

## **Disruptive Innovation and Course of Policy over Online Transportation in Indonesia towards Fair Business Competition**

**Diah Pawestri Maharani, SH. MH.**

*Faculty of Law, Universitas Brawijaya  
MT. Haryono St, No. 169, Malang, East Java, Indonesia*

**Airin Liemanto, SH., LL.M.**

*Civilization Studies Center, Universitas Brawijaya  
Veteran St, Ketawanggede, Lowokwaru, Malang, East Java, Indonesia*

### **Abstract**

The falling number of conventional transport users has sparked a conflict between conventional transportation and online transportation groups, bringing further to the impact of disruptive innovation causing more unhealthy business competition in Indonesia. This paper is aimed to formulate the course of policy over online transportation towards fairer business competition. The research results indicate that the emerging existence of online transportation is seen positive despite the fact that this transport mode leads to an issue due to the absence of regulation over its operation. In case of monopoly practices, the market position needs to change into win/win assumption model. KPPU has formulated 3 aspects to realise healthier business competition: (a) institutional aspect; (b) consultation and coordination aspects; and (c) legal and legislative aspects. It is expected that recommendations be achieved: (1) clearer categorisation of transport types; (2) improvement in conventional transportation services; (3) partnership; and (4) improvement in consumer protection.

**Keywords:** disruptive innovation, policy, online transportation, conventional transportation, fair business competition, Indonesia.

### **Introduction**

Online transportation in Indonesia is fundamental to short distance transportation. It is easily accessible, efficient, affordable, and comfortable. Online transportation is getting popular eclipsing the conventional transportation (Kaal and Vermeulen, 2017, p. 182). Ride-sharing Go-Jek, for example, has been actively used by 15 million people on weekly basis, involving about 900,000 partner drivers of Go-Jek and there are 100 million transactions monthly (Bohang, 2017).

The falling number of conventional transportation users has brought to a conflict between conventional transportation and online transportation (Dewi, 2016). It is believed that the emerging existence of online transportation has cut the livelihood of those working in conventional transportation, drastically cutting their revenue. For example, the number of taxis in Jakarta accounted for 27,000 units before the existence of online transportation. In 2018, there were only about 9000 units left. Mini buses were down to 14000 units, contrary to the capacity reaching 83000 units (Hartomo, 2018) provided by the government. On the other hand, since its inception

in 2011, Go-Jek company has recruited 200 new drivers on monthly basis (Faisal, 2015). The government has not had any clear legal protection that is welcomed by the two parties. The main issue is that how to realise fair business competition in a transportation industry.

In a business concept, online transportation characteristics are unique, in which it does not create a new market and values. The application software used in online transportation has disrupted conventional transportation business. The costumers who have their own vehicles or can drive or can give transportation services to passengers with affordable tariff are the main stakeholders (Syafriano, 2017, p. 1). Thus, online transportation has succeeded in overtaking the market revenue of conventional transportation which will trigger huge and significant capital accumulation to stimulate global economic growth in the long run (Faisal, 2015).

Transformation from conventional to digital system, however, has encountered several challenges, so that the government is required to immediately respond to the phenomenon of this disruptive innovation. Legislation on online transportation flexibly plays an essential role in resolving disruptive innovation issue towards sustaining technology.

To date, the government has not found any formulation of policy appropriate to accommodate the existence of online transportation that disrupts conventional transportation business. The Ministry of Transportation has issued Notification Letter Number UM.3012/1/21/Phb/2015 suggesting that all forms of online transportation, both ojek and online taxi, are banned from operation because this mode of transportation is not categorised as a public transportation as regulated in Acts. Since protests keep coming from the society, the Notification Letter was lifted by the Ministry of Transportation in less than 24 hours (Solehudin, 2017).

