A Review on the Background of E-Hailing Drivers in Malaysia and Their Awareness with Regulations

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Abstract: Smartphone applications have rapidly expanded from only basic applications to multiplatform and advanced applications that are very common nowadays. As the most widely used gadgets worldwide, there are many advantages that can be exploited. One of the advantages is the establishment of e-hailing applications. The existing applications are said to be proprietary, stand-alone solutions, and disintegrated while it has to support the end-to end integration to connect drivers, passengers and the vehicles. The security of these applications also has to be upgraded as there are a lot of risks to the users. This study examines the awareness of e-hailing drivers on regulations imposed to the e- industry by Malaysian government. This study focuses on the e-hailing drivers in Malaysia, mainly Grab drivers. Questionnaires were distributed among the Grab drivers. It was found that among 175 respondents, the majority of drivers were male aged in the range of 30 – 49, owned full time jobs, SPM/STPM holders with monthly income between RM2000 - RM5000. Most of them ventured as an e-hailing driver to earn extra side income. Out of the 175 respondents, this study has found that 12 persons (6.9%) were not aware about the government policy on e-hailing industry.

1. Introduction
After a few years, smartphone applications have evolved from basic and uncomplicated applications to multi-platform and advanced features that are common nowadays. This worldwide phenomenon has created an opportunity to make advantage out of it, which is the development of the E-hailing applications [1]. Today, Grab is the leader of ride-hailing platform and most of the drivers and passengers in Malaysia prefer to use the E-hailing application. This study focuses on the demography and factors that influence the E-hailing drivers in Malaysia. Instead of being a normal taxi company, Grab has outsourced its labor and productive assets, offering alternative services in a traditional industry. The real concern comes from the bargaining power of buyers (riders and drivers) who can effortlessly switch between mobile ride-sharing apps. The competition for both drivers and riders can
become incredibly intense. Customers switching costs and brand loyalty tend to be far lower for companies peddling on-demand access as end-users only need to download a new application. Convenience, reliability and instant gratification are the key drivers to gain customers [3]. However, lack of study on E-hailing leads to many problems. The existing applications are said to be proprietary, stand-alone solutions, and disintegrated when they need to support the end-to-end integration to connect drivers, passengers and vehicles. The security of these applications also has to be upgraded as the users are vulnerable to a lot of risks [1].

2. Literature Review
The study focuses mainly about the demography of E-hailing drivers and factors that influence them to venture into the E-Hailing industry in Malaysia through survey. Most of taxi operators have started to use the E-Hailing applications, either as licensed individual operators or as a fleet of taxis. This is driven by technology and opportunities offered combined with appropriate consideration of human factors associated with taxi operators that include trust, safety and security, cost, time and availability. While examining the factors that influence the intention of Malaysian drivers to adopt the apps, it is suggested that the mobile apps providers to focus on these factors to attract positive attitude toward the use of the apps. One of the factors for adoption of E-hailing business is ease of payment. E-hailing applications like Uber, Lyft, and Sidecar allow customers to conveniently make an online payment by using their smart phones. It has been reported by previous research that the most desired competitive business in different modes of transport is related to price and time [4].

2.1. Effects of Adopting E-Hailing Applications
Mobility is a basic need for everyone, thus the demand for transport service particularly for private car has increased tremendously in this modern society. In only a few years, drastic changes have been seen in taxi industry. The emergence of e-hailing application has increased the demand on ride services such as Uber and Grab services, which have revamped the taxi industry as they increase competition among taxi industry and public transportation [5]. The adoption of e-hailing applications has shown many positive and negative effects to people, transportation systems and environments. The positive effect can be associated to the vehicle miles travelled (VMT) and reduction of greenhouse gas emissions as the auto ownership decreases, use of public transport increases and need for parking spaces is also reduced. In addition, the e-hailing enables the non-drivers such as older people, younger people, people with disabilities and people without access to a vehicle to gain easier mobility. Lastly, traffic safety can also be improved by reducing the drunk driving [6].

In contrary, the negative effects that could arise from the e-hailing services are congestion, VMT and an increase in greenhouse gas emissions due to ‘empty’ vehicle trips. Current taxicab services required by law (wheelchair accessible vehicles, service in low-income neighborhoods and dispatch without smartphones) will be reduced. Walking, cycling, and transit use will decrease due to competition which affect the public health and environmental benefits of active transportation. Safety and quality of driving through low training/licensing requirements will also decrease while driver revenues will increase [6].

2.2 Revenue in Million (USD)
Initially set up in year 2012 in Malaysia, the taxi-based e-hailing application known as Grab started moderately and then has grown to be the market leader not only in the country, but in South-East Asia as well. The routes taken by the ride-sharing company have expanded and operated in 168 cities across eight Southeast Asia countries, boasting over 2.3 million drivers and commanding 95% of third-party e-hailing applications today. Many drivers are attracted to join Grab due to the profit gained and opportunities offered as a side job as shown in table 1 [7].
### Table 1. Revenue growth in Malaysia [7].

| Year | Revenue in Million (USD) |
|------|--------------------------|
| 2016 | 55.0                     |
| 2017 | 70.0                     |
| 2018 | 90.0                     |
| 2019 | 110.0                    |
| 2020 | 135.0                    |

#### 2.3 Revenue Growth

The e-hailing establishment has brought transformation to the transportation system in Malaysia, particularly at large towns and cities. Many new drivers have taken the advantage of the e-hailing revolution owing to its flexibility. At present, Grab has been making a lot of profits over the years as shown in Table 2 [7].

