

# An Analysis of Online Transportation Applications Between Gojek and Grab for Students

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**Abstract:** The use of technology is overgrowing. In today's era, every field in everyday life utilizes technology. One of them is in the transportation industry. Currently, online delivery is viral, especially among students and students who are easy to remember as Millennials and Generation Z. Smartphones are used not only for communication but also for buying fast food and drinks online using online delivery services. Online like Gojek. This research examines the user experience of online transportation applications. Students from various regions in Indramayu and Computer Engineering students at Universitas Wiralodra participated in this study as respondents. Experience using online transportation application services via smartphones has been collected in an online questionnaire using a Google form and distributed on social media such as Instagram, Twitter, Facebook, WhatsApp and Telegram. This study uses a user experience questionnaire (UEQ). This study aims to determine user experience in using online transportation application services. This study provides results indicating that all UEQ categories obtain positive scores. The highest score is in the "Intelligence" category, while the "New" type gets the lowest score. Online transportation shows that Gojek has a "good" rating scale. Overall the Gojek application is excellent in providing an experience for those who use it.

**Keywords:** Online Transportation of Mobile Applications, User Experience Questionnaires, Millennials and Generation Z.

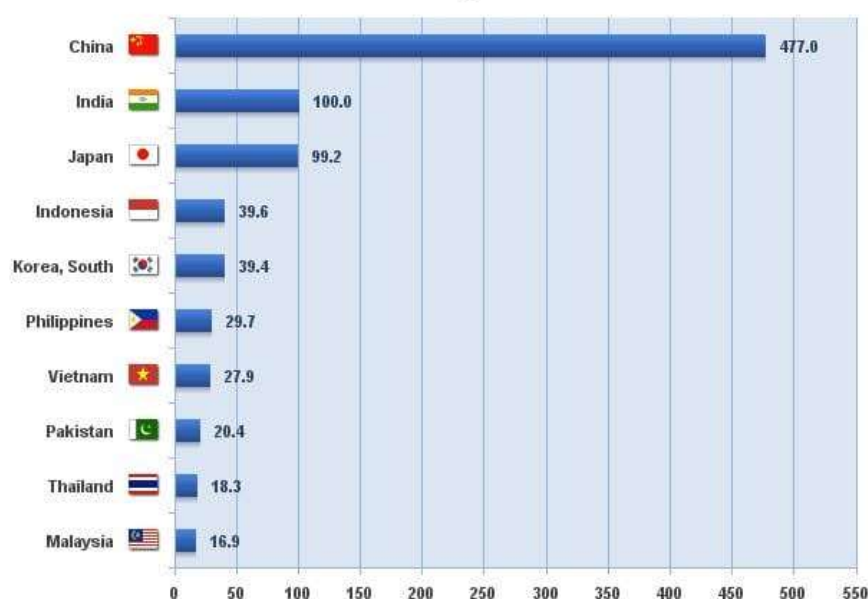
## Introduction

The era of globalization or population growth is very influential in developing alternative actions in society by contributing to technological developments. Advances in information technology change to mobile applications as well as computers. Currently, computers are electronic machines that are not only used to process information data. Technology always experiences innovation at all times. Technology that was initially still traditional has shifted to the digital world, such as the internet ([Irawan, Rizki, Chalermpong, & Kato, 2022](#)). Internet users are increasing all the time. The internet can be easily accessed anytime and anywhere by various groups of people. The shift to all-digital technology certainly impacts the market, consumers, companies and marketing. The internet network expansion can be utilized as a medium for the business's success ([Safira & Chikaraishi, 2022](#)).

One of the most versatile devices commonly combined with computers is the "smartphone", with the latest technology. Smartphones have become gadgets that are very often used by most people, from small children to adults, especially young people or what is commonly called the millennial Generation and the current generation Z. Along with the development of time, various businesses are trying to use the internet as one of the supports for their success. Company management must be able to implement marketing strategies that can create, maintain and increase customer satisfaction ([Paundra, van Dalen, Rook, & Ketter, 2020](#)). One of the businesses that use the internet as a milestone for the company's operations is a company engaged in online transportation services, namely Gojek and Grab. The company's work system is the same as motorbike taxis, and passengers ask to be taken to their destination. However, one thing that is very different from motorcycle taxis, in general, is that Gojek and Grab use the internet as a media liaison between the driver and the consumer. The drivers will take customers to their destination according to the request on the application ([Ilahi, Belgiawan, Balac, & Axhausen, 2021](#)).