In the following year, the Ministry of Transportation issued a letter Number AJ 206/1/1 PHB 2016 dated March 14, 2016 addressed to the Minister of Information and Communication to block the application of Uber Asia Limited's online transport reservation and PT Solusi Transportasi Jaya (GrabCar). The Ministry of Transportation listed the following 8 reasons as follows (Amelia, et.al, 2016, p. 28-29):

1. Uber and GrabCar are not categorised as public vehicles;
2. They do not have any legal entities;
3. They do not have any permit to operate public transports
4. They invest money but not in the form of limited liability company;
5. Infringement of Presidential Decree Number 90 of 2000 on Representative Office of Foreign Company (Keppres Number 90/2000) and the Decree issued by Capital Investment Coordinating Board (BKPM) Number 22 of 2011 concerning Transaction of Goods and Services in Indonesia with a company or individual. It is emphasised that there should not be any involvement in any forms of company management, subsidiaries, or branch offices in Indonesia;
6. They do not work in association with legal public transport business but they work in association with illegal companies or individuals;
7. They trigger worries and conflicts between legal public transportation and conventional taxi drivers; and
8. The existence of online transportation leads to potential of illegal transportation

and the conventional form is gradually losing its passengers. The letter issued to block application-based online transportation by the Ministry of Transportation is regarded as inappropriate. According to the surveys conducted in several media, conventional transportation do not mind the online transportation as long as they are in healthy business competition, in which the tariff charged by online transportation must not be too low, or it will significantly affect conventional transportation market. In this case, further measures such as harmonising business competition regulation, consumer protection, privacy, and fair social welfare must be taken, and any policy that only benefits one party must not be encouraged.

### **Concept of Disruptive Innovation**

The term disruptive innovation was first introduced by Christensen in his publication back in 1997. Responding to the term, Chang Che Hang *et al* stated in their writing entitled Opportunity Discovery and Creation in Disruptive Innovation: "Disruptive innovation (DI) is a process where a product or service provided via a simple application at the bottom of the market or in the new market, moving unstopably further to the top of the market, replacing other settled competitors. Furthermore, Utterback and Acee translated the theory of disruptive innovation based on original formulation to strategic formulation that is more general than market expansion strategy. Maitrayee, Ghosh restricts as follows: "*Disruptive innovation is the technology that changes the existing business model or customer expectations*" Globalisation, social network, professional mobility, and apprehensiveness of employees have urged most companies to focus more on the knowledge their employees have (Rusydi, 2017, p. 200).

These days, business actors are annoyed by globalisation, shift of technology, and new competitors. They are forced to re-find the identity of their companies. In healthy companies, innovation in business model is highly necessary to maintain the competitive positions that they have. Business model even moves from offices to the streets.

The birth of disruptive innovation also triggers some innovations in technology. Such an innovation would not have happened without changing conventional industrial structure. The innovation in technology has changed the conventional business model that leads to a fundamental paradigm. The paradigm of innovation in technology has transformed from sustaining technology to disruptive technology. Based on Christensen's view, the differences between sustaining and disruptive technology are described as follows:

*Sustaining technologies improve performance, increase margins, and build customer relations, disrupting technologies often start out as unusable innovations that underperform, cost too much, or focus on a different customer base* (Garon, 2012, p. 442).

The existence of online transportation is a significant example of disruptive technology. Uber and Grab are the two pioneers of online transportation that have threatened the existence of conventional taxis and have managed to change the way people reserve their public transports with only one touch on their smartphone. In several countries,

conventional taxis are even facing their bankruptcy. This annoyance is not only perceived by the owners of the industry, but employees also seem affected.

### **Conventional Transportation vs Online Transportation in Indonesia, is changing for good or bad?**

Application-based online transportation is among pros and cons coming from the societies. Several people stand against this trend, especially those involved in conventional taxis business and those directly affected. This is even seen as a worrying trend by the government.

