Service quality factors: Web navigation on online transportation in Indonesia

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Abstract. The purpose of this research to analyse the service quality of online transportation an area in Indonesia, seen from consumer perceptions, and map service quality attributes based on consumer perceptions. The research method used in this research is Service Quality Analysis (SERVQUAL) and Importance Performance Analysis (IPA). The population in this research is online transportation consumers, who have used a go ride service at least 1 time. The sampling used in this research was sampling quota of 200 respondents. The results of this research indicate that overall there is a gap between performance values with consumer expectations of -0.5, so it can be assumed that the service quality of Gojek in the region according to consumer perceptions is quite good. Based on the results of the mapping it was found that the factor of ease of web navigation became one of the factors of the services quality of online transportation. So that these factors must be a concern of the company.

1. Introduction
According to the Indonesian Internet Service Providers Association (APJII) quoted by Kompas in February 22, 2018, the population of Indonesia currently reaches 262 million people, more than 50 percent or around 143 million people have been connected to the internet throughout the year of 2017. So it can be concluded that some population of Indonesia citizen has taken advantage of internet access. The large number of Internet users is a huge opportunity for E-Commerce in Indonesia. So that the end - eventually more moldy E-Commerce companies in Indonesia. Even the development of the Internet today also raises Fin-tech (Financial Technology) which makes it easy for people to borrow money through virtual network. The development of E-Commerce in Indonesia also gave birth to Online-based Transportation.

Online transportation in Indonesia has been developing nowadays and now there are two large companies in this industry, namely Gojek Indonesia and Grab. Gojek Indonesia is an Indonesian startup company that has grown and developed so rapidly. Gojek at the beginning of its presence only focused on the service called as Go-Ride. But recently Grab as its main competitor also issued similar services, that called Grab Bike, so it increases Online transportation competition in Indonesia to become tougher.

The researcher tried to conduct surveys to 25 Gojek drivers to find out the consumer’s proportion based on their work which using Go Ride Service. Of the 20 Consumers they get in a day, most of the driver answer that 10 people are Students / 4 people are college students, 4 people are Employees, 3 people are housewives, 2 people are Civil Servants and the rest is others.
Next is the display of the gojek navigation system via an android smartphone, the location of the pickup is marked in green while the destination location is marked in red as follows:

![Gojek Driver Navigation System](image)

**Figure 1.** Gojek's driver navigation system.

In the navigation view in the Gojek application there are two different location points between the pickup location and the destination. Pickup locations are marked in green while the destination location is marked in red. Pick-up accuracy is often a problem in the service process. This can occur because of poor internet connection quality or inaccurate customer regulation, resulting in service delays.

To improve service quality in modern transportation, organizations need to use sophisticated tools, management, monitoring, and coordination of passenger transportation [1]. In his research entitled “models of estimation of application of passenger service quality parameters” obtained results that when assessing the passenger service quality by consumers, trip time appear to be the most important, and time of waiting for transport appears to be the most dependent on the work organization. Transportation services are advised to use quality assessments using indicators of regularity and reliability.

Use sophisticated tools and techniques for organization, management, monitoring and coordination of passenger transportation [2,3]. These problems were resolved through the introduction of intelligent transportation systems. Information about the parameters of traffic flow increases traffic management [2,4].

The problems that are the main issues in the study are the length of travel time used in transportation, while in this study the issue of the issues raised is more technical in web navigation performance that is being used by corporate organizations. From the description above, the researcher is interested in conducting research related to the quality of Gojek service. With the analysis of the phenomena described above, the researcher will conduct a study entitled "Service Quality Factors: Web Navigation On Online Transportation in Indonesia”.

2. Literature review

An important element when consumer has an expectation of service is the quality of the service. As for what can affect consumer expectation towards service according to Zeithaml et al. are [5]:

- Word of mouth communication. Factor that has great potential to influence consumer expectation is information received from other people who already feel the quality of service
- Personal needs. Consumer expectation can also be influenced by personal desire.
Past experience. The value of consumer expectation can also be influenced by a customer's past experience.

