

REGULATION MATTERS: A COMPARISON OF
MALAYSIAN-INDONESIAN'S E-HAILING
REGULATION FRAMEWORK

BY

DOROTHEA CHEE KE JING

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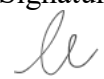
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Name of student:	Student ID:	Signature:
1. <u>Dorothea Chee Ke Jing</u>	<u>17UKB05602</u>	<u></u>

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LIST OF ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
CO.	Company
CVLB	Commercial Vehicles Licensing Board
EVP	E-hailing Vehicle Permit
GPS	Global Positioning System
KPPU	Business Competition Supervisory Commission
LTFRB	Land Transportation Franchising and Regulatory Board
MDTCA	Ministry of Domestic Trade and Consumer Affairs
MSC	Multimedia Super Corridor
MyCC	Malaysian Competition Commission
PDPA	Personal Data Protection Act 2010
PDVL	Private Hire Car Driver's Vocational Licence
PSV	Public Service Vehicle
RTD	Road Transport Department Malaysia
SIM	Surat Izin Mengemudi
SPAD	Land Public Transport Commission
STNK	Surat Tanda Nomor Kendaraan
TNC	Transportation Network Company
TNVS	Transportation Network Vehicle Service

PREFACE

This study, “Regulation Matters: A Comparison of Malaysian-Indonesian’s E-hailing Regulation Framework” aimed to analyze on Malaysia and Indonesia’s e-hailing regulation framework. The objective of this study is to identify and categorize the regulation framework on Malaysian-Indonesian’s e-hailing industry. Besides, it is also to compare and contrast Malaysian-Indonesian’s e-hailing regulation framework. In this study, form and enforcement of e-hailing regulations and policies of both countries will be identified. Moreover, commonalities and differences between Malaysian-Indonesian’s e-hailing regulation framework will be analyzed.

ABSTRACT

E-hailing, which is also known as ride-hailing or ride-sourcing, has been on the rise across the globe. However, it is known as a disruptive innovation as unregulated services have triggered major disruptions and led to certain setbacks in the transportation industry. It has been blamed for the rise in privacy and safety issues, unfair business competition and a decline in demand in the traditional taxi industry. In response to these issues, certain countries have started to regulate the e-hailing industry. The objective of this study is to identify, analyze and contrast on the form and enforcement of Malaysian-Indonesian's e-hailing regulation framework by using qualitative-comparative research. In this study, literature have been gathered from credible online sources. Based on the results of the study, there are commonalities and differences between the Malaysian and Indonesian's e-hailing regulation framework. For instance, both countries do have similar form and enforcement of regulations and policies in regulating the e-hailing industry, and the major difference would be on the data protection law. Furthermore, implications of the study have been discussed based on two aspects such as policy makers and individuals. For instance, just as the saying goes, "innovation outpaces regulation". The current state of the e-hailing industry is underregulated rather than unregulated. Policy makers should seek to improve existing regulation framework rather than starting new regulations from ground up to minimize the risk of overregulation that might eventually diminish the industry.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Research Background

Over the past years, mobile and internet technologies have been facing rapid advancements. One of the major developments would be the mobile internet. Mobile internet has been providing enormous benefits to the society which include, mobile internet technologies such as WAP (Wireless Access Protocol) and Wi-Fi, have enabled mobile phones to access the internet from anywhere in the world. In recent years, the combination between the mobile internet technologies and business platforms has driven new waves of innovations. One of the best examples would be the e-hailing services. In this modern era, mobility has become crucial in every society. Besides, the accessibility of mobile internet has undoubtedly changed the way people see public transport. Thus, the e-hailing industry has become one of the most in-demand markets.

E-hailing is a term that can be defined as a process of ordering any form of transportation pick-up including a car or taxi, by using electronic devices such as mobile devices. For the term “e-hailing”, the “e” stands for electronic while “hail” can be referred to a traditional way to signal an approaching taxi or cab to stop. E-hailing is also sometimes known as ride-hailing or ride-sourcing in other places. In order to meet various travel needs, both traditional car services and application-based start-up companies offer e-hailing services. E-hailing services are on the rise across the globe as e-hailing applications are especially useful and beneficial for both the drivers and customers, such as online cashless payment, lesser waiting time and searching time provides more comfort and privacy.

Transportation Network Companies (TNC) refers to the companies that provide e-hailing services. Multiple criteria need to be fulfilled to become a TNC such as the company must own a mobile application that is readily available for download

and use, consists of potential riders, and having drivers that have their own vehicles (Kessler, 2017). There are several well-known TNCs around the world such as Grab, Gojek, Uber and DiDi. These companies offer a variety of services which include transportation, delivery and financial services. For instance, besides transportation services, Grab also offers delivery and financial services like GrabFood and GrabPay, through its mobile application. Moreover, these companies' businesses are operating worldwide. For example, Gojek which is currently based in Indonesia also operates its business in Singapore, India, Vietnam and Thailand (Gojek, 2019).

In Malaysia, Grab is the leading transportation network company. The company which offers application-based mobility options has caused Malaysians to choose Grab over those traditional taxis. There are over 11 million grab riders in the country (Grab, 2019). Millions of people in the country rely on the e-hailing services either for the purpose of going to work or just to have another decent transport option. Therefore, we can see that e-hailing services have now become an essential part of Malaysians' everyday lives. Besides, similar phenomenon can be seen in Indonesia as well. Gojek, which is the main transportation network company in Indonesia, has around 108 million of downloads for its application, more than a million of drivers partnered and there are more than 100 million of transactions are being processed for around 25 million monthly users (Chandler, 2019). This shows that Indonesians also very much rely on the e-hailing services.

However, the rapid growth of the e-hailing industry is not without a caveat. This innovation remains controversial as it is considered as a disruptive innovation (Flores & Rayle, 2017). The e-hailing services have been said to be disrupting the traditional taxi industry in most of the countries. Since most of the riders prefer to go for e-hailing services, this has caused the demand for traditional taxi to decline rapidly. For instance, in Indonesia, the incomes of conventional Ojek were heavily affected by the birth of Gojek (Azzhuri et al., 2018). High level of competitiveness in the industry has caused some of the drivers or even operators to start adopting the e-hailing technology. This could lead to changes in the working practices of some existing traditional taxi drivers who used to work in a more rigid routine.

Furthermore, regulations do not always evolve as quickly as the technological advancement. In other words, technological innovation tends to outpace the ability of regulations and policies to keep up. This phenomenon can be seen in the e-hailing industry. In many countries, e-hailing services have been said to be unregulated, lack of supervision and constrictions by the government. Uncertainties in regulations caused risks towards the stakeholders which include riders, drivers and the operators.

In response to the issues, countries such as Malaysia and Indonesia have already started to regulate the e-hailing services by introducing sets of regulations and policies in both countries. Both countries do share similarities in cultural background and in close proximity. Thus, this study will look at the commonalities and differences of Malaysian-Indonesian's e-hailing framework in terms of the important aspects of regulatory measures such as form and enforcement.

1.1 Research Problem

With the advancement of technology, the e-hailing industry has been experiencing a strong growth in recent years. The emergence of e-hailing has always been seen as a positive development. However, it has also triggered major disruptions in the transportation industry due to under regulation over several aspects or lack thereof, especially to the traditional taxi industry as the e-hailing industry continues to expand. Unregulated services do present certain risks to the riders, drivers, operators (Todd, Amirullah & Xing, 2018). For instance, the safety of the riders will be at risk without regulated services. If drivers are not required to have full background checks such as criminal records checks or health checkups, it will surely put the riders' safety at risk. Besides, safety of the drivers will also be at risk due to absence of regulations. For example, drivers may be underinsured when catastrophe related to e-hailing befall them. As for the operators, the major issue would be in terms of market dominance. The market dominance by the

majority players can lead to unhealthy competition in the industry. Moreover, the loss of market shares of the traditional taxi industry. E-hailing services have caused the demand for the traditional taxi to decline rapidly. These phenomena not only occur in Malaysia but also in Indonesia as well. Therefore, both countries started to regulate the new form of services whereby sets of regulations have been introduced to regulate the e-hailing operators, drivers and its riders. It is important to study the form and enforcement of e-hailing regulation framework in both countries.

1.2 Research General Objectives

The general objective of conducting this research is to analyze the commonalities and differences of Malaysian-Indonesian's e-hailing framework in terms of the important aspects of regulatory measures. The two important aspects of regulatory measures are form and enforcement (Mutiarin, et al., 2019).

1.2.1 Research Specific Objectives

The objectives for this research are as follows:

1. To identify and categorize the regulation framework on Malaysian-Indonesian's e-hailing industry.
2. To compare and contrast Malaysian-Indonesian's e-hailing regulation framework.