A lot of people are questioning over the status of online transportation not regulated by the law as public transportation. Conventional public transport drivers have argued that online transportation has failed to meet the requirement as public transport as regulated in Act Number 22 of 2009 on Traffic and Road Transports and Government Regulation Number 74 of 2014 on Road Transports. Online-based transportation does not have any legal entity, any letter of business corporate domicile and Tax Identification Number, has failed to meet the requirement of having minimum five vehicles for public transport, and does not have any services and maintenance centres, and is not administratively prepared as seen compulsory for conventional public transportation (Anwar, 2017, p. 231-232). On one hand, conventional public transports are required to comply with the forcing regulation of public transports. On the hand, online-based transportation does not abide by the regulation.

The dispute over online transportation in Indonesia is getting even more complicated. Not only is it about the demonstration, but it usually sparks other issues such as traffic congestion, worsening condition of conventional public transports that are increasingly losing their popularity, and lack of appropriate infrastructure supporting the public transports.

In contrast, online transportation has better services to offer than conventional transports:

1. Online transportation is able to detect the location of drivers or riders with their passengers automatically, not relying on the availability and the existence of the vehicles like in conventional transportation.
2. Passengers will only need to open the application, click 'order', and getting to destination will not take long.
3. In online transportation system, the tariff is calculated based on the standard system, in which the drivers cannot decide the cost, nor will this system allow them to ask for more additional charge.
4. Online transportation allows cashless payment.
5. Online transportation is equipped with GPS as to systematically show the directions.
6. In conventional transportation, it is quite common to see some drivers or riders reject passengers by lying that their vehicles are under maintenance just because the drivers or riders are reluctant to be paid little despite a short distance.
7. Passengers have rights to get reward points given from the online transportation service. The points are exchangeable with foods, drinks, or shopping items.

Furthermore, the dimensions of quality of the services between conventional transportation and online transportation are also compared, in which online transportation in Indonesia is predominantly superior (see Table 1).

**Table 1**  
**Transportation Service Quality Dimensions (Alamsyah and Rachmadiansyah, 2018, p 2)**

Service Quality Dimension	Description	Conventional Transportation	Online Transportation
Availability	The availability of transportation services everytime, everywhere, and in any condition.	x	v
Accessibility	The application service ease of use in certain time, condition, and area.	x	v
Information	Information availability, well informed customer such as travel fee before making the journey	x	v
Time	The detail information about departure time, arrival time, and travel duration.	x	v
Customer Service	The capabilities of company to handle complaints, suggestions; The capabilities of company to response customer inquiry in reasonable time; The information about promotional activities.	x	v
Comfort	Company effort to provide comfort to customer, such as all-weather protection, vehicles hygiene, and driving style	x	v
Safety	Company effort to provide safety and security, such as driver preparation, driving attributes, route knowledge, traffic condition awareness	x	v
Environment	Vehicle noise, and vehicles contribution in gas emission	x	v

The indicators and excellence shown on the table confirm that this trend brings positive changes. However, the weakness in online transportation also needs to be taken into account for its betterment, including the infrastructure, comfort, punctuality,

competitive tariff, and so forth. The improvement is aimed to make conventional transportation as an alternative transportation for passengers.

### **Challenges of Online Transportation System in Indonesia**

The utilisation of information technology in transportation is needed. There are increasing numbers of people now using online-based application to reserve their vehicles. However, the existence of online transportation has sparked some issues in Indonesia despite the ease given by the application:

1. To date, applicators reject to follow the rules concerning transportation because they think they are under the telecommunication regulation issued by the Ministry of Informatics and Communication that controls the movement of applicators. Making dashboard is not time consuming but there is no regulation functioning to control the applicator.
2. Some institutions work on their own and they lack coordination among them.
3. The company that designs the application offers good amount of money. This tendency triggers people to change their professions as online transport drivers. Moreover, the offers given include affordable cost, efficient mode of transport, and fixed tariff, bringing people from conventional transports towards online transports.
4. The infrastructure also becomes an issue so far, as the absence of good transport infrastructure will not allow any activity of transporting people or goods from one place to another, but without the application, it is still possible to transport people and goods. Therefore, it is recommended that online transportation comply with the regulation of transportation.
5. To date, there is no clear information concerning how many online transports are available. Therefore, it will not be possible for government to make any appropriate regulation without exactly figuring out the number of availabilities.
6. In Indonesia, the Ministry of Informatics and Communication, has not performed any special auditing and supervision towards the company that designs the application. This indicates that so far the company has also taken the responsibility as a public transport operator. Some experts argue that it should be made clear over the task run by the company only either as an operator or application maker (applicator). While in fact, the companies responsible for making the applications have intervened in determining tariff and bonus.
7. The tariff must be set only by public transports registered to Provincial Department of Transportation based on the tariff standard set. Online taxis will also have to be held by operators established by online taxi drivers.

When the existence of unregistered application providers are not strictly supervised, it will only ruin the existing transportation system. Abolishment by the government must be imposed on unregistered application providers. The government must be present in the operation of public transportation comprising vehicle inspection of public transports, setting quota and tariff for healthier competition and more sustainable business, obtaining data of the online transports that operate to provide insurance for passengers. The government must also require all the

drivers to have Driving License A Public for the safety of the passengers. In short, the safety and comfort of both the drivers of online transports and the passengers must be guaranteed by the government (Rakhma and Setiawan, 2018).

## **Formulating Course of Policy over Online Transportation towards Fair Business Competition**

The government must immediately formulate an appropriate policy to provide solution to the issue over online transportation in Indonesia. Legal system, not the technology per se, is able to anticipate the issue triggered by the utilisation of technology. Gregory N. Mendel (2007, p. 551) has highlighted his notion in "History Lessons for General Theory of Law and Technology": "the marvels of technological advance are not always risk-free. Such risks and perceived risks often create new issues and disputes to which the legal system responds".

Theoretically, the market position of online transportation service is divided into 3 ways:

### **1. Zero-Sum Assumption**

This is the condition emphasising what is obtained by one will cause loss for another party. Monopoly is an example of Zero-Sum, in which one party tends to predominantly control the market (Meyer, 2017, p. 2-3).

### **2. Win/Win Assumption**

In this concept, all parties equally achieve their success under the same business fields. McDonalds and KFC are examples of business applying this concept in which the two giant companies were established side by side. This business model can increase the revenue for both companies, neither of which will perceive loss (Meyer, 2017, p. 3).

### **3. Growth Assumption**

In this concept, market is assumed as limited and it must be shared. However, market can be developed and extended. It clarifies that there needs no competition among parties (Meyer, 2017, p. 4).

When this theory is linked to the issue of online transportation in Indonesia, monopoly and unhealthy business competition will be more likely to occur. The Minister of Transportation, Budi Karya Sumadi, believes that there is probably hidden agenda behind affordable tariff set by online taxis offered to the passengers; "will people accept the situation where there is monopoly behind the low cost transportation? Too affordable a tariff means a chance for monopoly" (Sukmana, 2017).

Business Competition Supervisory Agency (hereinafter KPPU) keeps watching transaction of a merger between Southeast Asia Uber and Grab. This will surely affect price competition and change in transportation application sector (Anonymous, 2018).

According to survey carried out by several media, in general, most drivers of conventional transports do not mind with the existence of online-based transports as long as it is within healthy business competition and there is no price war. Therefore, it is possible to implement win/win assumption for online transportation services market position.

To realise the principle of a fair business competition between conventional and online-based transportations, KPPU has formulated roadmap grouped into three aspects (Damuri et.al., 2016, p. 32-34):

1. Institutional Aspect

This aspect involves key institutions to formulate the policy regulating transportation services. There are at least 2 ministries directly involved in policy management of transportation services such as the Minister of Transportation and the Minister of Informatics and Communication.