External Communication, communication that carried out by service provider company in the form of advertising or direct communication which can also influence the expectation of consumer.

Company’s failure in service can be caused by five gaps which often occurs in service quality [6]. The five GAPs are:

- Gap 1, the difference between consumer expectations and management perception of consumer expectation.
- Gap 2, the difference between management perceptions and service specifications expected by consumers. Because there is no clear standard in service, this gap can occur even though management has been able to feel what consumers want.
- Gap 3, the difference between service quality specifications and service to consumer.
- Gap 4, the difference between delivering services and external communication to consumer.
- Gap 5, the difference between consumer expectations and service received by consumer.

According to Kotler and Keller, service is various actions that someone offers to others, basically intangible and does not produce ownership [7]. It is also similar to what was said by Gronroos in Tjiptono which explains that service is a process of an invisible activity (intangible) that occurs between consumer and service provider or with physical resource provided to meet consumer needs [8].

Service is something that is abstract and cannot be seen because of its intangible nature. By comparing expectations and reality received by the consumer, the quality of service will be measured. In line with what Tjiptono said, "service quality is the expected level of excellence and control over the level of excellence to meet customer needs" [8].

The concept of SERVQUAL (Service Quality) was first introduced by Parasuraman et.al [9]. They found the phenomenon that the problem of quality of product and service became a central problem faced by the company. According to him the quality of service will be clearly seen when viewed from consumer perceptions. So that A. Parasuraman.et.al defines Service Quality is how much the difference between the reality of services received with consumer expectations for the service [9]. Initially SERVQUAL used 10 dimensions but Parasuraman et al. in the next study simplified it into five dimensions because according to him there were several overlapping dimensions [6]. The five dimensions are:

- Reliability, service provider services that match expectations and promised.
- Responsiveness, employee's responsiveness in providing service to consumer.
- Assurance, ability to provide security and trust by providing service convincingly and politely.
- Empathy, providing service as a whole by giving deep attention to consumer.
- Tangible (physical evidence), various things related to the physical form of service.

Importance Performance Analysis (IPA) is used to determine the attributes of service quality dimensions that need to be prioritized to be optimized [10]. The work of this method is by comparing the expectations of consumer for service (Importance) with perceived service (Performance). Later the results of this analysis will be described in a matrix or also called the Cartesian diagrams.
Figure 2. Research framework.

In figure 2 above the research framework is explained, from five dimensions to assess the quality of service. The dimensions explained basically are analyzed based on the gap that occurs, namely service expectations and service perceptions by using the SERVQUAL concept so that it knows some important things, becomes the strength and analysis material to produce several optimized service quality attributes.

3. Research method

This research uses quantitative descriptive methods. The population in this research is the Go Ride online transportation customers in the city of Garut whose numbers are unknown. The type of sampling used is Non Probability Sampling with a quota sampling technique. The criteria are online transportation customers Go Ride who have used this service more than once. According to Hair, et al. the number of samples is at least 5 times the number of indicators used [11]. The number of samples of 200 people obtained proportionally consisted of 100 students, 20 civil servants, 40 private employees, 30 housewives and 10 other professions. The research was conducted in the city of Garut during June to November 2018. The data analysis technique used are Servqual analysis and Importance Performance Analysis (IPA).

3.1. Research instrument

The questionnaire in this research is a questionnaire that refers to the SERVQUAL instrument where later the questionnaire will be made into 2 statements. First about consumer expectations (Expected service) while the second about perceived services (Perceived service), with interval data scale. Questionnaires were given to respondents who had already used Go-Ride services. Measurements of respondents' attitudes on the questionnaire using the differential semantic scale.

The differential semantic scale is used to measure attitudes, opinions, and perceptions of a person or group of people only in the form of not multiple choices or checklists, but arranged in a continuum line with "very positive" answers located on the right side of the line, and "very negative" line.

