

# COSTUMER PERCEPTION ON ONLINE TAXI SERVICES IN JAKARTA

**Leksmono Suryo Putranto**

Jurusan Teknik Sipil Universitas Tarumanagara  
Jl. Let.Jen.S.Parman No.1. Jakarta 11440  
lexy\_putranto@yahoo.co.id

**Frenky**

Jurusan Teknik Sipil Universitas Tarumanagara  
Jl. Let.Jen.S.Parman No.1. Jakarta 11440  
frenky\_ky@ymail.com

## Abstract

Nowadays online taxi become a significant competitor to the regular taxi in major cities in the world including in Jakarta. Regardless its legal status to serve as public transport in Indonesia, it is important to understand the level of service of online taxi operated in Jakarta. This paper discuss costumer perception on online taxi services in Jakarta. A hundred of questionnaires, equally distributed to students an non-students were filled. Each questionnaire contain group of general questions regarding personal data and daily trip data and perceptual questions regarding 7 latent variables, i.e. punctuality, convenience, security, safety, driver courtesy, features of the application and tariff. Analysis was done using path modelling freeware, Smart-PLS to reveal valid indicators for each latent variables and to reveal which latent variable was dominant in determining frequency of use of online taxi.

**Keywords:** Customer Perception, Online Taxi Services, Jakarta

## Abstrak

Dewasa ini, taksi *online* menjadi pesaing yang nyata terhadap taksi biasa di kota-kota utama dunia termasuk Jakarta. Terlepas dari legalitasnya sebagai angkutan umum di Indonesia, penting untuk memahami tingkat pelayanan taksi *online* yang dioperasikan di Jakarta. Makalah ini membahas persepsi pengguna layanan taksi *online* di Jakarta. Seratus kuesioner disebarluaskan secara merata ke responden mahasiswa dan non-mahasiswa. Tiap kuesioner terdiri atas kelompok pertanyaan umum yang mencakup data pribadi dan data perjalanan responden serta pertanyaan persepisional atas 7 variabel laten, yaitu ketepatan waktu, kenyamanan, keamanan, keselamatan, kesopana pengemudi, kualitas aplikasi dan tarif. Analisis dilakukan dengan perangkat lunak tak terbayar untuk pemodelan jalur, Smart-PLS untuk mengetahui indikator yang valid untuk tiap variabel laten dan untuk mengetahui variabel laten yang dominan menentukan frekuensi penggunaan taksi *online*.

**Katakunci:** Persepsi Pengguna, Layanan Taksi *Online*, Jakarta

## INTRODUCTION

Nowadays online taxi become a significant competitor to the regular taxi in major cities in the world including in Jakarta. No wonder that online taxi services such as Uber and Grab were rejected by existing taxi services worldwide. However this become an alternative taxi service for customers. There are several advantages regarding the use of online taxi, such as booking method, payment method, tariff, travel route. Ministry of Transport try to regulate this kind of services through KM No. 32/2016. Regardless its legal status to serve as public transport in Indonesia, it is important to understand the level of service of online taxi operated in Jakarta. This paper discuss costumer perception on online taxi services in Jakarta.

## **PREVIOUS STUDIES**

Despite many rejection and negative opinions regarding Uber services, Potvin (2015) argued that as mandated by law, Uber is obligated to, among others:

- Zero tolerance for the use of drugs or alcohol by any drivers, and a suspension pending investigation of any driver accused of violating the zero tolerance policy.
- Valid inspections on all driver partners' vehicles, and additional safety inspections conducted annually
- Primary liability insurance from the moment a driver partner accepts a trip through the completion of the ride up to US\$1M
- Clear display of how the fare is calculated, the applicable rates being charged, and provide the option for an estimated fare

GrabTaxi operates in 30 cities across 6 countries (Malaysia, Philippines, Thailand, Singapore, Vietnam, Indonesia) in the South-east Asia region ([https://en.wikipedia.org/wiki/Grab\\_\(application\)](https://en.wikipedia.org/wiki/Grab_(application))). Despite various reception and regulation issues in those countries, in Singapore, GrabTaxi received majority votes in an online poll conducted by Singapore's Straits Times as the taxi app of choice (Kok, 2014)

## **DATA COLLECTION**

A hundred of questionnaires, equally distributed to students and non-students were filled. There were 60 male respondents (36 students, 24 non-students) and 40 female respondents (14 students, 26 non-students). The respondents were 42 Uber users, 28 GrabTaxi users, 29 GrabCar users and 1 Go-car user. Each questionnaire contain group of general questions regarding personal data and daily trip data and perceptual questions regarding 7 latent variables, i.e. punctuality, convenience, security, safety, driver courtesy, features of the application and tariff.