Online transportation users are increasing every time from various groups, both children, students, students, and parents. Of course, there are several factors why consumers prefer to use online transportation over conventional motorcycle taxis, namely: ease of ordering, speed of travel time, the price offered, and quality of service that is trusted by most people in increasing consumer satisfaction ([Seetharaman, 2020](#)). The company's success factor is primarily determined by customer satisfaction. Customers are satisfied with the company for various reasons, such as service quality and price. Service quality focuses on meeting customer needs and delivering accuracy to match customer expectations. Online transportation companies try to fulfil consumer needs. The features in the online transportation application are made as complete as possible as consumers ([Sarram & Ivey,](#)

[2022](#)). The quality of the existing service is, of course, the price given by the company to consumers. Prices or tariffs are suitable for all ages, young people and parents. The brand image of online transportation has been embedded in people's minds. So this brand image also provides added value for the company. The Younger Generation is a perfect example of the existence of the "ubiquity of computing technology" and its focus on improving the user experience. The UEQ questionnaire quickly assesses the user experience of any interactive product. This research will analyse how the experience of online transportation users in the millennial Generation and Generation Z uses online applications. The object of his research is students in the Indramayu area who actively use online transportation applications ([Chiscano & Darcy, 2022](#)).



**Figure 1 Graph of online transportation users in Asia**

Many academics and practitioners have conducted some previous research on service quality related to aspects of consumer behaviour (especially the effect on customer satisfaction). This research follows up on research that has been conducted. Kurnia's research resulted in the conclusion that service quality, price, and brand image have a significant favourable influence on customer satisfaction. The results of Tangguh et al.'s research show that service quality and price significantly positively affect customer satisfaction. In contrast, brand image has no significant effect on customer satisfaction. This research will analyse online transportation applications used by students between Grab and GoJek. Indonesia is now ranked 4th as the country with the most users of online transportation services in Asia. According to statistical data, the number of users of online transportation applications in Indonesia has reached approximately 39.6%. "Indonesia is ranked fourth", he said in a Focused Group Discussion (FGD).

## Literature Review

The various theories used in this study can describe the experiences of computer engineering students and students from other campuses using online transportation services ([Farazi et al., 2022](#)).

## Online Transport Mobile Application

Mobile application-based transportation combines transportation and communication technology. Millennials and Generation Z can easily order online delivery using only smartphones ([Campos Ferreira, Dias, & Falcão e Cunha, 2020](#)).



**Figure 2 Home view of Grab Application**

The main advantage of online transportation is that the driver and their customer both know the whereabouts of each other's position. Payment can be made by transfer in the application itself, such as Gojek's Go-Ride and Grab's GrabBike ([Biduski, Bellei, Rodriguez, Zaina, & De Marchi, 2020](#)).

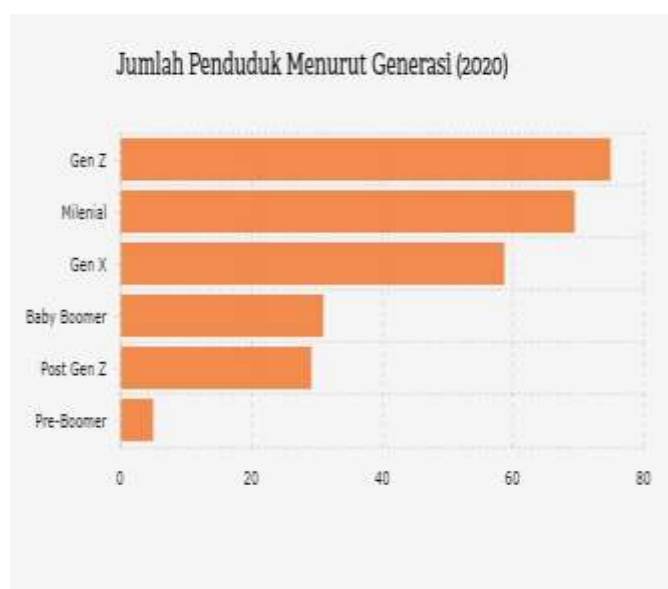
## User Experience Questionnaire

Smartphone user experience is expected to improve significantly after using the software. A questionnaire is most commonly used to determine the software's user-controlled quality and usability. The concept of user experience combines familiar aspects, such as efficiency,

with improved behavior, such as aesthetics (fun), the joy of use and interest ([Santoso, Schrepp, Hasani, Fitriansyah, & Setyanto, 2022](#)).