The following is a sample research questionnaire for the dimensions of tangible:
Table 1. Example of the questionnaire.

| Dimension | Score | (+) |
|-----------|-------|-----|
| Tangible  |       |     |
| 1 The navigation on Go-Jek application is worth using | Very not needed at all | 1 2 3 4 5 6 7 |
| 2 Complete driving attributes such as Go-Jek helmets and jackets | Very not needed at all | 1 2 3 4 5 6 7 |
| 3 Cleanliness of the Go-Jek helmet and jacket worn by drivers | Very not needed at all | 1 2 3 4 5 6 7 |
| 4 Cleanliness of Go-Jek driver's clothes | Very not needed at all | 1 2 3 4 5 6 7 |
| 5 The neat appearance of the Go-Jek driver | Very much needed | |

In table 1 an example of a questionnaire for the Tangible dimension with a Semantic Differential attitude scale, where the left side of the respondent's answer score is "very negative" and the right side of the answer is "very positive". The questionnaire for the same statement was given the first two times for the perceived service and the second one for the expected service.

4. Results and discussion

4.1. SERVQUAL analysis
Servqual's analysis in this study consisted of Analysis of item by item, dimension by dimension and as a whole.

Table 2. Analysis SERVQUAL Item by item.

| No | Attribute | Performance (Perceived) | Expected (Expected) | Gap |
|----|-----------|-------------------------|---------------------|-----|
| 1  | The navigation on Go-Jek application is worth using | 5.9 | 6.28 | -0.38 |
| 2  | Complete driving attributes such as Go-Jek helmets and jackets | 5.46 | 5.99 | -0.53 |
| 3  | Cleanliness of the Go-Jek helmet and jacket worn by drivers | 5.49 | 6.2 | -0.71 |
| 4  | Cleanliness of Go-Jek driver's clothes | 5.65 | 6.27 | -0.62 |
| 5  | The neat appearance of the Go-Jek driver | 5.43 | 6.06 | -0.63 |
| 6  | When driving users can drive the vehicle properly | 5.95 | 6.56 | -0.61 |
| 7  | Drivers prioritize the convenience of Go-Jek users | 5.97 | 6.52 | -0.55 |
| 8  | Drivers comply with traffic regulations | 6.18 | 6.57 | -0.39 |
| 9  | The driver controls the road and the areas that the user wants to reach | 5.61 | 6.2 | -0.59 |
| 10 | Drivers are able to drive or deliver goods at the right time | 5.75 | 6.25 | -0.5 |
| 11 | Drivers are quick to respond to orders and contact the customer immediately | 5.85 | 6.34 | -0.49 |
Table 2. Cont.

| No | Dimension                                                                 | Performance (Perceived) | Expected (Expected) | Gap   | Ranking |
|----|---------------------------------------------------------------------------|-------------------------|---------------------|-------|---------|
| 12 | Drivers pick up motorcycle taxi users quickly                             | 5.67                    | 6.28                | -0.61 |         |
| 13 | Friendliness of drivers towards Go-Jek users                              | 5.77                    | 6.38                | -0.61 |         |
| 14 | Be polite to Go-Jek users and do not differentiate                        | 5.89                    | 6.48                | -0.59 |         |
| 15 | Drivers are willing to lend personal funds to buy food orders ordered by users | 5.79                    | 6.06                | -0.27 |         |
| 16 | Services that guarantee the satisfaction of Go-Jek users                  | 5.92                    | 6.41                | -0.49 |         |
| 17 | Drivers prioritize the safety of Go-Jek service users                      | 6.08                    | 6.52                | -0.44 |         |
| 18 | Go-Jek guarantees shipment of goods and destination                       | 6.08                    | 6.51                | -0.43 |         |
| 19 | Go-Jek guarantees the accident risk of its service users                  | 5.72                    | 6.21                | -0.49 |         |
| 20 | Go-Jek maintains the confidentiality of the personal cell phone number of Go-Jek service users | 5.88                    | 6.39                | -0.51 |         |
| 21 | When it rains the driver is willing to lend a raincoat to Go-Jek users    | 5.71                    | 6.28                | -0.57 |         |
| 22 | Drivers prioritize the security of service users                          | 6.05                    | 6.49                | -0.44 |         |
| 23 | Drivers are able to fulfill what services are needed by users             | 5.92                    | 6.37                | -0.45 |         |
| 24 | Driver Go-Jek maintains good relations with service users                 | 5.85                    | 6.27                | -0.42 |         |
| 25 | Go-Jek drivers are able to create a good atmosphere with service users    | 5.74                    | 5.93                | -0.19 |         |