The general questions consists of the following:

1. Gender
2. Status (student or non student)
3. Brand of online taxi regularly used (Uber, Grabtaxi, Grabcar)
4. Frequency of using online taxi

The perceptual questions consists of the following:

1. Punctuality:
  - a. Availability of taxi as promised in the booking application.
  - b. Ability of driver to choose the fastest route.
  - c. Availability of sufficient number of taxis
2. Convenience:
  - a. Taxi is in a proper shape and condition.

- b. Availability of wide range of vehicle type.
- c. Air condition works well
- d. Musical entertainment works well
- e. Availability of vehicle fragrance.
- f. Taxi seat is comfortable

3. Security:

- a. The trip can be traced by GPS
- b. Windows and doors work well
- c. Interior lighting works well

4. Safety:

- a. Ability of driver to drive safely.
- b. Obidience of driver to traffic regulation.
- c. Safety belts work well.
- d. Taxi engine works well.

5. Driver Courtesy:

- a. Driver courtesy during booking process.
- b. Driver courtesy on arrival in the pick-up point.
- c. Driver communication skill when asking the choice of trip route.
- d. Driver courtesy not to discuss unnecessary things
- e. Driver courtesy on choosing conversation topic during the trip

6. Features of the Application:

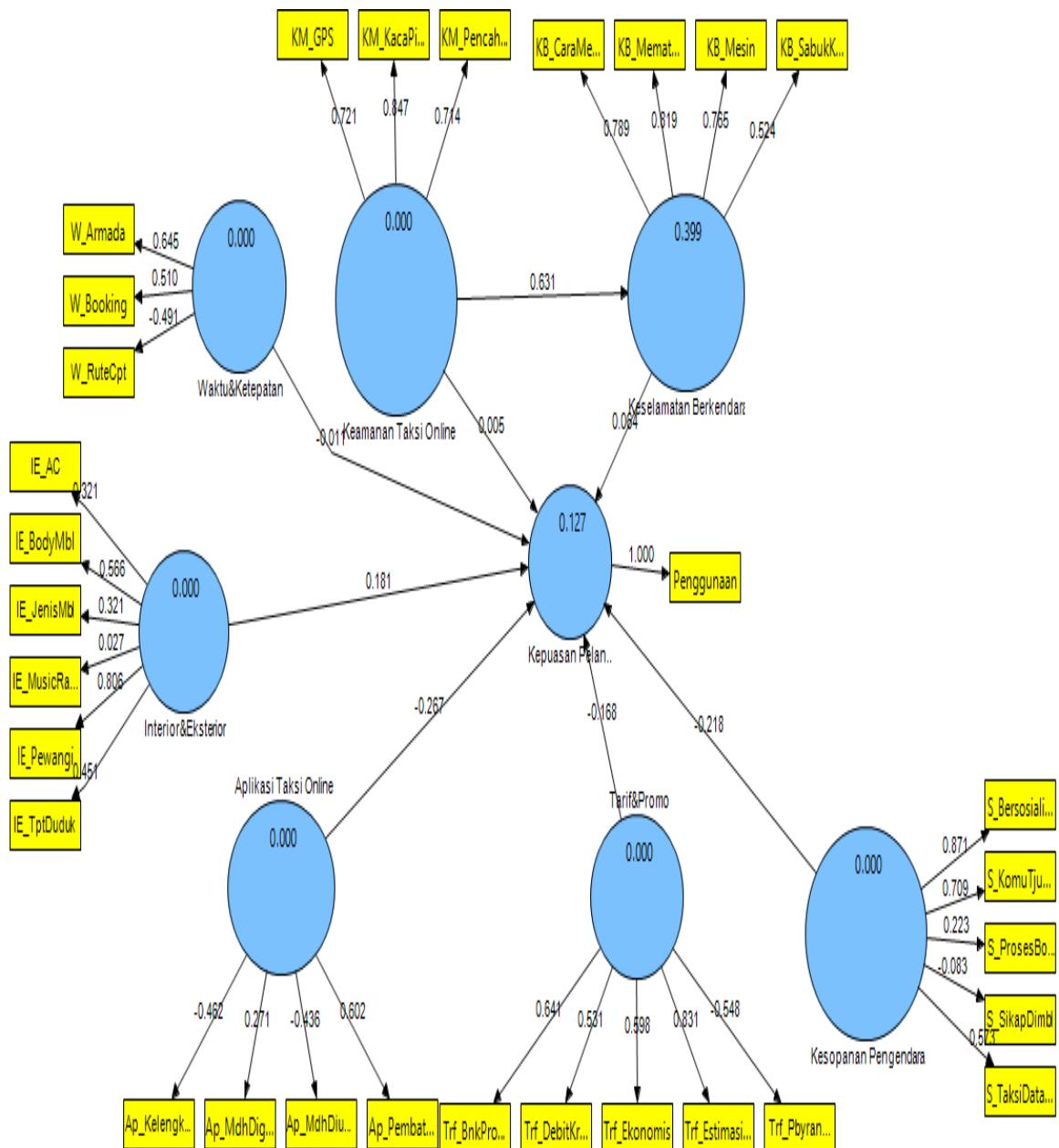
- a. Easy to download.
- b. Easy to use.
- c. Easy to cancel booking.
- d. Clear information on driver name/ contact number and estimated arival time of taxi

