The Analysis Of Service Quality Using Importance Performance Analysis For Mrt Jakarta

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ABSTRACT

Public infrastructure and congestion issues become salient problems in Indonesia. According to INRIX Global Traffic Scoreboard (2018): Jakarta was ranked as twelfth worst in the world. Air quality also becoming another issues that derived from traffic congestion causing air pollution. To mitigate this issue, government has been established MRT Jakarta in 2019. This study aims to evaluate and improving service level of Moda Raya Terpadu (MRT) in order to encourage more people using public transportation, moreover altering people using public transportation would reduce the amount of fossil fuels and reducing bad air pollution for a better climate. Methodolgy of the research using service quality theory with five dimension from Parasuraman et. al, and extended in Importance Performance Analysis (IPA) method. Therefore, data was distributed using questionnaire with 18 item measurement and 102 respondents was collected. As a result, tangibility, reliability, and responsiveness dimension had been classified in quadrant one, followed assurance dimension in quadrant two, however empathy dimension had been measured in quadrant four and indicates to be improved.

Kata kunci: Service Quality, IPA. MRT Jakarta

PRELIMINARY

Jakarta as capital city of Indonesian had serious problem of congestion, according to INRIX Global Traffic Scoreboard (2018): Jakarta was ranked as twelfth worst in the world, in addition, almost 23% drivers spent their times much longer when commute to home because of congestion. Data from (transportation ministry 2010), shows the number of automotive rose up gradually almost 9,5% each year while road construction length of road, merely about 0,01% each year. Another complex situation caused by congestion is their exhaust while burning fuel, according to AQLI (*air quality life index*) ; there are astounding number increase in gasoline and diesel that have a great contributors to air pollution. To conclude this situation, a significant investment in public transport infrastructure will be needed to improving the system, reaching wider coverage destination, consistent in time and convenient for commuters in order to encourage residents changing their community habit to using public transportation. Meanwhile, at the early in 2019, Indonesian central government announced MRT as public transportation in Jakarta. It glanced by some researcher and expert to avoiding gridlock foreseen because of the transport infrastructure being uncapable to mitigating notorious traffic congestion. The system operation re-emerged into two phases, Firstly in phase 1 scheme: the railroad covered approximately 15.7 kilometer distance started at Lebak Bulus in South Jakarta and finished at the Hotel Indonesia in Central Jakarta and provides seven elevated and six underground stations. In addition, phase 2 construction plan predicted to be complete in 2024 followed by operational line in 2025.

While the construction of phase 2 still on progress, investigation in this present phase become prominence, in order to avoiding the misunderstanding between consumer (citizen) and service provider. Several study from researcher, such as : (Transportation Research Board, 1999); (Randheer, AL-Motawa, & Vijay. J, 2011) suggest service quality as tools to measuring consumer perception of quality service in public transportation. Inspite of all the elements of service quality are important, improving inefficient elements would lead into a greater effect of quality improvement (Grujičić, Ivanović, Jović, & Dorić, 2014) therefore IPA method would be extended in this research to spot the importance elements

Nonetheless, considering study from , (Dell'Olio, Ibeas, & Cecin, 2011)different consumer socioeconomics have a consequences in their expectation, this research specifically choose a worker. The main reason are: firstly, the location of MRT embedded in Central City of Jakarta and connecting in Business District routes, in fact most of office workers are the consumer in MRT (Detik Finance 2019). This research aims to evaluate and improving service level of Moda Raya Terpadu (MRT) Jakarta as a suggestion to government in order to encourage more people using public transportation, moreover altering people using public transportation would reduce the amount of fossil fuels and reducing bad air pollution for a better climate

LITERATURE REVIEW

Service Quality

Earlier study in service quality area was derived from (Parasuraman et. al), as a management tools to assessing the quality of service from consumer perception while acquire the reality of services. There are several elements have been used by previous researcher to measuring service quality. Firstly, studies from (Eboli & Mazzulla, 2008) service quality can't to be examine from appearance because of the intangible of people feeling. Secondly, the outcome of service is single used without change to be stored. The other components of services have inseparate from process and outcome services. Lastly, the unstable from the a variety level of service delivered (heterogenity). According to (Parasuraman, A., Zeithaml, V., Berry, 1988);(Yaseen & El Qirem, 2018) : instrument of service quality was being measured by services characteristics for instance; *tangible, reliability, responsiveness, assurance, emphaty*

Table 1 : Service Quality measurement

| No	Dimension	Number of attribute	Attribute Description
1	Tangible	1	Modern furnished facilities
		2	The train show in good condition
		3	Staff appearance looks well dressed and neat
		4	Managing complaints in effective way
2	Reliability	5	Punctuality time in arrival and departure

		6	Service provider have responsible to passenger complaints
		7	Maintained seats for passengers (clean)
		8	Trusted and dependable
3	Responsiveness	9	Staff managing passenger in responsive way
		10	Availability of Maps/route in station
		11	Provides an easy access while ordering ticket
4	Assurance	12	Have good queue management system
		13	Providing safety measurement for passenger (medical room for passenger)
		14	Provide price stability and transparency
5	Emphaty	15	Prioritizing passenger need
		16	Staff members have a great personality (courteous, helpful)
		17	Staff serve each passenger well
		18	Showing a non-discriminatory service performance