Furthermore, Regulatory Review Agency (hereinafter LPR) and KPPU play an essential role especially in formulating the policy that regulates fair and healthy business competition, while LPR is responsible for reviewing regulations concerning conventional and online transportations. The KPPU is also responsible for giving recommendation to integrate healthy business competition in either the new economic regulation or the existing one.

2. Consultation and Coordination aspects

These aspects are aimed to invite stakeholders regarding the formulation of healthy and fair business competition. They may involve those from related ministries such as: Ministry of Trade, Ministry of Economic Coordination, Bappenas, Ministry of Home Affairs, Capital Investment Coordination Body (BKPM), the Ministry of Law and Human Rights, Presidential Staff Office, and local governments. Other stakeholders may also embrace Land transport Organisation, online transportation business actors, and scholars.

Consultation and coordination aspects will further explain the essence of the formulation of responsibility of each party involved in the initiation of transforming into healthier business competition. In addition, the mechanism of consultation and coordination is regarded important in coordinating with LPR and KPPU, especially regarding the review of new and existing regulations that involve every institution.

3. Legal and Legislative aspects

These aspects will explain more about several legal documents needed to support the activity to transform into healthy business competition regarding the policy regulating transportation services. The documents involve:

- a. Act Number 22 of 2009 concerning Traffic and Highways
- b. Act Number 11 of 2008 concerning Electronic Transaction and Information
- c. Act Number 20 of 2008 concerning micro, small, and medium enterprises.
- d. Act Number 5 of 1999 concerning Ban of Monopoly Practices and Unhealthy Business Competition
- e. Act Number 8 of 1999 concerning Consumer Protection
- f. Government Regulation Number 74 of 2014 concerning Road Transports
- g. The Decree of Ministry of Transportation Number KM 35 of 2003 concerning Operation of Passenger Transports with Public Vehicles.
- h. The Decree of Ministry of Transportation Number KM 69 of 1993 concerning Operation of Transportation for Goods.
- i. Etc.

The above regulatory review is expected to achieve the following recommendations:

1. The government must formulate clear clarification concerning public transports, online transports, and transports for rent. This measure is needed to develop healthy and fair business competition.
2. It is expected that the government be able to modernise transportation infrastructure, improve infrastructure and quality of human resources, and increase the security level since the service quality given by conventional transportation is still low.
3. The government is expected to facilitate the partnership between conventional transportation and online transportation business actors. This partnership encourages more benefits to come for both modes of transportations and to build trust between parties.
4. Consumer protection is the key aspect to do. The government must take strict actions for those involved in ruining public orders such as violence in public vehicles and sweeping.

### Conclusions

Online transportation is far more popular than conventional one due to its excellent services. The existence of online transportation in the market has sparked disruptive innovation, leading to unhealthy business competition, but the government does not have any clear regulation that is welcomed by all parties. Therefore, positioning transportation service market into win/win assumption model is expected to give solution. The KPPU has at least formulated three aspects for healthier business competition: (a) institutional aspect, (b) consultation and coordination aspects; and (c) legal and legislative aspects. Those three aspects are expected to meet the following recommendations: (1) clearer categorisation of types of transportation; (2) improvement of service quality of conventional transportation; (3) partnerships; and (4) Improvement of consumer protection.