1.3 Research Questions

Based on the problem statement and research objectives, the study is able to answer questions such as:

1. What are the form and enforcement of e-hailing regulations and policies?
2. What are the differences between Malaysian-Indonesian's e-hailing regulation framework?

1.4 Research Significance

Firstly, the findings of this study will be of great benefit to the policy makers. This study will help the governments of both countries to have better knowledge towards their own and others' regulation framework on the e-hailing industry. This will allow them to implement or strengthen the enforcement of regulations and policies more effectively ensuring the welfare of stakeholders are protected. Besides, this study will contribute to the society as it will help the public to have better understanding towards the Association of Southeast Asian Nations (ASEAN) countries contexts agenda 2030. It also helps the public to enhance their knowledge in disruptive technologies and its issues. In addition, this study will help the users of e-hailing services in every country to be aware of the importance of the enforcement of regulations and policies on the e-hailing industry.

1.5 Chapter Layout

This study is structured into 5 chapters. Firstly, Chapter 1 provides the background, overview of the study context, stating the research problems, objectives and questions. Then, Chapter 2 examines and analyses the past literature regarding e-hailing services. Next, Chapter 3 states the research methods used in carrying out this study. Chapter 4 discusses the results and analysis regarding regulation framework on Malaysian-Indonesian's e-hailing industry. Finally, Chapter 5 concludes.

1.6 Conclusion

In a nutshell, several issues mentioned above have surfaced due to the emergence of e-hailing services. This study will focus on examining and investigating the key issues in the e-hailing industry and the regulation framework on the e-hailing services.

CHAPTER 2: LITERATURE REVIEW

2.1 The Emergence of E-hailing

Uber can be said as the pioneer of e-hailing services (Wang, 2019). In 2009, Uber Technologies Incorporated, which was previously known as UberCab was founded in the United States by Travis Kalanick and Garrett Camp. A year later, the company successfully launched the Uber mobile application. The Uber mobile application enables the riders to satisfy their transportation needs by requesting a driver through their smartphones (Mastrorillo, 2016). The company will pair its available drivers to the travelers who need rides, provided those drivers must have their own vehicles (Chen, Mislove, & Wilson, 2015). The riders are said to be charged by the time and distance of travel. Besides, as we can see from the development of the e-hailing industry, the first-mover advantage has caused Uber to achieve rapid growth and further expanded its business to other developed countries such as Australia, Canada and the United Kingdom (Wang, 2019). According to Uber (2019), the company operates in 69 countries and over 700 cities worldwide. Therefore, Uber's business model is referred to as an innovative and successful model which is known as "Uberification" in the industry (Bashir, Yousaf & Verma, 2016). Since then, multiple companies have imitated Uber's business model and started to launch e-hailing platforms in their own countries (Wang, 2019).

In 2012, Uber's rival Lyft (previously known as Zimride) was launched in the United States (Chaudhry et al., 2018). Its founders are Logan Green and John Zimmer. Although the company's operation was more or less the same as Uber, but it differentiated itself by providing unique services to the riders. For instance, it provides options whereby riders were allowed to choose their music preferences on the app and this enabled the drivers to know what choice of music to play when the riders were on board. This was one of the competitive advantages of Lyft in

the market during that time. Today, Lyft operates in more than 300 cities in the United States and has expanded its business to Canada in 2017 (Lyft, 2019).

Besides the United States, the arrival of e-hailing services can also be seen in other parts of the world such as Dubai and China in that particular period. In 2012, Careem, an Emirati TNC was introduced in Dubai (Stephens, 2019). It was co-founded by Magnus Olsson and Mudassir Sheikha and another founder, Abdulla Elyas joined the company in 2015. The company offers similar e-hailing services and aimed to simplify and improve the lives of the locals in Dubai. What made it distinct from other e-hailing companies was Careem was the first to launch female drivers in countries including Saudi Arabia and even provided them with training sessions conducted by the company (Hassan, 2018). Until today, Careem is still continuously expanding its business and it is currently operating in over 14 countries worldwide (Careem, 2019).

Furthermore, this new business trend has also introduced in China by its local e-hailing company, DiDi Chuxing Technology CO. in 2012, which was founded by Cheng Wei (Nie, 2017). During those days in China, DiDi and Uber were rivals but clearly DiDi has achieved a higher level of success due to the powerful supports of the local investors (Wirtz & Tang, 2016). One of the remarkable success of DiDi would be the company was the first e-hailing app to be awarded an official online car-hailing operating license in Shanghai, China in 2015 (Yu, 2015). Today, DiDi still remains as the leading TNC in China.

2.1.1 E-hailing Malaysia

In 2012, e-hailing services were first introduced in Malaysia upon the launch of MyTeksi app, which was known as GrabTaxi in other countries. It was founded by two Malaysians, Anthony Tan and Tan Hooi Ling (Lin & Dula, 2016). In the early stages, the company does receive negative feedback from many taxi companies. However, it managed to start its operation with utilizing the readily available of 30 taxi fleet which was offered by one of the taxi companies and achieved its first success in 2013 whereby its app has received

up to 10,000 bookings per day (Cosseboom, 2015). Since then, the company started to expand its business to other Southeast Asia countries such as Indonesia, Vietnam, Myanmar, Cambodia, Thailand and the Philippines. In addition, GrabTaxi rebranded to Grab in 2016 with the launch of cashless payments which was initially supported in several countries including Malaysia (Russel, 2016). Therefore, the Grab application not only helps to assign private hire cars or taxis to nearby travelers via a location-sharing system, it also offers delivery and financial services such as GrabFood and GrabPay.

Uber was first introduced in Malaysia in 2013 (Jais & Marzuki, 2018). It became the main rival of Grab ever since. The traditional taxi industry in Malaysia has actually been revolutionized by the emergence of e-hailing. Although both Grab and Uber started their operations with much challenges due to the traditional taxi drivers, but full support was actually given by the Malaysian Government. Therefore, both companies were able to compete with the traditional taxi industry in the country. However, Uber has withdrawn from the Malaysian market in 2018 and chose to merge its business operation with Grab (Tariq, 2018). This makes Grab the leading TNC in Malaysia today. Furthermore, the model's success has led to the imitations by the locals in Malaysia. According to Pikri (2018), there are other existing players that offer e-hailing services within the country. For instance, MyCar, JomRides and Riding Pink.

2.1.2 E-hailing Indonesia

Gojek, the first local startup that provides e-hailing services were introduced in Indonesia in 2010 and it was founded by Nadiem Makarim (Azzuhri et al., 2018). The first-mover advantage has caused the company to gain high brand recognition among the locals and wide network of drivers in most of the large cities in Indonesia. Before the existence of Gojek, Indonesians would use motorcycles (known as Ojek) to travel back and forth within the country. In the beginning, Gojek only provides transportation services through

motorcycles via phone calls bookings. After years of continuous development, the company currently provides over 20 types of services including courier, food delivery, taxi rides and house cleaning services which operate in more than 50 cities in Indonesia (Gojek, 2019). For instance, GoRide, GoPay, GoCar, GoClean and GoFood.

In addition, Gojek operates based on 3 significant values which are innovation, speed and social impacts to be the solutions for Indonesia (Azzuhri et al., 2018). In large cities in Indonesia, the absence of quality transportation system was one of the major issues faced by the locals and Ojek was not capable of solving it. Therefore, Go-Jek's success can be seen by its capabilities in solving the issue. The company has certainly made an impact towards the locals in Indonesia by providing more transportation options in their everyday lives. In other words, it somehow not only changed the way the locals travel but also enabled them to travel more conveniently within the country. Furthermore, employment rate in Indonesia has also improved since the emergence of e-hailing services. It provides more job opportunities as the locals may register as Gojek drivers across the country.

After the launch of Gojek, its main rivals which are Uber and Grab have also chose to enter the Indonesian market years later (Russel, 2016). According to Go-Jek (2018), although Uber and Grab are both strong competitors in the e-hailing industry, Gojek still managed to remain as the most popular e-hailing app in Indonesia.

2.2 The Issues of E-hailing

2.2.1 Social Issues

With the rise of e-hailing services available worldwide, the riders' safety issue has come to light in recent years, especially in countries that are having loose regulations and policies control (Chaudhry et al., 2018). There have been

cases of assault, harassment and robbing riders while they were on the rides being reported these days in different countries. For instance, according to Ram (2019), there was a case in Malaysia whereby a 29-year-old male e-hailing driver reported to be arrested for molesting a 20-year-old female university student in Perak. He was arrested and his vehicle was seized after the student has lodged a report to the police. Besides, in Indonesia, Grab has come under scrutiny after a rider was reported to be assaulted by the company's driver (Ibnu Aqil, 2018). Not only riders, the e-hailing drivers also face safety issues such as being victimized by the riders (Feeney, 2015). There were several cases regarding e-hailing drivers being attacked, robbed and sexually assaulted by the riders. According to Jayne (2018), a 34-year-old male teacher, a part time Grab driver, was robbed and forced to strip naked by two male riders in Puchong, Malaysia. The driver was threatened to give them his money and was told to not to make any police report if not they will hunt him and his family down. However, he still chose to lodge a police report and this case went viral within the country. These cases certainly caused concerns to arise over the safety of e-hailing services.