### Table 2. Revenue growth of e-hailing industry in Malaysia over the years [7].

| Year | Revenue Growth (%) |
|------|--------------------|
| 2017 | 28.31              |
| 2018 | 24.88              |
| 2019 | 20.95              |
| 2020 | 16.92              |
| 2021 | 13.3               |
| 2022 | 10.24              |

#### 2.4 Regulations Imposed by Malaysian Government on E-Hailing Industry

Regulations on e-Hailing service are formed by Land Public Transport Commission on 12 July 2018. Those who are involved in the service are given 1 year to fulfill all the criteria given under the Land Public Transport Act (Amendment) 2017. E-hailing is a public transport service that uses reservation system via electronic application. The e-hailing companies have to apply for intermediation business license which is defined as business of facilitating arrangements, bookings or transactions of an e-hailing vehicle whether for any valuable consideration or money’s worth or otherwise. The e-hailing companies must register with Companies Commission of Malaysia, have paid-up capital of at least RM100,000 and one of the members from the Board of Director must be Malaysian and stay in Malaysia. For e-hailing drivers, they have to apply for intermediation business license, either for new drivers or existing drivers. The e-hailing drivers also must be Malaysian, aged 21 years old and above, have competent driver license and vocational driving license, does not have any criminal records and not blacklisted by the Royal Malaysia Police and Road Transport Department Malaysia. In addition, the drivers also must have no compound payment with Land Public Transport Commission, pass medical checkup as well as attend and pass the new 6 hours driving training module.

Other than drivers, the vehicles registered also have to fulfill requirements such as the vehicles must have at least 3 stars as recognized by New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP), 4-11 seats, insurance for vehicle, riders and third party people, and undergo scheduled inspection by PUSPAKOM once per year after 3 years registered at Road Transport Department Malaysia. The vehicles also must display identification sticker for e-hailing vehicles that is given by Road Transport Department Malaysia. The maximum lifetime for completely knocked down (CKD) vehicles is not more than 10 years after registering at Road Transport Department Malaysia and not more than 10 years after manufacturing date for completely build up (CBU) vehicles. Maximum vehicle lifetime for taxi, rental cars and luxury cabs class is based on requirements set by Land Public Transport Commission. The maximum commissions for e-hailing
drivers and taxi drivers are 20% and 10% per trip, respectively. Moreover, the e-hailing drivers should not be stationed at one place and bookings must be done via electronic applications. If any drivers do not follow the rules, they may be punished under Land Public Transport Act (Amendments) 2017 [8].

3. Methodology
To develop database of the e-hailing drivers, several methods were used. It is important to ensure that the methods used are able to successfully attain the objectives. The methods are summarized in figure 1.

![Flowchart of overall study.](image)

3.1 Questionnaires
Questionnaires are defined as a written interview which can be carried out in several methods via face to face, telephone, computer or post. These methods provide relatively cheap, quick and efficient way of obtaining large amounts of information from large sample of people. They are also useful for large populations when interviews would be impractical [9]. To achieve the results needed, the questionnaires were distributed to the e-hailing drivers. The scope of the questionnaires included demographic distributions and economy. Demographic distribution presented the background profile of the driver (age group, household income, employment etc.), while economy represented income per day, customers per day and trips made study.

3.2 SPSS Software
Statistical Package for the Social Sciences (SPSS) was first launched in 1968. Since SPSS was acquired by IBM in 2009, it was officially known as IBM SPSS. This software can open all file formats that are commonly used for structured data such as from Excel spreadsheets, plain text files, relational (SQL) databases and strata [10]. This software was used in this study to analyse the data obtained from the questionnaires through validity and reliability test. A correlation coefficient close to
0, but either positive or negative implies little or no relationship between two variables. A few relationship variables from this study showed significant value below 0.05, indicating that the data were significant and valid as summarized in table 3.

Table 3. Correlation variables.

| No | Variables                                      | Significant of 2 Tails |
|----|-----------------------------------------------|------------------------|
| 1. | Monthly income and income per day             | 0.000                  |
| 2. | Education level and income per day            | 0.030                  |
| 3. | Customer per day and monthly income           | 0.002                  |
| 4. | Trip made and monthly income                  | 0.008                  |
| 5. | Customer per day and income per day           | 0.000                  |
| 6. | Major problem and income per day              | 0.043                  |
| 7. | Customer problem and major problem            | 0.031                  |

The second measure of quality in a quantitative study is reliability or the accuracy of an instrument. In other words, the extent to which a research instrument consistently has the same results if it is used in the same situation on repeated occasions. The Cronbach’s α result is a number between 0 and 1. An acceptable reliability score is higher than 0.6. The data collected were subjected to was 0.3, which was still in the range but has low reliability. Table 4 depicts the reliability analysis and Cronbach’s α result for this study.