The biggest Gap value occurs in the third attribute which is "cleanliness of the helmet attributes and Gojek jackets worn by drivers" with a value of -0.71. For cleaning the helmet is still lacking, because the drivers themselves rarely wash their helmets and they also not providing a net for head cover of the consumers. While the smallest Gap value is in the 25th attribute, which is "Gojek drivers are able to create an atmosphere that is not rigid with service users" with a Gap value of -0.19. Indeed, Gojek drivers in Indonesia are easily familiar with consumers, so that when they bring consumers to their destinations, communication is often established, so that the atmosphere is not rigid, but these attributes are still perceived by consumers to be lacking and must be improved.

Table 3. Analysis SERVQUAL dimension by dimension.

| No | Dimension     | Performance (Perceived) | Expected (Expected) | Gap     | Ranking |
|----|---------------|-------------------------|---------------------|---------|---------|
| 1  | Tangible      | 5.84                    | 6.16                | -0.576  | I       |
| 2  | Reliability   | 5.89                    | 6.417               | -0.527  | II      |
| 3  | Responsiveness| 5.79                    | 6.306               | -0.516  | III     |
| 4  | Assurance     | 5.934                   | 6.405               | -0.471  | IV      |
| 5  | Emphaty       | 5.851                   | 6.265               | -0.414  | V       |

Based on the table above it can be seen that the value of Performance is lower than the expected value so that the Gap Value is all negative. This could also indicate that the quality of Gojek service in Indonesia is still low. The biggest gap value is found in the Tangible dimension with a Gap value of -0.576. The value of the Gap is negative which negatively illustrates that the form of Gojek physical services in the form of the condition of the vehicle and the appearance of the driver.
Overall SERVQUAL's Gap values can be determined by reducing the total Performance Score (P) with the total expectation score (E). As for more detailed calculations can be seen below:

\[ Q \text{ (Quality of Service)} = P \text{ (Perceived)} - E \text{ (Expected)} \]

\[ Q = 5.81 - 6.31 = -0.5 \]

Overall calculation of Gap value is -0.5. A negative gap value indicates that there is gap between the value of performance and consumer expectation. The performance provided by Gojek has not been able to meet consumer expectations in Indonesia. The value of -0.5 is a not too large Gap, so it can be assumed that consumers in Indonesia are quite satisfied with the performance given at this time. Consumers are quite satisfied in a number of ways, namely the condition of a decent driver's vehicle, the driver is able to deliver with a time that is efficient and responsive when getting an order by immediately contacting consumers.

4.2. Attributes mapping using Importance Performance Analysis (IPA)

Service quality attributes are mapped in a Cartesius diagram consisting of quadrant A (Top priority), quadrant B (maintain performance), quadrant C (low priority), and Quadrant D (excessive).

In table 2 above, it can be seen that the Gap score is all negative so that it can be indicated that according to employees, the quality of services provided by Gojek in Indonesia is still far from expectations. The biggest Gap score is in the 9th attribute "Driver Gojek knows the road and areas that the user wants to go" with a score of -0.85 followed by the 5th attribute "Appearance of a neat and fragrant Gojek driver" and the 12th attribute "Driver picks up Gojek users quickly " with the same score of -0.68. Employees who are filled by young executive and worker, both employees and factory workers do indeed need a timeliness so that they are not late in entering the workplace. According to them, the mastery of roads and picking up quickly is very important. On average, employees make reservations early in the morning, so sometimes there will be a delay in pick-up because the traffic conditions are heavy. While the smallest Gap Score is in the 15th attribute, which is "drivers are willing to lend personal funds to
buy food orders ordered by users" with a score of -0.1 and attribute 25, which is "Gojek drivers are able to create an atmosphere that is not rigid with service users" with a score -0.23.