In addition, e-hailing services have also caused the rise of privacy concerns. One of it would be the leakage of riders' personal data (Gandhi, Sucahyo & Ruldeviyani, 2018). E-hailing applications collects, shares, and stores riders' personal data, this has an advantage over the drivers as it enables them to know some of their rider's information in advance before picking them up, however it consists of high level of risk of those data being misused (Feeney, 2015). One of the cases was Grab has leaked over 120,000 of its riders' data in marketing emails in Singapore in 2017 (Vijayan, 2019). This incident happened when among the 300,000 marketing emails that were sent by Grab to a group of riders consist of over 120,000 data of other riders. Grab was said to breach the data protection law and was fined by the government.

Another privacy issue that exist regarding e-hailing services would be e-hailing companies are able to track and record the exact patterns of movement of its drivers and riders worldwide (Pham et al., 2017). For instance, Grab seeks to track the habits and locations of its drivers even when

they are not on duties (Lim, 2017). The company installed trackers in their drivers' cars in order to collect data and daily updates of them. This action undoubtedly caused a rise of debates among the public. Although it may improved the safety concerns for riders but it actually has disrupted the privacy of the drivers. Besides, Uber has also faced controversies when it was said to be continuously tracking its riders' locations even after rides completed (Wamsley, 2017). However, Uber has ended this function after privacy concerns were raised during that controversial period.

2.2.2 Business

Following the rising popularity of e-hailing services, the numbers of TNCs is seen to be increasing tremendously worldwide. This has caused the e-hailing companies to face challenges in terms of competitiveness in the industry. Companies usually tend to follow the footsteps of their competitors that consist of similar business operations or those that are more successful (Onyang, 2016). This phenomenon is due to the influence of fear such as uncertain to face the ever-changing environment and some tend to be afraid to lose competitive advantage. All these companies compete on several aspects such as price, customer service, quality, comfort and convenience (Adamkasi, 2017).

The level of competition in the e-hailing industry can be analyze by using Porter's Five Forces analysis (Gathuku, 2015). First and foremost, industry rivals. For example, Uber currently operates in many different countries thus its competitors may be different in each country. In the United States, Uber's main competitor would be Lyft while Careem would be its main rival in the Middle East as both the companies are having similar business model as Uber. Next, threats of new entrants into the e-hailing industry are quite significant. For instance, Uber business model is never a secret and it can easily be imitated by other companies. As it is an internet-based kind of business model, the new entrants of the industry are able to access the distribution channels more easily (Dudovskiy, 2018). The low entry barriers are one of the reasons

why the numbers of TNCs have been continuously increasing over the past years. Furthermore, threat of substitutes. In this rapid developing industry, substitutions of an e-hailing company can be easily found (Allan, 2017). For example, the substitutes of Uber can be companies that are either in direct or indirect competition with it. Direct competition companies are like Lyft and Grab while indirect competition companies would be the traditional taxi companies or other public transports. Moreover, bargaining power of supplier. An example of threat of suppliers to Uber would be the company does not own any vehicles that are operating under its name as they either outsource the cars or their drivers provide their own vehicles. In other words, its operation is much depending on its suppliers and drivers. Thus, this results in a high bargaining power of suppliers in the case of Uber. Lastly, the bargaining power of buyers. In the e-hailing industry, it consists of high bargaining power of buyers. Since there are so many options in the e-hailing market, riders can just shift easily from one service to another. For instance, if Uber increases its price today, riders may just switch to Grab which offers a lower price. Therefore, the e-hailing industry is currently facing a high level of competition among the e-hailing companies.

2.2.3 Government's Response

Governments in different countries react differently towards this new phenomenon. In 2017, the Malaysian government has legalized the e-hailing services such as Uber and Grab in the country (Shagar, 2017). According to Section 16(1) of the Land Public Transport Act 2010, it is illegal to operate public service vehicles with the absence of an operating licence, while driving private vehicles (Leong, 2015). Thus, previously Uber and Grab drivers can be said to be working illegally. On 27th of July, 2017, amendments made to the Land Public Transport Act 2010 and the Commercial Vehicles Licensing Board Act 1987 were passed by the lower house of the Parliament of Malaysia (known as Dewan Rakyat) (Lim, 2017). Both amendments were made for the purpose of regulating the e-hailing services. The passing of both amendments put the e-hailing services to be under proper regulation control

which the government is given full authority to be in charged in regulating and monitoring the industry. For instance, e-hailing operators are now required to obtain individual business licence in order to operate legally in Malaysia. For Sabah and Sarawak, Commercial Vehicles Licensing Board (CVLB) will be in charge of issuing the licence while Land Public Transport Commission (SPAD) for Peninsular Malaysia.

2.2.4 Public's Reaction

The public's reactions towards the emergence of e-hailing industry remain controversial. There are both positive and negative points of view among the public towards e-hailing services.

Firstly, the e-hailing services certainly provided the public with even more options in terms of private hire transportation (Todd, Amirullah & Xing, 2018). The high level of competitiveness in the e-hailing market caused lower prices being offered to riders and quality of services always being improved. Dynamic pricing model is commonly used in the e-hailing industry, which prices for services are set according to the current market demands. Different e-hailing services may charge riders in different ways. For example, in Malaysia, e-hailing services such as Grab, charges riders by own algorithm such as based on time, distance travelled and traffic condition. As compared to traditional taxi drivers, riders may tend to choose e-hailing services mostly due to lower prices. Besides, e-hailing services have also been beneficial to the riders in terms of providing higher level of comfort and convenience. For instance, as compared to having to hail a taxi either by the roadside or in a street, riders will mostly prefer to just access the e-hailing applications to call for a ride. Furthermore, the rising of e-hailing industry has increased the employment opportunities in the country. It has lower entry barriers and higher flexibility in terms of working patterns such as the e-hailing drivers are allow to choose to either work full time or part time. That is why e-hailing services are seen as a source of additional income for most of the people.

Therefore, all these benefits have certainly caused the e-hailing services to garnered positive feedback from the public.

However, negative responses also exist among the public due to lack of regulations of the e-hailing industry. Unregulated e-hailing services have caused the rise of safety concern among the public. For example, when it is not compulsory for the e-hailing drivers to undergo full background checks like medical checkups and criminal records, this would cause certain risks to the safety of the riders. Besides, unregulated services have also caused certain issues to the drivers. For instance, unfair treatments such as some of the operators tend to overly prioritize the riders and neglected the drivers. Not only that, the drivers are also said to be overly penalize by the feedback given by the riders. Moreover, absence of regulations can lead to the market dominance by the e-hailing operators. For instance, Grab can be said as the majority player in the current e-hailing market in Malaysia. This market dominance may cause the company to exercise market power and thus in a long run, negative outcomes may occur. This will also lead to unhealthy competition in the e-hailing industry. All these negative outcomes have garnered negative feedback from the public towards the e-hailing industry.

2.3 Form and Enforcement of E-hailing Regulation Framework

The Malaysian-Indonesian's e-hailing regulation framework is based on Cortez's (2014) important aspects of regulatory measures which are form and enforcement (Mutiarin, et al., 2019).

In recent years, only several ASEAN countries such as Malaysia, Singapore, Indonesia, Vietnam and the Philippines have started to enforce regulations on the e-hailing industry (Izham, 2018). This could be due to the e-hailing industry is still considered new in many of the other ASEAN countries. Regulations and policies come in different forms and conditions (Mutiarin et al., 2019). Although

every country can be said to be having different forms of regulations in regulating the e-hailing industry but commonalities can still be found among them. The common themes include the registration of e-hailing operators and the regulations on the e-hailing drivers.

