" is price cuts and regulation of at least primary participants to maintain justice in the e-marketplace (particularly for B2B). The "stick" is the necessitated requirement of a contract to be linked exclusively with the e-marketplace or a required minimum business volume to be present within it. Exclusivity can also arise from increased costs by transferring from one e-marketplace to a different e-marketplace. This may be resolved, as an example, by using feasibility standards, or by strengthening the network effect through inciting larger interactions or greater independence among participants (by providing chatrooms or predictive services).

Competitive agencies may find difficulty in judging the consequences of competition in networks from exclusivity impulse. Concerning general regulations in the market, exclusivity impulse is more dangerous with the greater market power enjoyed by the e-marketplaces that use it.

From the description above, it can be seen that the potential for anti-competition in e-commerce transactions is due to the possibility of price discrimination, as well as the dominant position caused by control of markets by e-marketplaces.

The possibility of other competition issues that may arise in relation to e-commerce can increase the ability to coordinate competitive behaviors by instituting cartels. Because e-commerce makes prices more transparent and reduces costs of updating price lists, prices can increase in markets where vendors truly know its weaknesses and are careful with their dependencies (as in an oligopoly). This may be able to occur because price reductions will be more quickly known by competitors and will possibly be quickly matched, while price increases will more easily and quickly attract interest again if competitors fail to follow.

E-commerce may also facilitate collusion inasmuch that it may even lead to cartels because prices are relatively open and well-known; by providing new ways to exchange information, for several among these, it may become almost impossible for competition agencies to look for and obtain evidence. The most realistic example is that of chat rooms. There are even more sophisticated ways, as in the US Airline Tariff Publishing case, where prices that are made possible to be changed are stated to the competition, not to the consumers, and the listed prices are accompanied by “labels” that indicate the conditions under which the possibility of change may be revoked. Next, e-commerce may make it easier to detect fraud in anti-competitive agreements and to target price change responses, lowering fines for fraudulent actors.

While collusion as a part of sales may become more common, there is also the possibility that buyers will utilize B2B relationships to obtain powers of and direct to monopsony. Wherein the market is in a conducive condition to achieve such powers, e-commerce may also facilitate this by making it easier to achieve deals and to detect and punish fraudulent actors. Further, through various “coordination effects”, e-marketplaces may be associated with competitive disruption, when e-marketplaces are utilized to remove or discriminate competitors.

Risks of anti-competition or discrimination against several participants in e-marketplaces increase with the level of market power enjoyed by one of the parties and where control is centered on a single entrepreneur or a small number of entrepreneurs. Although anti-competitive determinants may be easily tracked, the same methods cannot be used to further extract other hidden methods, where computer code may be used to cause losses to one or more parties.

It is quite possible to install “firewalls” to eliminate or at the least reduce risks where B2B interactions are used to affect coordination of anti-competition and discriminative behaviors. This means that no matter what, imperfect solutions in place since the installation of firewalls may selectively and perhaps secretively not be activated. It would be better if the parties do not directly counter by way of an activity, even though they possess the desire to greatly secure the situation so that buyers and sellers can enter into transactions through B2B interactions. Strict transparency and neutrality as requested by buyers and sellers and groups among them seems to be the best course of action to create successful B2B interactions, and this may be considered something that is attributed to third-party ownership. Another advantage of third-party ownership is the distancing from continuous bias that occurs as part of the participation of owners in facing their exchanges in an exclusive manner. Third-party ownership can also revoke the participation

of owners from good opportunities to share sensitive information with the pretext that this becomes necessary for effective management in trade.

There can be several cases where B2B presence becomes impossible unless the primary participants take the same risks. This is not necessary even if the owner(s) should be involved every single day in the management of trade, or they should hold back risks when B2B interactions are in a good condition. In addition, if participating owners that provide funds are prudent from the start because they can stand to lose stock equity in the short term, they can be more reluctant to increase exchange fees or escalate the network effect to assist their newly present B2B interactions.