## Millennials and Z

The millennial generation or generation Y is the Generation born from 1980 to 1995, when technology was advanced, ages 23 to 38. Millennials are proficient in using social media and smartphones, so they are automatically very proficient in technology ([Pant, 2022](#)). They are often seen as a lazy generation because they often play with cell phones. However, the millennial Generation is inquisitive and self-confident ([Jimenez Correa et al., 2021](#)). Generation Z is the Generation born between 1997 to 2000. This Generation has never known life without technology, so it is sometimes referred to as the i-gen.



**Figure 3** Graph of the population by Generation

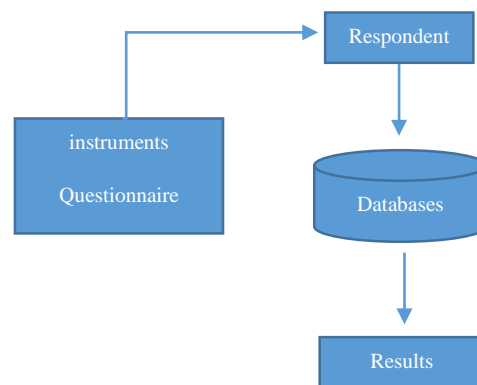
The majority of Indonesia's population are millennials and generation Z, the results of the 2020 population census. The percentage of generation Z is 75% of the total 270.2 million Indonesian population. Millennial Generation is 70% of the total population. While the last Generation, Pre-Boomers, as much as 5% of this Generation were born before 1945.

## Research Method

This research is qualitative research using questionnaires and a literature review. These methods aim to describe all relevant facts using students' experiences throughout Indramayu.

## User Experience Questionnaires

User Experience Questionnaire or questionnaire is an instrument consisting of a list of questions commonly used in collecting research data from respondents. Questions that are made in a structured manner will affect the results of the research ([Biduski et al., 2020](#)).



**Figure 4 Stages of analysis of online transportation application users**

In this study, a questionnaire instrument was used to collect data to facilitate retrieval of questionnaire data so that it is better, accurate, complete and consistent as research conducted in easy processing. The purpose of this questionnaire instrument is expected to produce something that is expected to be empirical data. The reason for taking this research method is to receive valid data so that the data obtained cannot be arbitrary or justifiable ([Pei, Huang, & Ding, 2022](#)).

Respondents are people who respond to answers from someone's research. Respondents will respond if given access to the questionnaire in the study. The database is a collection of questionnaire data created and then processed into questions or interrelated to facilitate data processing. The result is the result of the questionnaire that is obtained automatically from the Google form.

## Data analysis

Data analysis is carried out automatically through the tools provided by the User Experience Questionnaire. The tool can be downloaded on [pagewww.ueq-online.org](http://pagewww.ueq-online.org); with this tool, the data entered will be calculated as the mean and variance ([Birrell, Payre, Zdanowicz, & Herriotts, 2022](#)).

## Result and Discussion

The Gojek application and questionnaire analysis will explain some of the observations below.

### The appearance of the Gojek Application

Gojek makes it easy for customers to choose various services that are frequently used or available as favourite services. The Gojek application is equipped with a place to search and an account icon on the main screen above. Gojek uses stimulants to provide various promotions to attract consumer interest. Second, there is GoPay balance information, then there are four menus, namely: 1) payment, 2) promo, 3) enter balance, and 4) others. The middle part of the Gojek application layer has seven primary services used as popular consumer services. This section has an eighth menu, namely the "other" menu. If the consumer presses another menu, all services not included in the favourite service will appear.

Gojek is an Indonesian start-up company that started operating in 2010 in certain cities, such as Surakarta. This internet-based transportation service helps people's needs, as evidenced by the increasing number of Gojek users. Apart from being able to take someone to their destination, companies that offer various other facilities, such as Go-Food (food delivery), Go-Shop (order for shopping), Go-Send (delivery of goods), and other features offered on the application Gojek also provides other attractive offers that result in customer satisfaction, such as customers can pay via non-cash, namely Go-Pay. Payment via Go-Pay is more profitable for customers because companies can offer cheaper rates than cash payments. Another advantage of using Go-Pay is that customers will get points. If the points are used, the customer will get a discount on specific services, as when a customer uses Go-Food, he will get a discount on the food he buys, but it applies to only a few restaurants. The bottom of the Gojek application is equipped with 4 (four) menus, namely: 1) homepage, 2) promos, 3) orders, and 4) chat. This section will continue to appear when consumers make transactions for services.