In Malaysia, e-hailing operators will now have to make an application to the Land Public Transport Commission (SPAD) for an intermediation business licence. According to the government, it is mandatory for e-hailing operators to obtain the license before providing e-hailing services. Intermediation business licence is a new category specific for e-hailing services (Mohamad, 2018). This shows that the Government actually recognize e-hailing as a distinct industry from the traditional taxi industry. Besides Malaysia, e-hailing services are also being recognized as a distinct industry from the local taxis in the Philippines. However, the regulations in the Philippines identify the e-hailing services as Transportation Network Vehicle Service (TNVS) under the TNC (Paronda, Regidor & Gaabucayan-Napalang, 2017). This somehow caused an unclear distinction as the government actually previously categorized TNVS and TNC as public utilities. Besides, the regulator, the Land Transportation Franchising and Regulatory Board (LTFRB), also regulates the e-hailing vehicles with similar measures as the taxis. While in Indonesia, the government considered the e-hailing operators as purely app companies and attempted to require e-hailing companies to either partner with those transportation companies which are licensed by the ministry or they can choose to register for a transportation company licence on their own. For instance, Gojek collaborated with conventional taxi service company, Blue Bird in Indonesia (Marzuki, 2017). Go-Blue Bird feature was launched in the Gojek app. This feature allows Blue Bird users to hail Blue Bird taxis more conveniently. As a regulator, the Indonesian government strongly supports this partnership as this helps in balancing the competition in the transportation industry and healthier business environment will be created.

Besides, the governments have also started to regulate the e-hailing drivers. In Malaysia, the government is getting stricter with its requirements for the e-hailing industry. For instance, e-hailing drivers are now required to obtain a PSV licence, compulsory to pass their medical checkups and criminal records, need to undergo

training module and they must not be blacklisted by the Road Transport Department Malaysia (RTD) (Mohamad, 2018). In Singapore, the government has a much similar approach towards the e-hailing drivers. The Singaporean government now requires the e-hailing drivers to apply for the Private Hire Car Driver's Vocational Licence (PDVL) in order to be registered as e-hailing drivers.

Moreover, a government's regulations is said to be heavily rely on its enforcement (Mutiarin et al., 2019). Common enforcement issues are due to resource and political restrictions. The enforcement of regulations compromise the credibility of agencies while serious problems may incur if fail to do so. As most of the government agencies are still having limited resources in maximizing the policy enforcement, the participation of the public becomes essential. Enforcement of policies on the Transportation Network Companies (TNC) can be said as rigid. This can be seen in some of the countries such as South Korea. It is known to be having one of the toughest policies on its TNCs in the country. In 2018, tens of thousands of South Korea's taxi drivers protested against their government's plan on allowing carpool services within the country (Gibson, 2018). They protested due to the negative impacts that would occur to the TNCs and the driver's daily income might also be affected. Besides, the TNCs in Spain also faced similar issues. In 2018, the Spain government has officially announced that they will let the local authorities to set the regulations of TNCs after the strike of their local taxi drivers (Meyer, 2018). Moreover, the regulations in the Philippines also faced with massive protest from the local taxi drivers and in the end led to the postponement of the government's licensing activities (Cabuenas, 2017).

2.4 Previous Studies

There were previous attempts in addressing the regulation issues related to the e-hailing industry in other countries. For instance, Nurhidayah and Alkarim (2017) conducted a study on the TNCs business model, the establishment of their domination, business and regulation issues related to the e-hailing industry in Indonesia. The journal's title is "Domination of Transportation Network

Companies (TNCs) in Indonesia: An Indonesian Case”. The results of the study showed that the emergence of TNCs has indeed revolutionized the transportation industry as TNCs provides more job opportunities and thus improves standard of living of people in many countries. However, with the continuous growth, issues surrounding TNCs have certainly occurred in every country. The Indonesian-based TNCs are still finding solutions to the issues. Hence, the authors concluded the study by saying that since there are presences of bugs on the e-hailing services, the taxi companies should take the advantage of the situation and take quick actions to catch up in order to regain its popularity in the industry once again.

Besides, Flores and Rayle (2016) conducted a study to examine the background on the emergence of ridesourcing in San Francisco, involvements of ridesourcing companies in regulatory battles and actions of political leaders to resolve the issues. The title of the journal is “How Cities Use Regulation for Innovation: the Case of Uber, Lyft and Sidecar in San Francisco”. The results of this study showed that the changes in regulations that begun in California has led the expansion of ridesourcing to the rest of the cities in the United States and world.

CHAPTER 3: METHODOLOGY

3.1 Research Design

This study is a qualitative-comparative research. To analyze the Malaysian-Indonesian's e-hailing regulation framework, an analysis is done based on Cortez's (2014) important aspects of regulatory measures. For the ease of understanding, two components will be compared namely form and enforcement. Form aspect is to identify the form of regulations on Malaysian-Indonesian's e-hailing industry namely policy and statute. Enforcement aspect is to look into whether the current formulated regulations and policies benefit various stakeholders.

3.2 Data Collection Method

Mainly two countries with different regulation framework on e-hailing services are chosen which are Malaysia and Indonesia. Data on the transportation industry of each country are gathered. There are more than 50 past literatures, legal and policy documents, reports, websites, articles and other documents, which range within the period of 2014-2019, are gathered and analyzed. The laws and policies gathered are regarding to the e-hailing industry involving the riders, driver-partners welfare, the operators and competition law. The selections of reference are from several credible online sources.

Table 3.1: Source of Literature

Types of reference	Sources	Discussion
Journals		Emergence of e-hailing
	i. Wang (2019)	Uber is the pioneer of
	ii. Mastrorillo (2016)	e-hailing services. Its mobile
	iii. Chen, Mislove & Wilson (2015)	application is able to satisfy
	iv. Bashir, Yousaf & Verma (2016)	riders' transportation needs
	v. Chaudhry, El-Amine, & Shakshuki (2018)	by pairing available drivers
	vi. Wirtz & Tang (2016)	to the travelers. Uber
		operates in 69 countries and
		over 700 cities worldwide.
		Its business model is known
		as "Uberification". Lyft and
		Didi are rivals of Uber in the
		United States and China
		respectively.
		E-hailing Malaysia
	i. Lin & Dula (2016)	E-hailing services were first
	ii. Jais & Marzuki (2018)	introduced in Malaysia with
	iii. Tariq (2018)	the launch of MyTeksi app
		(GrabTaxi) in 2012. Its main
		rival, Uber also started to
		operate in Malaysia in 2013.
		However, Uber has withdrew
		from the Malaysian market
		and merge its business
		operation with Grab in 2018.
		E-hailing Indonesia
	i. Azzuhri et al. (2018)	E-hailing services were first
		introduced in Indonesia upon
		the launch of Gojek in 2010.
		The company operates based
		on 3 significant values
		(innovation, speed, social
		impacts) to be the solutions
		for issues faced in Indonesia.
		Social issues related to
		e-hailing industry
	i. Chaudhry et al. (2018)	Riders' safety issues (cases

<ul style="list-style-type: none"> ii. Gandhi, Suchayo & Ruldeviyani (2018) i. Pham et al. (2017) 		of assault, harassment, robbing riders) and privacy issues (leakage of riders' personal data, track and record patterns of movements of both riders and drivers).
<ul style="list-style-type: none"> i. Onyango (2016) ii. Gathuku (2015) 		<p>Issues in e-hailing businesses</p> <p>E-hailing companies face challenges in terms of competitiveness in the industry. The level of competition in the e-hailing industry is high.</p>
<ul style="list-style-type: none"> i. Mutiarin et al. (2019) ii. Paronda, Regidor & Gaabucayan-Napalag (2017) 		<p>Form and enforcement of e-hailing regulation framework</p> <p>Based on three categories which are e-hailing riders, drivers and the operators.</p>
<ul style="list-style-type: none"> i. Nurhidayah & Alkarim (2017) ii. Flores & Rayle (2016) 		<p>Previous studies</p> <p>Previous attempts in addressing the regulation issues related to the e-hailing industry in other countries.</p>
News	<ul style="list-style-type: none"> i. CNN Hassan (2018) ii. Wall Street Journal Yu (2015) iii. Tech in Asia Cosseboom (2015) 	<p>Business Activities</p> <ul style="list-style-type: none"> i. Uber and Careem recruit first female drivers in Saudi Arabia ii. DiDi, the first e-hailing app to be awarded an official online car-hailing operating license in Shanghai, China iii. GrabTaxi achieved first success (its app received up to 10,000