Table 4: Reliability analysis and Cronbach’s α.

| Case Processing Summary | Reliability Statistics |
|-------------------------|------------------------|
|                         | N | %  | Cronbach's Alpha | N of Items |
|                         | 175 | 98.9 | 0.340 | 25 |
| a. Listwise deletion based on all variables in the procedure. | |

4. Result and Discussion
The study investigates the factors that influence the drivers to venture into the e-hailing services which included their motivation, income per day from their service and monthly income.

4.1. The Factors That Influences E-Hailing Drivers
Most of the respondent chose to be e-hailing drivers as a side job to gain additional income as represented by 37.7% (66 of 175). Other respondents chose to be e-hailing drivers due to the difficulty of getting a job, interest and good income source. The summary of the results is shown in table 5.
Table 5. Motivation of respondent.

| Motivation Element                                             | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------------------------------------------------|-----------|---------|---------------|--------------------|
| Difficult To Get A Job                                       | 35        | 20.0    | 20.0          | 20.0               |
| Difficult To Get A Job/Good Income                           | 4         | 2.3     | 2.3           | 22.3               |
| Difficult To Get A Job/Interested/Side Income                 | 3         | 1.7     | 1.7           | 24.0               |
| Difficult To Get A Job / Side Income                         | 4         | 2.3     | 2.3           | 26.3               |
| Good Income                                                  | 28        | 16.0    | 16.0          | 42.3               |
| Good Income / Interested / Side Income                       | 1         | .6      | .6            | 42.9               |
| Good Income / Side Income                                    | 3         | 1.7     | 1.7           | 44.6               |
| Interested                                                   | 29        | 16.6    | 16.6          | 61.1               |
| Interested / Side Income                                     | 2         | 1.1     | 1.1           | 62.3               |
| Side Income                                                   | 66        | 37.7    | 37.7          | 100.0              |
| Total                                                        | 175       | 100.0   | 100.0         |                    |

Table 6 shows the respondents’ income per day. The highest income per day was shown by RM 100 to RM300 accounted for 62.3% (109 of 175). The lowest income per day of respondent was RM 50 and below for 6.3% (11 of 175).

Table 6. Income per day gained by e-hailing drivers.

| Income per day | Frequency | Percent | Valid percent | Cumulative percent |
|----------------|-----------|---------|---------------|--------------------|
| <50            | 11        | 6.3     | 6.3           | 6.3                |
| 50-100         | 37        | 21.1    | 21.1          | 27.4               |
| 100-300        | 109       | 62.3    | 62.3          | 89.7               |
| >300           | 18        | 10.3    | 10.3          | 100.0              |
| Total          | 175       | 100.0   | 100.0         |                    |

4.2. Awareness on Government Policy among Respondents

This study also investigates the awareness on government policy among respondents consisting of e-hailing drivers. Survey related to government policy on e-hailing is needed as this service has expanded. Results are shown in table 7.

Table 7. Awareness of e-hailing drivers on government policy.

| Government policy | Frequency | Percent | Valid percent | Cumulative percent |
|-------------------|-----------|---------|---------------|--------------------|
| Yes               | 163       | 93.1    | 93.1          | 93.1               |
| No                | 12        | 6.9     | 6.9           | 100.0              |
| Total             | 175       | 100.0   | 100.0         |                    |

5. Conclusion

Based on this study, the regulations enforced by the Malaysian government related to e-hailing service are considered new as it was fully enforced by 12 July 2019. This proved that the government is concern about the citizen through the regulations enforced after a lot of problems have arisen from the e-hailing industry. It is known that e-hailing services may pose a lot of dangers to the users as there are a lot of criminal cases reported in Malaysia. This enforcement is expected to reduce the crime rate that is related to e-hailing.
Based on the results of this study, the majority of the e-hailing drivers in Malaysia were Malay male aged between 30 - 49 years old. Most of the drivers were self-employed and have monthly income in the range of RM2000 to RM5000. Based on to their education level, most of the drivers have SPM and STPM certificates. This proved that most e-hailing drivers were employed and has their main source of income. The main factor that causes them to venture into the e-hailing services is to earn extra side income as represented by 37.7% respondents. The results also showed that the drivers were able to earn RM100 to RM300 per day from 10 - 20 customers. Thus, it can be concluded that most of the drivers need to earn side income to survive even though they have main source of income. Despite facing the risks of vehicle breakdown and lack of demand, the income of e-hailing drivers is fairly profitable.

Results of the study also showed that 93.1% of the respondents were aware about the government policy. Although only few people were not aware with the government policy and regulations on E-Hailing, it is quite alarming as so many requirements need to be fulfilled to be a serious e-hailing driver, such as registration for vocational driving license and vehicle inspection. Failure to abide the regulations, the drivers involved will be convicted under the Land Public Transport Act (Amendment) 2017. Thus, all e-hailing drivers should aware about the government policy and comply with the regulations as this will affect not only the drivers but also users of the service.

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