Figure 5 View of Gojek Application homepage

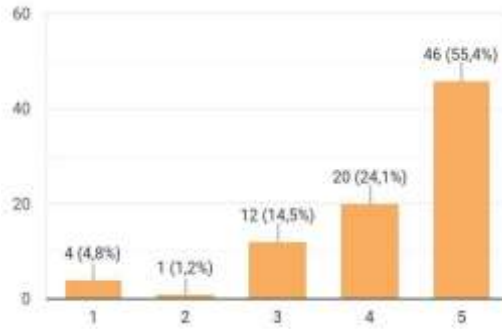
## UEQ Analysis Results

Table 1 UEQ analysis results

| No | Question                | Respondents | positive response |
|----|-------------------------|-------------|-------------------|
| 1. | Troublesome/fun         | 83          | 46                |
| 2. | Hard/easy to find       | 83          | 63                |
| 3. | Efficient/inefficient   | 83          | 34                |
| 4. | Difficult/easy to learn | 83          | 46                |
| 5. | Difficult/easy to use   | 83          | 54                |
| 6. | Monotonous/creative     | 83          | 35                |

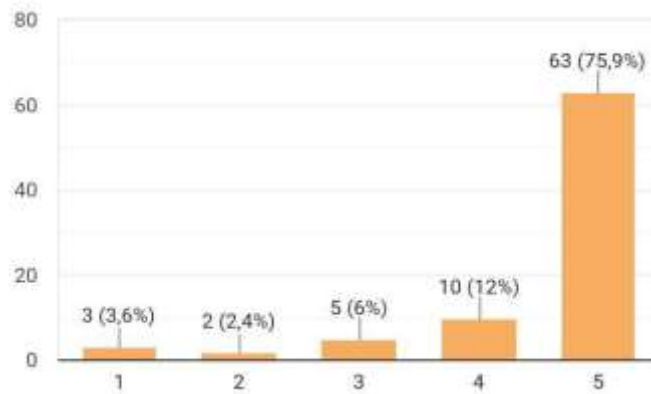
The analysis shows that all categories of question items have positive results from 100% of respondents, and more than 55% gave a positive response to the Gojek application. This proves that the Gojek application is prevalent among students, especially in the Indramayu area.





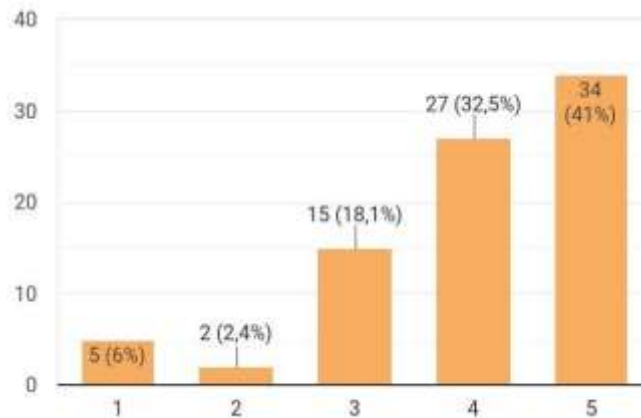
**Figure 6 Troublesome question graph**

The question "difficult or reassuring" scored 46 out of 83 respondents with a percentage of 55.4%, which is a positive evaluation score. This means that the Gojek application is fun with the available features.



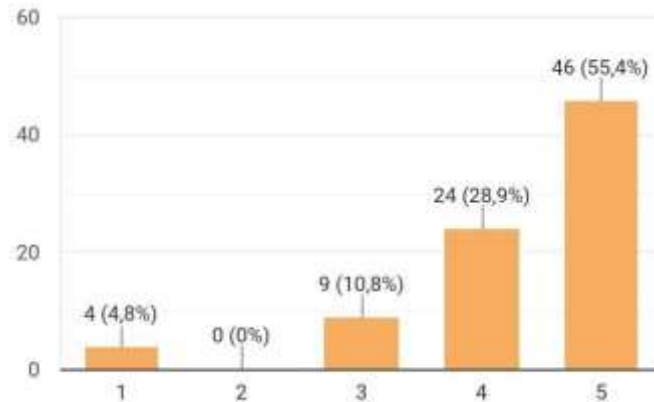
**Figure 7 Difficult question graph**

The highest score of all existing questions is on the "difficult or easy to find, getting a score of 63 out of 83 respondents with a percentage of 75.9%.