	<ul style="list-style-type: none"> iv. TechCrunch Russel (2016) Russel (2015) v. Vulcane Post Pikri (2018) vi. The Jakarta Post vii. SAYS Lim (2017) viii. The Star Online Shagar (2017) ix. Digital News Asia Marzuki (2017) 	<p>bookings per day)</p> <ul style="list-style-type: none"> iv. GrabTaxi rebranded to Grab. Uber and Grab entered Indonesia market v. More e-hailing services (MyCar, JomRides, Riding Pink) entered Malaysia. vi. Gojek remains as the most popular e-hailing app in Indonesia. vii. Uber and Grab legalized in Malaysia. viii. E-hailing services (Grab and Uber) legalized in Malaysia. ix. Gojek collaborated with Blue Bird in Indonesia.
	<p>Social issues</p> <ul style="list-style-type: none"> a) <ul style="list-style-type: none"> i. The Jakarta Post Ibnul Aqil (2018) ii. SAYS Ram (2019) Jayne (2018) b) <ul style="list-style-type: none"> i. The Straits Times Vijayan (2019) Lim (2017) ii. NPR Wamsley (2017) 	<ul style="list-style-type: none"> a) Safety issues <ul style="list-style-type: none"> i. Riders assaulted by an e-hailing driver in Indonesia ii. Rider molested by an e-hailing driver and an e-hailing driver got robbed by riders in Malaysia. b) Privacy issues <ul style="list-style-type: none"> i. Grab leaked consumer' data. Grab tracks habit and location of drivers. ii. Uber tracks consumers' locations even after rides completed.
Laws and Policies	<ul style="list-style-type: none"> a) Malaysia <ul style="list-style-type: none"> i. Personal Data Protection Act 2010 (PDPA) ii. Competition Act 2010 iii. Road Transport Act 1987 [Act 333] 	Laws and policies in both Malaysia and Indonesia

iv. Penal Code [Act 574] v. Grab (2019) b) Indonesia i. Ministerial Regulation No.12/2019/ Minister of Transportation Regulation No.12/2019 ii. Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition iii. Road Traffic and Transportation Act Number 14 of 1992 iv. Gojek (2019)	
Statistics i. Uber (2019) ii. Lyft (2019) iii. Careem (2019) iv. Gojek (2019)	Countries that the companies operate in For instance, Uber operates in 69 countries including Australia, Japan, Germany and Switzerland.
Reports, Analysis & Articles i. Leong (2015) ii. Institute for Democracy and Economic Affairs (IDEAS) Todd, Amirullah & Xing (2018)	Business activities i. Uber and Grab legalized in Malaysia ii. More options regarding e-hailing services (Uber, Grab, MyCar) are provided to Malaysians
i. The Diplomat Gibson (2018) ii. Fortune Meyer (2018) iii. Cato Institute Feeney (2015)	Social issues i. Protest of South Korea's taxi drivers ii. Strike of Spain's local taxi drivers iii. E-hailing applications collects, shares, and stores riders' personal data, it leads to high level of risk of those data being misused.

Business environment	
i. Porter Analysis Adamkasi (2017)	i. Aspects that companies compete on
ii. Research Methodology Dudovskiy	ii. Uber's Porter's five forces analysis
Regulations	
i. Zico Law Mohamad (2018)	i. Regulatory framework of ASEAN countries
ii. Liew (2018)	ii. Private Hire Car Driver's Vocational Licence (PDVL) for Singaporean e-hailing drivers

Source: Reference used for this study.

3.3 Classification Technique

The Malaysian-Indonesian's e-hailing regulation framework is analyzed based on Cortez's (2014) important aspects of regulatory measures which are form and enforcement (Mutiarin, et al., 2019).

The classification of literature is based on form and enforcement of the e-hailing regulation framework. Form indicates the existing statute or regulations and policies while enforcement indicates the enforcement bodies that oversee the regulations and policies. Under form and enforcement, there are two categories which are regulation and policy. The regulations and policies are categorized based on three parties such as e-hailing riders, drivers and operators, based on three aspects which are privacy, safety and business.

CHAPTER 4: DATA ANALYSIS

In this chapter, form and enforcement of e-hailing regulation framework in Malaysia and Indonesia were analyzed and categorized. E-hailing regulation and policies of both countries were also being compared based on three categories which are riders, drivers and operators.

4.1 Malaysia

4.1.1 Riders

4.1.1.1 Data Protection

First and foremost, Personal Data Protection Act 2010 (Act 709) can be said as a form of cyber law which recommended the implementation of the Multimedia Super Corridor (MSC) (Department of Protection of Personal Data, 2019). In September 2009, The Personal Data Protection Bill 2009 has been distributed to both private sectors and public agencies to obtain reviews and it was approved by the Parliament and His Majesty the King in the following year. The basic objective of the Act was set out in the 10th Communications and Multimedia Act 1998, which is to ensure the security of information and reliability as well as integrity of network. In other words, the objective of this law mainly is to regulate the processing of personal data of individuals in regards to commercial transactions and to protect personal data of common interest. This Act applies to both parties who collect and process personal data in a commercial transaction. Those who violate the Act would receive penalty of between 1 to 3 years imprisonment and/or between RM100k to RM500k.

In the e-hailing industry, this Act does play an important role in protecting the data privacy of the riders. However, according to Lai (2019), the enforcement of the Act is not strong enough and lots of cases involving data and privacy breach have yet to be resolved.

Besides the existing regulations, e-hailing operators such as Grab have policy such as Grab Privacy Policy to protect the data privacy of its riders (Grab, 2019). This policy describes how Grab collects, processes and uses personal data of their riders. Grab collects personal data information of riders through several ways including voluntary method (users provide personal data when filling up user profile or registration form), through normal operation of the company's app, website and services (location, transaction information, device information), and from other sources (business partners, insurance providers, governmental sources of data). Personal data are collected for the purpose of maintaining and improving the company's services such as engage riders to provide services and to validate rides and process payments. Thus, this policy is to assure their riders that their data information is safe and secured.

4.1.1.2 Regulation or Policy on Safety Issues

According to the Ministry of Transport, e-hailing driver-partners need to comply with the new regulations which it is compulsory for them to obtain Public Service Vehicle (PSV) license, e-hailing Vehicle Permit (eVP), Puspakom (computerized vehicle inspection company) inspection and an e-hailing sticker, starting from 12 October 2019 onwards (Uihua, 2019). A PSV licence is basically a type of vocational driving licence which permits the licence holder to drive any type of motor vehicle, which is used to transport or carry paying riders. An eVP is a type of licence which permits e-hailing drivers to continue to drive for their companies respectively. In other words, both PSV licence and eVP are just driving licence that the drivers need in order to drive their cars. However, eVP is in digital form whereby it would be incorporated into the e-hailing drivers' app. As for the Puspakom inspection,

not all e-hailing vehicles are required to undergo inspection, only vehicles that are more than three years old are needed to undergo routine inspection once for every 12 months. Moreover, the e-hailing sticker which is needed to be placed on the front part windshield and rear mirror of the e-hailing vehicle will prevent riders to get on the wrong vehicles. All these regulations were issued for the purpose to safeguard the safety of the riders.

E-hailing operators such as Grab also has its own policies in ensuring its riders' safety. For instance, the company upholds a Code of Conduct for its driver-partners to ensure the drivers clearly understand the legal compliance, security, safety and service standards (Grab, 2019). Infringements may result in termination or suspension of access to Grab platform as the company practices zero-tolerance policy. The company ensures all its drivers agree to comply fully with the Code of Conduct. In addition, the purpose of Grab's Anti-Harassment Policy is also to ensure safety for the riders. All users are expected to follow the rules stated in the policy which include the golden rule (no physical contact), be respectful (no abusive language), all booking information are confidential, respect privacy (no posting or sharing of information on any platform) and avoid causing unnecessary alarm (riders and drives advised to stick to GPS recommended route). Grab practices zero tolerance policy on harassment.

Furthermore, Grab's Personal Accident Insurance. Grab is the first to provide personal accident insurance for the riders, with no additional cost. Once the riders are on a GrabCar booking, the insurance covers the entire trip. For instance, it will compensate the insured person for injuries caused to the person's body arising from a GrabCar accident. Besides, Grab also provides safety features such as emergency button. For instance, riders will be able to press the emergency button in the app in order to either notify their emergency contacts or make calls to the local authorities if they need help at any point of time during the ride. All these policies surely help to assure the riders their safety during their rides with Grab.

4.1.2 Drivers

4.1.2.1 Data Protection

As for the drivers, Personal Data Protection Act 2010 (Act 709) also plays an important role in ensuring their privacy. Besides, Grab Private Policy not only safeguards the riders, but drivers as well. As for drivers, Grab collects their personal data in terms of telematics data (speed data), device data (GPS location) and vehicle registration data. This policy helps to ensure the privacy of their data and to prevent cases such as leakage or breach of data.

4.1.2.2 Regulation or Policy on Safety Issues

The new regulations which are made mandatory for e-hailing drivers to comply such as obtaining Public Service Vehicle (PSV) license, e-hailing vehicle permit, valid e-hailing insurance and an e-hailing sticker, starting from 12 October 2019 onwards by the Ministry of Transport (Lee, 2019), are to safeguard not only the riders but for the purpose of ensuring drivers' safety as well. As for the valid e-hailing insurance, it is mandatory to be acquired by the drivers for the coverage of e-hailing jobs.