Source: Author (2019)

Importance Performance Analysis

Importance Performance Analysis being used as a tool for in practical managerial area to measuring performance. According to, index performance and importance were illustrated in horizontal and vertical line, respectively. As a result, (Grujičić et al., 2014) each line divided space into four quadrant to be classify such as; Quadrant I is labelled as (concreate here), Quadrant II labeled as (keep up good work), Quadrant III was labelled (low priority), Quadrant IV was labelled as (possible overkill)

Figure 1 : Importance Performance Analysis
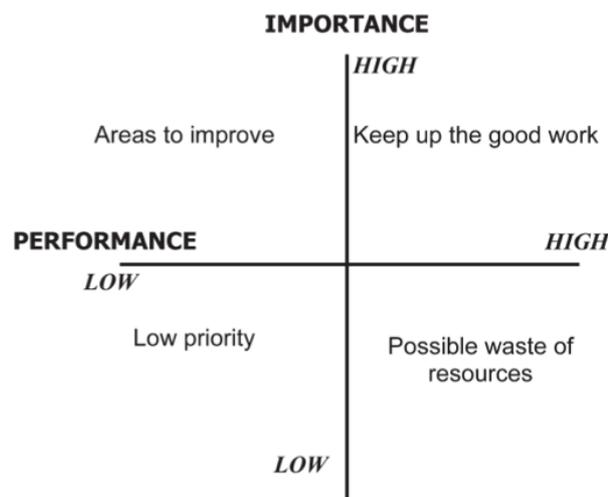
Source : (Martilla & James, 1977); (Grujičić et al., 2014)

RESEARCH METHOD

To meet the certain criteria of the subject, this research was following purposive sampling technic. In addition, quantitative method was designed with closed questionnaire through five dimensions of service quality (Parasuraman, A., Zeithaml, V., Berry, 1988); (Tjiptono & Chandra, 2011)): *tangible, reliability, responsiveness, assurance, empathy*.

Total 102 respondent had distributed in questionnaire with 18 item attributes of service quality was adopted ranging from number 1 represent (*not at all important*) until 5 is (*extremely important*), therefore it was given to commuter while using MRT at Bundaran Hotel Indonesia station. Furthermore, collected data from consumer expectation and provider performance will be indexed in four cluster Importance Performance Analysis (IPA) to made an analysist.

RESULTS

The calculation value of each service attribute between passenger expectation and reality are provides in table 2

Table 2 : Service Quality Attribute Value

No	Attribute	Nilai Harapan	Nilai Kinerja	Nilai GAP
1	Modern furnished facilities	4,21	3,85	-0,36
2	The train show in good condition	4,34	4,42	0,08
3	Staff appearance looks well dressed and neat	4,26	4,23	-0,03
4	Managing complaints in effective way	4,32	4,12	-0,2
5	Service provider have responsible to passenger complaints	4,46	3,92	-0,54
6	Punctuality time in arrival and departure	4,43	4,52	0,09
7	Maintained seats for passengers (clean)	4,67	4,52	-0,15
8	Trusted and dependable	4,42	4,58	0,16
9	Staff managing passenger in responsive way	4,52	4,02	-0,5
10	Availability of Maps/route in station	4,62	4,52	-0,1
11	Provides an easy access while ordering ticket	4,33	4,37	0,04
12	Have good queue management system	4,52	4,42	-0,1
13	Providing safety measurement for passenger (medical room for passenger)	4,02	4,46	0,44

14	Provide price stability and transparency	4,11	4,34	0,23
15	Prioritizing passenger need	4,23	4,02	-0,21
16	Staff members have a great personality (courteous, helpful)	4,54	3,82	-0,72
17	Staff serve each passenger well	4,58	4,51	-0,07
18	Showing a non-discriminatory service performance	4,57	4,62	0,05

Source: (Author 2019)

Furthermore, the result from each value calculation would be analyzed through Importance Performance Analysis as a tools to putting each atttribute into four quadrants.