10 attributes are in the B quadrant. Keep up the good work. These attributes are Attribute No. 6 "Driving the vehicle well when delivering Go-Jek users", attribute No. 7 "Driver Go-Jek Driving with the convenience of users of Go-Jek", Attribute no 8 “Driver Go-Jek complies with traffic regulations", Attribute no. 11 "Go-Jek driver responds quickly to orders and immediately contacts the buyer", Attribute no. 14" is polite towards Go-Jek users and does not differentiate ", No. 16 attribute 'service that guarantees Go-Jek user satisfaction', Attribute no. 17 "driver prioritizes safety of Go-Jek service users", Attribute no. 20 'Go-Jek guarantees safe shipment and reaches destination ", Attribute no. 22" Go-Jek driver prioritizes service user security "and No. 23 attribute" driver Go-Jek is able to fulfill what services are needed by service users".

11 attributes are in the quadrant C low priority (low priority). These attributes are Attribute No. 2 "Completeness of driving attributes such as Go-Jek helmet and jacket", Attribute No. 3 "cleanliness of helmet attributes and Go-Jek jackets worn by drivers", No. 4 attribute "Go-Jek driver's cleanliness", Attribute no. 5 "Appearance of the Go-Jek driver that is neat and fragrant", Attribute No. 9 "Driver Go-Jek controls the road and areas that the user wants to go", Attribute no 10 "Go-Jek driver is capable of driving or sending goods with efficient time ", Attribute No. 12 "driver picks Go-Jek users quickly ", Attribute no 15" driver is willing to lend personal funds to buy food orders ordered by the user ", Attribute no.19" Go-Jek company guarantees accident risk user services ", Attribute no 21" when the rain driver is willing to lend a raincoat to service users "and finally Attribute No. 25" Go-Jek driver is able to create an atmosphere that is not rigid with a suit user a".

5. Conclusion
The conclusions that can be drawn based on the results of data processing and analysis that have been carried out. Overall Gap Score between perceived and expected expectations of service is negative. A negative Gap score indicates that Gojek service performance has not been able to meet consumer expectations. According to the perceptions of consumers, the quality of Gojek service in Indonesia is still lacking. This is evidenced by the negative Gap score. The services that Gojek provides have not been able to meet consumer expectations so that negative Gap scores are all in various calculations, both based on item-by-item analysis, dimension-by-dimension and overall score. After being analyzed using the Cartesian diagram in the IPA method as a whole the results were obtained that: There are 1 attribute in the quadrant A concentrate here (Top Priority). This means that this attribute must be a top priority for Gojek to be immediately corrected so that customer satisfaction can increase, 10 attributes in the B quadrant keep up the good work. These attributes are Attribute no. 6, attribute no. 7, Attribute no. 11, Attribute no. 14, Attribute no. 16, Attribute no. 17, Attribute no. 18, Attribute no. 22 and Attribute no. 23. Attributes that enter this quadrant are very good according to consumers, the performance must be maintained by the service provider, 11 attributes are in the quadrant C low priority. These attributes are Attribute No. 2, Attribute no. 3, Attribute no. 4, Attribute no. 5, Attribute no. 9, Attribute no 10, Attribute no. 12, Attribute no. 15, Attribute no 19, Attribute no 21 and final Attribute no 25. Attributes that enter into this quadrant according to consumers are not satisfactory and the drivers are not optimal in providing services so that it needs to get improved service performance, 2 attributes are in quadrant D possible overkill. These attributes are: Attribute no. 1 and Attribute no. 24. Attributes in this quadrant according to consumers are very satisfying but their performance is considered excessive. Gojek can focus more on improving the performance of the attributes found in the A and C quadrants.

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