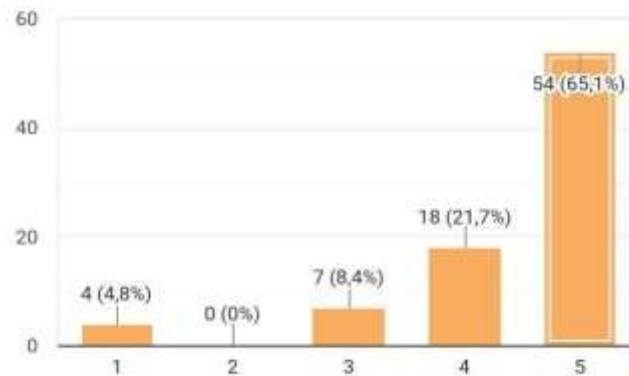
**Figure 8 Query graphs are neither streamlined nor efficient**

The question "not efficient or efficient" gets a positive response from students and students with a percentage of 41%.



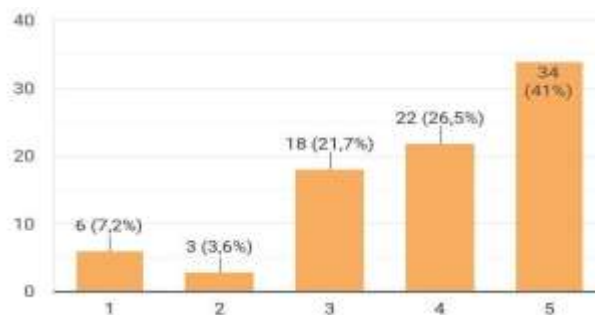
**Figure 9 Difficult or easy-to-learn questions graph**

The question "difficult or easy to learn" scores 46 with a percentage of 55.4%. This means that the Gojek application is easy for students to learn.



**Figure 10 Difficult or easy-to-use question graphics**

Questions that are difficult or easy to use receive a score of 54 with a percentage of 65.1%, which is in the positive area. Besides being easy to learn, the Gojek application is also easy to use.



**Figure 11 Monotonous or creative question graph**

The last question, "monotonous or creative", obtained a value of 34 respondents with a percentage of 41%, which means having a positive evaluation. Showing the features of the Gojek application can attract students' interest in using the Gojek application. Quality of service both in terms of the reliability of the driver driving, the responsiveness of the driver, the empathy of the driver, the guarantee of getting to the destination, and also the physical form or equipment of the vehicle are things that are assessed by students of the Faculty of Economics and Business when using online transportation services. According to Lupiyoadi, service quality is a factor that determines the level of success and quality of the company where the company's ability to provide quality service to consumers and as a company strategy to defend itself and achieve success in facing competition. Service quality has a significant influence on customer satisfaction. The better the quality of service provided, the higher customer satisfaction with the service.

According to Fandy, price is often used as an indicator of satisfaction when the price is associated with the perceived benefits of an item or service. Satisfaction is the ratio between what is expected and the actual price. Thus, at a certain price level, if the benefits felt by consumer's increase, then their satisfaction will also increase. Vice versa, satisfaction with an item or service will decrease along with the perceived benefits at a certain price level. If the price is too high, the company is considered not to care about customers or is considered to be a fraud. Conversely, if the price is too low, customers may doubt the company's ability in terms of service quality. Respondents considered that the prices set by online transportation services were affordable and that the existing application services were to the needs of students. Prices that are easily accessible by the public can increase consumer satisfaction in using the products or services of the company.

The brand image signifies a certain quality so satisfied buyers can with the product. Although competitors can imitate product processes and designs, they cannot easily convey impressions that have lingered in the minds of people and organizations for years through product experiences and marketing activities. Branding can help secure a competitive advantage. This case shows that brand image in online transportation influences consumer satisfaction. Brand image is an element that contributes to the success of a marketing organization, both business and non-profit companies, manufacturers and service providers, and local and global organizations.

## Conclusions

The study results can be concluded: from all categories of user ratings, the experience with the Gojek application shows a positive assessment. The Gojek application provides an experience for its users. The benchmark for this application can be found on a "good" scale compared to Grab's online transportation application. This proves that the Gojek application is a high-quality online transportation application worldwide that is relatively balanced with other applications. In general, the User Experience Questionnaire can analyze the user experience of millennials and generation Z who use online delivery services, namely Gojek.

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