7. Tariff and Promotions:

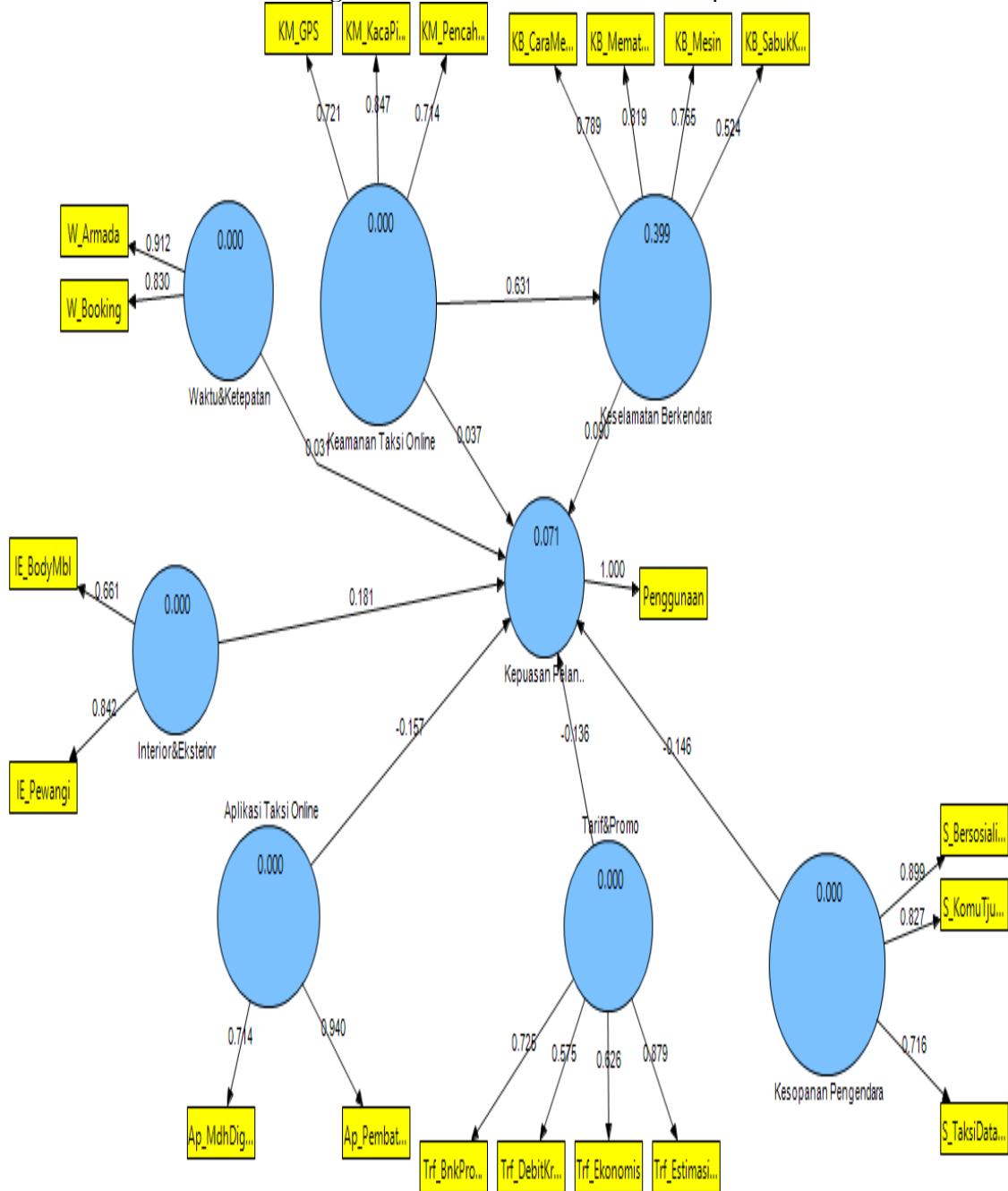
- a. Cheaper tariff than regular taxi.
- b. Estimated cost to reach destination is provided.
- c. Wide range of payment method (credit card, debit card, etc).
- d. Minimum charge is applied.
- e. Availability of various promotional tariffs