In addition, Grab's policy such as Grab's Anti-Harassment Policy, Grab's Personal Accident Insurance and Grab's Safety Features are all applicable to its drivers too. Besides Grab's Personal Accident Insurance, the company also provides Grab Daily E-hailing Insurance to ensure safety of its drivers. In order to reduce the burden of e-hailing regulations, Grab has partnered with several insurance companies and launched Grab Daily E-hailing Insurance which offers cheaper rates for its driver-partners. This is to ensure they are covered 24/7 when they are online and driving with Grab. Those insurance companies include Tokio Marine, Allianz and AXA. The daily rate, coverage details and benefits differ among the insurance companies.

4.1.3 Operators

4.1.3.1 Business Licence

On 27th of July 2017, both the Land Public Transport (Amendment) Act 2017 and the Commercial Vehicle Licensing Board (Amendment) Act 2017 were passed by both Houses of Parliament (Leong, 2017). The Amendments were made with the objective to regulate the e-hailing services and to create fair field between the e-hailing industry and the local taxis. Before this, there were no specific laws and regulations to govern the e-hailing operators in Malaysia. Under the amendments, e-hailing operators need to acquire an International Business Licence in order for them to operate intermediate business legally in Malaysia. According to section 2(d) of the Commercial Vehicle Licensing Board (Amendment) Act 2017 [Act A1553], “intermediate business” can be defined as the business of facilitating bookings, arrangements or transactions of e-hailing vehicles, either for any valuable consideration, money’s worth or otherwise. There are two regulatory bodies that are responsible for the licence application process, the Commercial Vehicles Licensing Board (CVLB) in charge of Sabah and Sarawak, while the Public Transport Commission (SPAD) for Peninsular Malaysia. It is considered as an offence if the operators operate intermediate business without obtaining the licence. Besides, the amendments emphasize on the financial status of the e-hailing operators as applicants are required to provide complete financial information for the licence application, this is to prove the company’s ability to operate and maintain the intermediation business. This is to ensure the licence holders are capable of achieving and maintaining good financial condition.

4.1.3.2 Competition Law

In 2012, Malaysia became the fourth country in ASEAN to introduce laws to govern or regulate competition and to ensure fair field in the market when the Competition Act 2010 came into force (Tay, 2013). The objective of the Act is to promote the development of economy and to protect consumer interest which applies to all commercial activities within or outside Malaysia, which the activities have effect on competition in the local market. There are two main areas of the regulation which are the prohibition on anti-competitive agreements and the abuse of dominant position in the market. An independent body, the Malaysian Competition Commission (MyCC), under the Ministry of Domestic Trade & Consumer Affairs (MDTCA), was established to enforce the Act. As the e-hailing operators are facing high level of competitiveness in the industry, this Act plays an important role in regulating or governs the competition and to create fair field among the companies.

4.2 Indonesia

4.2.1 Riders and Drivers

4.2.1.1 Data Protection

In Indonesia, there is still no general law on data protection (Husein & Sirie, 2019). However, according to Umali (2019), due to the massive exchange of data that occurs everyday, the Indonesian government recognizes the importance of enforcing laws on data protection. The Indonesian government is still now in the process of finalizing the Personal Data Protection Act (PDP) Bill. Besides, e-hailing operators like Gojek has policy such as Gojek Privacy Policy to protect the personal data of both its riders and drivers (Gojek, 2019). This policy describes how Gojek collects, uses, stores, transfers, discloses and protects its riders and drivers' personal information. For instance, Gojek can

collect personal information through riders or riders' mobile devices directly, whenever they use the application or website and from third parties (agents, suppliers, contractors). Personal data of the users are collected for the purposes such as for registration, verification and to maintain or improve services. This policy is used to ensure the riders and drivers that their personal information is being secured.

4.2.1.2 Regulation or Policy on Safety Issues

The Ministry of Transportation of Indonesia has issued an regulation whereby it requires e-hailing drivers to acquire public driving licence, SIM A Umum (Yuniarni & Sheany, 2018). It is mandatory to obtain a Surat Izin Mengemudi (SIM) or Indonesian Driving License before allowing them to drive a motor vehicle. A Public (A Umum) is one of the classes for the licence, which means to drive commercial vehicles and goods carrier with a maximum weight of not exceeding 3500kg. Therefore, in order for the e-hailing drivers to drive legally, they need to obtain the SIM A Umum. This is to ensure the safety of both the riders and drivers. Besides, the new Ministerial Regulation No. 12/2019 was also introduced which covers the aspects of riders and drivers' safety and standards of services. For instance, for the safety of riders and drivers, the e-hailing applications are required to have emergency buttons.

Moreover, e-hailing operators such as Gojek has the Gojek's Driver Quality Assurance to ensure the safety of its riders and drivers. Each and every driver will be screened through the company's controlled end to end recruitment process. For instance, the drivers are required to submit Driving Licence (SIM) and Vehicle Registration Document (STNK). After that, they also need to receive onboarding module such as on maintaining the condition of motor vehicles and creating the awareness of traffic laws and regulations. Besides, the drivers will also receive continuous education, safety riding program and driver workshops to improve their quality and skills. All these will help to secure and ensure the safety of the riders and drivers.

Furthermore, Gojek also do provide Passenger Insurance Coverage for its riders. Gojek is in collaboration with the Allianz (financial service company) to provide a maximum safety guarantee for its riders throughout the entire trip. When the riders are on a trip with Go-Ride, they will automatically receive protection from the insurer company without paying any insurance fee. Gojek are responsible for the costs. Besides, Gojek do provides safety features such as an emergency button in the app. It functions as a speed dial which enable the the users to contact the emergency unit of Gojek. Their safety agents will be available 24/7.

4.2.2 Operators

4.2.2.1 Business Licence

In 2016, the Ministry of Transportation has issued the Ministerial Regulation No. 32/2016 in order to regulate or govern the e-hailing operators (Adyatama, 2016). Under the regulation, it requires the e-hailing operators either to register for their own transportation company licence or partner with the transportation companies which were licensed by ministry. In other words, they cannot just run their own business with individual drivers. For example, Gojek collaborated with a conventional taxi service company, Blue Bird in Indonesia (Marzuki, 2017). This helps in balancing the competition in the transportation industry and healthier business environment will be created.

4.2.2.2 Competition Law

The Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition came into force in 2000 (Widyatmoko, Fachri & Nasution, 2016). This Anti-Monopoly Law prohibits all kinds of agreements that may cause monopolistic practices or unfair

competition. An independent body, the Business Competition Supervisory Commission (KPPU) is responsible in enforcing the competition laws. In the e-hailing industry that consists of high level of competitiveness, this Anti-Monopoly Law plays an important role in ensuring fair field among the players in the industry.

4.3 Comparison of Malaysian-Indonesian's e-hailing framework

Based on the important aspect of regulatory measures such as form and enforcement, there are commonalities and differences between the Malaysian and Indonesian's e-hailing framework. In other words, although the e-hailing regulations and policies for the riders, drivers and operators in Malaysia and Indonesia are almost on par, but there are still differences between them.

4.3.1 Similarities

First and foremost, both countries do show similar efforts in ensuring the safety of both riders and drivers through regulating the e-hailing industry. In Malaysia, the latest regulation which was issued by the Ministry of Transport requires the e-hailing drivers to comply with the new rules which include obtaining Public Service Vehicle (PSV) license and e-hailing Vehicle Permit (eVP). Similar to this, the Ministry of Transportation in Indonesia also issued a regulation whereby it is mandatory for the e-hailing drivers to obtain a public driving licence, which is known as SIM A Umum.

As for Grab and Gojek, both companies do own similar policies in Malaysia and Indonesia respectively. Those policies are to ensure the privacy and safety of both riders and drivers. Privacy policies include Grab's Privacy Policy and Gojek's Privacy Policy. As for safety policies, there are Grab's Code of

Conduct, Grab's Safety Features, Grab's Personal Accident Insurance, Gojek's Driver Quality Assurance, Gojek's Safety Features and Gojek's Passenger Insurance Coverage. The policies provided by both companies are actually on par in protecting the privacy and ensuring the safety of their users.

Furthermore, commonalities can also be found in the efforts of the Malaysian-Indonesian government in regulating the e-hailing operators. The e-hailing operators in both countries are required to obtain certain licence. In the context of Malaysia, the e-hailing operators need to acquire the Intermediation Business Licence in order for them to operate legally. In Indonesia, the Ministerial Regulation No. 32/2016 which was issued by the Ministry of Transportation also requires the e-hailing operators to either obtain their own transportation company licence or partner with the transportation companies which were licensed by ministry. Besides, there are also competitions laws that govern the e-hailing industry that is facing high level of competitiveness. For instance, Competition Act 2010 and Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition in Malaysia and Indonesia respectively. These laws are used to balance the competition and to ensure fair field among the players in the industry, and thus create healthier business environment.