### References

- Alamsyah A. & Rachmadiansyah, I. (2018). Mapping Online Transportation Service Quality and Multiclass Classification Problem Solving Priorities, International Conference on Data and Information Science, Journal of Physics: Conf. Series 971, 2.
- Amelia, L., Purbolaksono, A., Hermanto, M. R., and Syahayani, Z. (2016). Respon Kebijakan terhadap Transportasi Berbasis Aplikasi di Jakarta: Kajian Singkat dan Rekomendasi (Qualitative Study). Jakarta: The Indonesian Institute.
- Anonymous. (2018). Cegah Monopoli, KPPU Pantau Tarif Transportasi Online. [Online] Available: <https://indopos.co.id/read/2018/04/09/134126/cegah-monopoli-kppu-pantau-tarif-transportasi-online> (September 15, 2018).
- Anwar A. A. (2017). Online vs Konvensional: Keunggulan dan Konflik Antar Moda Transportasi di Kota Makassar. Journal of Ethnography Indonesia, Volume 2 Issue 2, 231-232.
- Bohang, F. K. (2017). Berapa Jumlah Pengguna dan Pengemudi Go-Jek?. [Online] Available: <https://tekno.kompas.com/read/2017/12/18/07092867/berapa-jumlah-pengguna-dan-pengemudi-go-jek> (September 18, 2018).
- Damuri, Y.R., et al. (2016). Peta Jalan Pengarusutamaan Persaingan Usaha: Menuju Kebijakan Ekonomi yang Mengintegrasikan Prinsip Persaingan, Centre for Strategic and International Studies, Jakarta, 32-34.

- Dewi, S. (2016). Pro dan Kontra Transportasi Aplikasi Online Pengemudi Taksi Tolak Keberadaan UBER dan GrabTaxi yang dinilai 'Menghancurkan Sopir Kecil. [Online] Available: <https://www.rappler.com/indonesia/125731-sopir-taksi-tolak-uber-grabtaxi> (October 2, 2018)
- Faisal, F. (2015). Uber and Gojek Just the Start of Disruptive Innovation in Indonesia. [Online] Available: <http://theconversation.com/uber-and-gojek-just-the-start-of-disruptive-innovation-in-indonesia-43644> (October 2, 2018).
- Garon, J. M. (2012). Mortgaging the Meme: Financing and Managing Disruptive Innovation. *Northwestern Journal of Technology and Intellectual Property*, Volume 10, Issue 7, 442.
- Hartomo, G. (2018). Jumlah Angkutan Konvensional di Era Digital Terus Merosot, Ini Data Lengkapnya. [Online] Available: <https://economy.okezone.com/read/2018/01/30/320/1852212/jumlah-angkutan-konvensional-di-era-digital-terus-merosot-ini-data-lengkapnya> (September 28, 2018).
- Kaal, W. A. & Vermeulen, E. P. M. (2017). How to Regulate Disruptive Innovation—From Facts to Data. 57 *JURIMETRICS*, 182.
- Mandel, G. N. (2007). History Lessons for a General Theory of Law and Technology, *Minnesota Journal of Law in Science and Technology*, Vol 8 : 2, 551.
- Meyer, P. (2017). Building a Disruptive Business, *Business Quest*, 2-3.
- Rakhma, S. & Setiawan, D. (2018). Mengapa Masalah Taksi Online di Indonesia Berkepanjangan?. [Online] Available: <https://ekonomi.kompas.com/read/2018/02/04/113400626/mengapa-masalah-taksi-online-di-indonesia-berkepanjangan> (August 25, 2018).
- Rusydi, I (2017). Disruptive Innovation dalam Kajian Hukum Persaingan Usaha. *Jurnal Ilmiah Galuh Justisi*, Volume 5, No. 2, 200.
- Solehudin, M. (2017). Pro Kontra Taksi Online, Pengamat: Kuncinya Keadilan. [Online] Available: <https://news.detik.com/berita-jawa-barat/d-3678162/pro-kontra-taksi-online-pengamat--kuncinya-keadilan> (August 29, 2018).
- Sukmana, Y. (2017). "Menhub Kaitkan Tarif Murah Taksi Online dengan Upaya Monopoli". [Online] Available: <https://ekonomi.kompas.com/read/2017/10/20/173625926/menub-kaitkan-tarif-murah-taksi-online-dengan-upaya-monopoli> (August 29, 2018).
- Syafrino, A. (2017). Efisiensi dan Dampak Ojek Online terhadap Kesempatan Kerja dan Kesejahteraan. Unpublished thesis. Departement of Economics, Faculty of Economics and Management, Institut Pertanian Bogor, Bogor, p. 1.