## DATA ANALYSIS

Analysis was done using path modelling freeware, Smart-PLS to reveal valid indicators for each latent variables and to reveal which latent variable was dominant in determining frequency of use of online taxi. Valid indicators were having standard loading factor of at least 0.5 (Hisyam, 2009). Figure 1 shows the initial path model and Figure 2 shows the final path model after indicators with standard loading factor less than 0.5 were deleted and the software was rerun.



**Figure 2** Initial Path Model of Overall Respondents



**Figure 2** Path Model of Overall Respondents after Deleting Indicators with  $SLF < 0.5$

The remaining valid indicators were as follow:

1. Punctuality:
  - a. Availability of taxi as promised in the booking application.
  - b. Availability of sufficient number of taxis

2. Convenience:

- a. Taxi is in a proper shape and condition.
- b. Availability of vehicle fragrance.

3. Security:

- a. The trip can be traced by GPS
- b. Windows and doors work well
- c. Interior lighting works well

4. Safety:

- a. Ability of driver to drive safely.
- b. Obidience of driver to traffic regulation.
- c. Safety belts work well.
- d. Taxi engine works well.

5. Driver Courtesy:

- a. Driver courtesy on arrival in the pick-up point.
- b. Driver communication skill when asking the choice of trip route.
- c. Driver courtesy on choosing conversation topic during the trip

6. Features of the Application:

- a. Easy to use.
- b. Easy to cancel booking.

7. Tariff and Promotions:

- a. Cheaper tariff than regular taxi.
- b. Estimated cost to reach destination is provided.
- c. Wide range of payment method (credit card, debit card, etc).
- d. Availability of various promotional tariffs

The following is the summary of koefisien of determination (R Square) between each lattent variable and frequency of online taxi use:

- Punctuality affect 0.0961% of frequency of online taxi use.
- Convenience affects 3.2761% of frequency of online taxi use.
- Security affects 0.1369% of frequency of online taxi use..
- Safety affects 0.81% of frequency of online taxi use.
- Other latent variables have negative R with frequency of online taxi use

Therefore it can be concluded that frequency of online taxi use were only marginally affected by 4 latent variables (punctuality, convenience, security and safety). It can be seen that security affects 39.8161% of safety.

## **CONCLUSION**

From the analysis that has been carried out throughout this paper it can be concluded that:

1. All indicators within security and safety were valid.
2. Some indicators within punctuality, convenience, driver courtesy, feature of application and tariff & promotions were valid.
3. Frequency of online taxi use were only marginally affected by 4 latent variables (punctuality, convenience, security and safety).

## **REFERENCES**

\_\_\_\_\_ (2016). KM Nomor 32 Tahun 2016 Tentang Taxi Berbasis Aplikasi.

\_\_\_\_\_ (2016) [\(online\)](https://en.wikipedia.org/wiki/Grab_(application)) (Accessed 24 July 2016)

Kok, L.M (2014). GrabTaxi, ComfortDelgro flagged as most popular: Straits Times online poll (online). Available from [\(online\)](http://www.straitstimes.com/singapore/transport/grabtaxi-comfortdelgro-flagged-as-most-popular-straits-times-online-poll) (Accessed 20 March 2015)

Potvin, E. 2015 *Uber Position Paper: Driving Innovation and Providing a Solution for Congestion: An Uber Case Study in Jakarta*. Unpublished.