4.3.2 Differences

By looking at the comparison of Malaysian-Indonesian's e-hailing regulation framework, differences do exist. The greatest difference would be on the data protection laws. In the context of Malaysia, there is the Personal Data Protection Act 2010 (PDPA) to secure the privacy of the personal data of e-hailing users (riders and drivers). In contrast, the data protection laws in Indonesia have yet to be imposed, currently there is still no general law on data protection.

In terms of safety, there are also differences in the laws and policies enforced in both countries. Firstly, it is mandatory for the e-hailing vehicles to undergo inspection in Malaysia such as Puspakom inspection while there is no such regulation in Indonesia. Besides, e-hailing vehicles are also required to place e-hailing stickers on the front part windshield and rear mirror to prevent riders to get on the wrong vehicles while this is not being practiced in Indonesia. In addition, a valid e-hailing insurance is needed to be acquired by e-hailing drivers in Malaysia for the coverage of their jobs while this is not made mandatory for the e-hailing drivers in Indonesia. In addition, the new Ministerial Regulation No. 12/2019 which was issued by the Ministry of Transportation in Indonesia covers the aspects of riders and drivers' safety and standards of services. For instance, for the safety of riders and drivers, the e-hailing applications are required to have emergency buttons. Unlike Indonesia, Malaysia does not impose such laws on safety features on e-hailing apps.

Furthermore, Grab and Gojek also have differences in their policies in Malaysia and Indonesia respectively. Grab do provides policies such as Grab's Anti-Harassment Policy, Grab's Personal Accident Insurance and Grab Daily E-hailing Insurance for both riders and drivers. However, Gojek do not provide any anti-harassment policy for its users. Besides, it only provides Gojek's Passenger Insurance Coverage to ensure the safety of riders but there is none insurance coverage that is provided to its drivers.

4.4 Existing Regulations That Applicable to E-hailing Services

There are laws and regulations which are enforced for provision to be made regarding the regulation of motor vehicles and traffic on roads, and other aspects in relation to vehicles and roads thereon; for provision to be made regarding the protection of third parties against risks resulting from the use of motor vehicles;

for provision to be made regarding the control for adaptation and construction of motor vehicles; and for provision to be made for connected purposes. Those are laws and regulations that were enforced before any of the e-hailing laws and policies can come into place.

4.4.1 Malaysia

Road Transport Act 1987 is an act that is enforced to make provision about the laws of traffic and motor vehicles on roads and other aspects that have linkages with vehicles and roads (Road Transport Act 1987). It also provides protection against third parties risks resulting for the use of motor vehicles.

According to section 26 of the act, no one shall use, cause or permit to be used a motor vehicle without a motor vehicle licence which granted under this Act. Besides, no one shall drive a motor vehicle in a speed that is exceeding any imposed speed limit (Section 69, Road Transport Act 1987). For instance, the national speed limit on expressways is 110 km/h (Section 40, Road Transport Act 1987). According to section 41, 42, 43, 44 and 45 of the act, driving offences include any person who, when driving a motor vehicle, causing death by reckless or dangerous driving, reckless and dangerous driving, careless and inconsiderate driving, and driving while under the influence of intoxicating liquor or drugs. In addition, unless vocational licence granted, no one shall drive or act as a conductor of a public service vehicle on a road (Section 56, Road Transport Act 1987). No registered owner of public service vehicle or other person shall employ or permit drivers without licence for the carriage of riders on roads (Section 57, Road Transport Act 1987). Moreover, to determine that the vehicles comply with the requirements (construction, equipment and use), the frequency of inspection depends on category/class of vehicles (Section 66B, Road Transport Act 1987). Furthermore, it is mandatory to insure vehicle against damage and/or third party risks. A third party insurance policy needs to insure against risks (death, injury and damage property) to a third party (Section 90, Road Transport Act 1987).

Penal Code is law that codifies most of the offences and procedures in Malaysia (Penal Code Act 574). It is officially known as an act relating to criminal offences. According to section 279 of the penal code, no one shall drive any motor vehicle in public in rash or negligent which likely to endanger human life or cause injuries to other person.

4.4.2 Indonesia

Road Traffic and Transportation Act Number 14 of 1992 Road Traffic and Transportation Act Number 14 of 1992 is an act that concerning road traffic and transportation.

According to article 18 of the act, every driver of a motor vehicle shall own a driving license. Besides, every motor vehicle on the road shall comply to the technical and road-worthiness requirements (Article 12, Road Traffic and Transportation Act Number 14 of 1992 Road Traffic and Transportation Act Number 14 of 1992). According to article 13 of the act, every motor vehicle on the road shall be inspected. Moreover, every public vehicle shall be insured (against vehicle itself or losses incurred by a third party as a result of the operation of the vehicle (Article 32, Road Traffic and Transportation Act Number 14 of 1992 Road Traffic and Transportation Act Number 14 of 1992). Furthermore, according to article 28, the driver of motor vehicle shall be responsible for the losses incurred by a rider and or owner of goods and/or third party arising from his neglect or mistake in driving. If death is caused, it is the driver and/or owner and/or public transport company's obligation to provide assistance to the heirs of the victim (medical treatment, funeral costs). If the injuries caused to body and health, assistance (medical treatment costs) shall be given to the victim (Article 31, Road Traffic and Transportation Act Number 14 of 1992 Road Traffic and Transportation Act Number 14 of 1992).

Table 4.1: Malaysia's E-hailing Regulation Framework

		Form		Enforcement	
		Statute/Regulation	Policy	Government	Private Sector
Riders	Privacy	Personal Data Protection Act 2010 (PDPA)	Grab Privacy Policy	Ministry of Communications and Multimedia (KKMM)	Grab Holdings Inc.
	Safety	Public Service Vehicle (PSV) Licence (Vocational driving licence) & E-hailing Vehicle Permit (EVP)	Grab's Personal Accident Insurance	Ministry of Transport (MoT)	Grab Holdings Inc.
		Puspakom Inspection	Grab's Anti-Harassment Policy	Ministry of Transport (MoT)	Grab Holdings Inc.
		E-hailing Sticker	Grab's Code of Conduct	Ministry of Transport (MoT)	Grab Holdings Inc.
			Grab's Safety Features		Grab Holdings Inc.
Driver-Partners	Privacy	Personal Data Protection Act 2010 (PDPA)	Grab Privacy Policy	Ministry of Communications and Multimedia (KKMM)	Grab Holdings Inc.
	Safety	Public Service Vehicle (PSV) Licence (Vocational driving licence) & E-hailing Vehicle Permit (EVP)	Grab's Personal Accident Insurance	Ministry of Transport (MoT)	Grab Holdings Inc.
		Puspakom Inspection	Grab's Anti-Harassment Policy	Ministry of Transport (MoT)	Grab Holdings Inc.
		Valid E-hailing Insurance	Grab Daily E-hailing Insurance	Ministry of Transport (MoT)	Grab Holdings Inc.
			Grab's Code of Conduct Grab's Safety Features		Grab Holdings Inc. Grab Holdings Inc.

Operators	Intermediation Business Licence Competition Act 2010	Ministry of Transport (MoT) Ministry of Domestic Trade & Consumer Affairs (MDTCA)
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Source: Developed for the study.

Table 4.2: Indonesia's E-hailing Regulation Framework

		Form		Enforcement	
		Statute/Regulation	Policy	Government	Private Sector
Riders	Privacy		Gojek Privacy Policy		Gojek
	Safety	SIM A Umum	Gojek's Driver Quality Assurance	Ministry of Transportation	Gojek
		Ministerial Regulation No.12/2019	Gojek's Passenger Insurance Coverage Gojek's Safety Features	Ministry of Transportation	Gojek Gojek
Driver-Partners	Privacy		Gojek Privacy Policy		Gojek
	Safety	SIM A Umum	Gojek's Driver Quality Assurance	Ministry of Transportation	Gojek
		Ministerial Regulation No.12/2019	Gojek's Safety Features	Ministry of Transportation	Gojek
		Ministerial Regulation No. 32/2016 Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition		Ministry of Transportation Commission for the Supervision of Business Competition (KPPU)	

Source: Developed for the study.