Figure 2 : Importance Performance Analysis Metrix
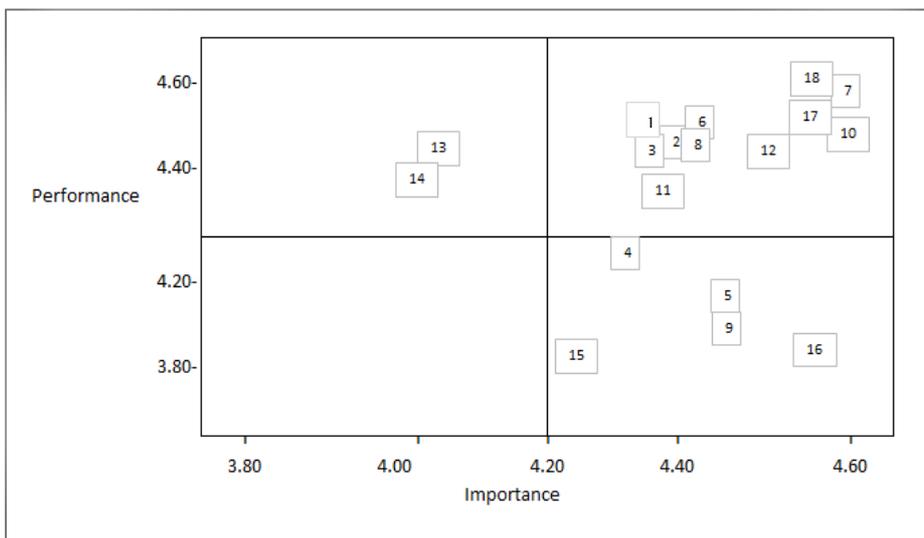
Source: Author (2019)

Quadrant 1*(Keep Up Good Work)*

According to Figure 2, there are several classification of each attribute to be described, Firstly, in table 3 below will provides information about Quadrant 1 (*Keep up Good work*) classification :

Table 3 : Quadrant 1*(Keep Up Good Work)*

No	Attribute
1	Modern Furnished Facilities
2	The train show in good condition
3	Staff appearance looks well dressed and neat
6	Punctuality time in arrival and departure
7	Maintained seats for passengers (clean)
8	Trusted and dependable

10	Availability of Maps/route in station
11	Provides an easy access while ordering ticket
12	Have good queue management system
17	Staff serve each passenger well
18	Showing a non-discriminatory service performance

Source: Author (2019)

Looking at the data, almost half of all number of attributes have meet the expectation of passengers. especially in tangibility, reliability, and responsiveness dimension, this findings indicates that the passengers give a positive evaluation of this dimension and need to be responses to keep up good work by services providers

Quadrant 2 (*Possible Overkill)*

In the second table of Importance Analysis Performance will describe about the possible overkill, that will be illustrated in table 4 below

Table 4 : Quadrant 2 (*Possible Overkill)*

No	Attribute
13	Providing safety measurement for passenger (medical room for passenger)
14	Provide price stability and transparency

Source: Author (2019)

Based on table 4, the evaluation attributes of providing safety measurement for passenger and price stability had classified into *(possible overkill).* It indicates both of attributes of assurance have provides a great performance while most of passenger perception feels it over expect for their importance. However, two of that attributes still need to be maintained to handle great service quality.

Quadrant 4 (*Concentrate here)*

In regards of rest attributes had reported in table 5 with the detail information each attributes

Table 5 : Quadrant 4 (*Concentrate here)*

No	Attribute
4	Managing complaints in effective way

5	Service provider have responsible to handling passenger complaints
9	Staff managing passenger in responsive way
15	Prioritizing passenger need
16	Staff members have a great personality (courteous, helpful)

Source: Author (2019)

The data shows several attributes was classified in quadrant four. Overall, almost of staff performance were evaluated in less performance, especially for delivering services for passenger, such as managing their complaints and handling. At this point passenger expected more service that need to be prioritized by service provider

DISCUSSION

In Conclusion, evaluating all service quality measurement using IPA tools help the services providers to made a classify of each attributes into four quadrant. Almost half of total attribute was evaluated in good performances. However, there are several attributes need to be improved by ministry of transportation.

looking at first data in quadrant one *(Keep Up Good Work)*, the data show tangibility, reliability, and responsiveness dimension had adhere passenger expectation, for instance: modern futuristic, provides a neat seat, and punctuality time. This a good indication for worker, based on(Yaseen & El Qirem, 2018),punctuality time is the important thing for workers. The other good performance criteria was being captured in assurance dimension including safety measurement and price stability, According to (Grujičić et al., 2014) to handling attribute quadrant two (*Possible Overkill)* the performance always have it have an over demand than importance, nonetheless the providers still need to maintain this attribute to meet the user criteria.

On the other hand, some attributes still need to be upgraded. The result from quadrant four shows a lot of attributes derives from empathy dimension, it gives a signal to emerge an improvement especially for managing complaints. To embark on, MRT is a new transportation provides to citizen and introduce new technology such as an automated ticket system, and map or schedule routes. undisputed, many passengers need

adaptation to using this information. To cope this situation, The government needs giving an service excellent learning to their employee to changing the way while delivering information, and the other one is giving an awareness how to read ticket system or read map routes in media.

Furthermore, this study also have several limitation, First to be mention, this research was conducted only at Bundaran Hotel Indonesia station, therefore it may be considered to extend larger sample at the other stations. In addition, extending research from (Dell'Olio et al., 2011) another approach in segmentation is necessary needed to be able responding each group needs, It important to acknowledge that different people have different needs and are motivated by different factors such as traveler and commuter to investigate more outlook, Furthermore this research also suggest researcher to made another point of view to attracting people using transportation to subdue air quality as a part of sustainable development goals.

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