3.2. Recommendations to competition agencies concerning the issue of competition in e-commerce

The duties and authority of the KPPU, concerning issues of competition in e-commerce that do not appear to surface and are truly novel or unique competition issues, involves larger cooperation among competition agencies and powers of investigation as well as law enforcement expertise. There needs to be guidelines regarding the need to fill gaps in regulation. Competition supervisory agencies certainly need to undertake further in-depth studies in order to make amendments to Law No. 5 of Year 1999 so that it contains further perspectives on transactions that occur in cyberspace. It should be kept in mind that e-commerce on one hand provides ease in transactions and accelerates the process of business communication, but on the other hand, there is also the potential for fraudulent competition that occurs among B2B and B2C interactions. There needs to be more careful observations on new competition risks from e-commerce and methods to avoid these risks, as the involved parties simultaneously participate in intense competition.

Because e-commerce must expand geographical markets, e-commerce can also increase occurrences in cases of competition that transgress national borders. This means that competition agencies will request for mutual assistance more often to obtain information as well as to coordinate legal adjustments with other countries. It is not an easy matter to establish relevant markets, particularly in the context of geographical markets, in which goods that originate from one country and goods that originate from another can interact with and substitute for one another.

What becomes a highlighted discussion is that computer code may make this matter more difficult; it may become impossible to obtain legal access toward certain pieces of evidence. This allows for certain issues to occur, such as the requirement for evidence that is produced and stored in intranet concerning B2B relationships that should have been with unmediated communication using intranet. In various cases, even if the evidence can be tracked, obtained, and presented well in court, competition agencies must train their staff to master several techniques that involve cyberspace. Competition agencies must also further understand how software works in eliminating or discriminating entrepreneurs in e-commerce.

In facing competition that occurs in the field of e-commerce, a competition agency needs to develop experts that understand how software or code may be used to discriminate suppliers of various competing products. Competition agencies must be able to de-

fine online markets in comparison with real world markets and determine whether they are the same or not. Certainly, there are still many more issues that are faced by competition agencies regarding issues of competition within e-commerce.

The success of enforcing laws that regulate business competition will very much depend on the performance of agencies in enforcing and supervising the execution of the law. Institutional aspects cover (1) primary tasks and functions, (2) organizational structure including human resources, and (3) procedures of work or management. The only institution for Indonesia with the authority to enforce competition law is the Business Competition Supervisory Commission (*Komisi Pengawas Persaingan Usaha*, KPPU). It has been known that in the 18 years since its inception, there have not been reported cases that result from unfair competition in cyberspace.

Among the barriers of execution of e-commerce are issues of language, taxation, regulations, difficulties in identifying actors, and legal differences existing between countries. As such, there needs to be harmonization of equal understanding among competition agencies around the world, and if at all possible, an international convention concerning the issue of competition in e-commerce.

In relation to specific regulation, namely Law No. 5 of Year 1999, there needs to be an amendment that accommodates the various developments and progress in electronic transactions, which also requires harmonization with regulations in the Law of Electronic Information and Transactions.

Conclusions

Based on the preceding explanations and analyses, below are the conclusions that may be derived:

1. The issue of competition in e-commerce concerns issues of infrastructure and transaction. The issue of infrastructure in the perspective of business competition concerns the interconnection agreements among providers that lead to vertical integration, which will certainly reduce the benefit of competition in Internet access. In regard to issues of transaction in the perspective of business competition, while e-commerce provides ease of transaction and efficiency of business transactions, there is also the potential for difficulties in determining relevant markets, occurrences of price dispersion and price discrimination, and strengthening of the dominant position or even a monopoly in interconnections.
2. Problems faced by competition agencies (KPPU) regarding competition in e-commerce concerns legal and technical problems. Legally, the problem concerns determining relevant markets – whether online markets are the same as conventional markets – as well as problems of evidence and regulations in positive Indonesian law, including Law No. 5 of Year 1999, that are not in perspective of e-commerce transactions. Technically, there needs to be a comprehensive understanding of the issues, considering the complexity of e-commerce problems such as payment system issues, validity of electronic contracts, legal differences between countries, proving evidence, and so on.

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