Table 4.3: Comparison of Malaysian-Indonesian's E-hailing Regulation Framework

		Malaysia	Indonesia	Malaysia	Indonesia
		Statute/Regulation	Statute/Regulation	Policy	Policy
Riders	Privacy	Personal Data Protection Act 2010 (PDPA)	N/A	Grab Privacy Policy	Gojek Privacy Policy
	Safety	Public Service Vehicle (PSV) Licence (Vocational driving licence) & E-hailing Vehicle Permit (EVP)	SIM A Umum	Grab's Code of Conduct	Gojek's Driver Quality Assurance
		Puspakom Inspection	N/A	Grab's Safety Features	Gojek's Safety Features
		E-hailing Sticker	N/A	Grab's Personal Accident Insurance	Gojek's Passenger Insurance Coverage
		N/A	Ministerial Regulation No.12/2019	Grab's Anti-Harassment Policy	N/A
Driver-Partners	Privacy	Personal Data Protection Act 2010 (PDPA)	N/A	Grab Privacy Policy	Gojek Privacy Policy
	Safety	Public Service Vehicle (PSV) Licence (Vocational driving licence) & E-hailing Vehicle Permit (EVP)	SIM A Umum	Grab's Code of Conduct	Gojek's Driver Quality Assurance

	Puspakom Inspection	N/A	Grab's Safety Features	Gojek's Safety Features
	Valid E-hailing Insurance	N/A	Grab's Personal Accident Insurance	N/A
	N/A	Ministerial Regulation No.12/2019	Grab's Anti-Harassment Policy	N/A
			Grab Daily E-hailing Insurance	N/A
Operators	Intermediation Business Licence	Ministerial Regulation No. 32/2016		
	Competition Act 2010	Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition		

Source: Developed for the study.

Table 4.4: Road Transport Act 1987 & Penal Code

Law		Remarks
Road Transport Act 1987 [Act 333]	Driving licences (Section 26)	No one shall use/cause/permit to be used a motor vehicle without a motor vehicle licence which granted under this Act.
	Speed limit (Section 69) Exceeding speed limit (Section 40)	No one shall drives a motor vehicle in a speed that is exceeding any imposed speed limit. For instance, the national speed limit on expressways is 110 km/h.
	Driving offences (Section 41-45)	Driving offence include any person who, when driving a motor vehicle, causing death by reckless or dangerous driving, and driving while under the influence of intoxicating liquor or drugs.
	Vocational licences (Section 56, 57)	Unless vocational licence granted, no one shall drive/act as a conductor of a public service vehicle on a road. No registered owner of public service vehicle/other person shall employ/permit drivers without licence for the carriage of riders on roads.
	Vehicles required to undergo periodic inspection (Section 66B)	To determine that the vehicles comply with the requirements (construction, equipment and use), the frequency of inspection depends on category/class of vehicles.
Penal Code [Act 574]	Motor vehicle users to be insured against third party risks (Section 90)	It is mandatory to insure vehicle against damage and/or third party risks. A third party insurance policy need to insure against risks (death, injury and damage property) to a third party.
	Rash driving or riding on a public way (Section 279)	No one shall drive any motor vehicle in public in rash/negligent which likely to endanger human life or cause injuries to other person.

Source: Developed for the study.

Table 4.5: Road Traffic and Transportation Act Number 14 of 1992

Law		Remarks
Road Traffic and Transportation Act Number 14 of 1992 Road Traffic and Transportation Act Number 14 of 1992	Driving licences (Article 18)	Every driver of a motor vehicle shall own a driving license
	Technical and Road-worthiness Requirements for Motor Vehicles (Article 12)	Every motor vehicle on the road shall comply to the technical and road- worthiness requirements
	Inspection of Motor Vehicles (Article 13)	Every motor vehicle on the road shall be inspected
	Insurance (Article 32)	Every public vehicle shall be insured (against vehicle itself /losses incurred by a third party as a result of the operation of the vehicle.
	Traffic Accidents (Article 28, 31)	The driver of motor vehicle shall be responsible for the losses incurred by a rider and/or owner of goods and/or third party arising from his neglect/mistake in driving. If death is caused, it is the driver and/or owner and/or public transport company's obligation to provide assistance to the heirs of the victim (medical treatment, funeral costs). If the injuries caused to body and health, assistance (medical treatment costs) shall be given to the victim.

Source: Developed for the study.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 Discussions of Major Findings

Based on the results, both Malaysia and Indonesia indeed put great efforts in imposing regulations to govern the e-hailing industry. The primary objective of new e-hailing regulations is to create fair play and healthier competition in the industry (Aziz, 2019). However, it somehow has created even more issues and frictions among the industry.

According to Lai (2019), The new enforcement of a set of e-hailing regulations issued by the government does not sit well with the e-hailing industry. The new e-hailing regulations are seen as a burden by the operators and drivers. Some of the e-hailing companies are even seeing a worrying trend which some of their drivers are quitting their jobs over the new ruling (Lokman, 2019). The primary objective of the new e-hailing regulations issued by the government is to create fair play and healthier competition in the industry. However, it somehow has created even more issues and frictions among the industry (Aziz, 2019).

According to Todd, Amirullah and Xing (2018), new e-hailing regulations were introduced to ensure safety of e-hailing users, however the regulations also introduce new requirements and processes that are costly for both e-hailing operators and drivers. This ultimately might result in worse outcomes for the riders. As the regulations in the industry increases, it also increases the compliance cost. According to Kenton (2018), compliance cost can be defined as the expenses that firms incur to adhere to the industry laws and regulations. Compliance cost tends to increase as the regulations in the industry increases. The cost can be incurred arising from local, national and even international laws and

regulations. Therefore, global companies that operate all over the world will face higher compliance costs as regulations vary across the globe.

The new regulations (PSV licence, eVP, training course) which were issued by the Ministry of Transport in Malaysia have certainly increase the compliance cost of the e-hailing services. According to Tan (2019), the estimated cost in order to acquire the both PSV licence and eVP is RM750, RM220 for compulsory training courses, RM20 for health checkups, RM400 for the annual insurance and RM70 for vehicle inspection. All these costs surely are burdensome, especially for some of the part-time drivers who actually chose this job to make extra money outside their day-job to make a better living for their families. According to Lai (2019), e-hailing services initially exist as a more convenient opportunity for those who wants a part-time job and a cheaper option for riders. However, those regulations have caused the e-hailing services to be the exact opposite.

Besides, the new regulations certainly reduce business revenue of the e-hailing operators, which include losses due to quitting of drivers and compliance cost. According to Chu (2019), e-hailing operators are facing shortages of drivers due to the new regulations imposed. The trend of drivers quitting their job surely caused the e-hailing operators to face losses. Moreover, the e-hailing operators such as Grab, need to offer cash reimbursement to help their drivers in order to ensure their compliance with the new regulations (Yeoh, 2019). For instance, Grab's drivers will be provided with subsidies for the PSV training courses and vehicle inspection, lower rates of insurance will also be given. Although this can prevent the drivers from quitting their jobs, however it will increase the compliance cost of the company. Thus, resulting in a decline in business revenue.

As the number of e-hailing drivers decreases, high fares and longer waiting time of the e-hailing services will be expected (Lee, 2019). In order for the e-hailing operators to match the supply and demand, surcharge mechanism may be applied. In other words, fewer drivers indicate high fares. Besides, fewer drivers indicate that it will be more difficult for riders to book their rides, especially during peak hours. This lead to longer waiting time for the riders. All these worse outcomes surely caused negative impacts to the riders.

In a long run, regulations are indeed important in regulating and governing the e-hailing industry. However, the government should further examine the impact of those regulations on the country's socio-economic as a whole.

5.2 Implications of the Study

Based on the result of this study, the current situation of the e-hailing industry is just underregulated rather than unregulated. However, overregulation will eventually diminish the industry due to reasons such as compliance costs. Therefore, instead of starting new regulations from ground up, the policy makers should improve the existing regulatory framework to ensure the effectiveness of the regulations in ensuring the welfare of various stakeholder.

Besides, the public should be aware that the current e-hailing industry is govern by the existing laws and policies. They need to know the existence of the regulations in order to ensure their rights are being well protected.

5.3 Limitations of the Study

In this study, mainly only two countries, Malaysia and Indonesia's e-hailing regulation frameworks are being classified and compared. Therefore, these findings may not translate to other countries' e-hailing regulation framework. Besides, as compared to Malaysia, limited access to Indonesian government documents is a significant barrier, thus data and information on Indonesia's e-hailing industry, laws and regulations are more difficult to be collected. Moreover, there are not much previous studies on e-hailing regulation frameworks.

5.4 Recommendations for Future Research

It is suggested that future work should include data from a greater geographic area, or even to be expanded to analysis that consists of more than two countries. Besides, more research and effective ways are needed to get access and analyse the Indonesian's laws and regulations. Moreover, as there are not much previous studies done on e-hailing regulation frameworks, this study can be used as a foundation for future studies.

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