Analysis of service quality on train passenger's perception by applying fuzzy topsis method

Gama Magistra Piche[1]*, Hendri Andi Mesta[1]
[1]Department of Management, Faculty of Economics, Universitas Negeri Padang, Padang, Indonesia

ABSTRACT

This study will only focus on the external side of the company, namely from the perspective of passengers who use transportation services from PT. Kereta Api Indonesia Divre II West Sumatra for the Padang-pariman route. In this study, the population size is unknown. Thus, determining the sample size of the population using the theory developed from Isaac Michael. The method of data collection in this study is observation, interviews, and questionnaires. In this study, researchers used the servqual method and fuzzy topsis ranking to measure service quality. The results of research on the quality of service in the West Sumatra Regional Division II train are from the five criteria studied by the researchers, namely, tangible, reliability, responsiveness, assurance, and empathy, there is the highest gap value on the responsivenesses criteria, namely the preference value of 0.9587, and the next is the tangible criteria. It was concluded that there are several criteria that have met the quality of service, namely the responsiveness criteria where passengers assess the response of train staff to what passengers need while at the station or train is good, as well as for tangible criteria, passengers feel the facilities on the train are able to satisfy train passengers. Meanwhile, the quality of service in the security or assurance department is considered by passengers to be normal. And for reliability and empathy, passengers rate about service qualities on these two criteria still not satisfying passenger.

ABSTRAK

Penelitian ini hanya akan fokus pada sisi eksternal perusahaan yaitu dari sudut pandang penumpang yang menggunakan jasa transportasi dari PT. Kereta Api Indonesia Divre II Sumatera Barat untuk rute Padang-pariman. Dalam penelitian ini, ukuran populasi tidak diketahui. Dengan demikian, penentuan ukuran sampel dari populasi menggunakan teori yang dikembangkan dari Isaac Michael. Metode pengumpulan data dalam penelitian ini adalah observasi, wawancara, dan angket. Dalam penelitian ini, peneliti menggunakan metode servqual dan fuzzy topsis ranking untuk mengukur kualitas pelayanan. Hasil penelitian kualitas pelayanan pada KA Divisi Regional II Sumbar dari lima kriteria yang diteliti peneliti yaitu, tangible, reliability, Responsiveness, assurance, dan empati, terdapat nilai gap tertinggi pada kriteria Responsiveness. , yaitu nilai Preferensi sebesar 0,9587, dan selanjutnya adalah kriteria tangible. Dari data hasil penelitian disimpulkan bahwa ada beberapa kriteria yang sudah memenuhi kualitas pelayanan yaitu kriteria responsiveness dimana penumpang menilai respon petugas kereta api terhadap apa yang dibutuhkan penumpang selama berada di stasiun atau kereta api sudah baik, serta Sedangkan untuk kriteria tangible, penumpang merasa fasilitas di kereta api mampu memuaskan penumpang kereta api. Sedangkan kualitas

pelayanan di bagian security atau assurance dinilai penumpang biasa saja. Dan untuk keandalan dan empati, penilaian penumpang tentang kualitas pelayanan pada kedua kriteria tersebut masih belum memuaskan penumpang. Untuk itu diharapkan PT. KA Kai Divre II Sumatera Barat kedepannya akan dapat meningkatkan kualitas pelayanannya karena akan mempengaruhi jumlah penumpang yang menaiki KA tersebut.

* *Corresponding author: e-mail: gamamagistrapiche@gmail.com*

INTRODUCTION

The scope of the industrial world, both goods and services, cannot be separated from the quality aspect. Quality is a key factor that will bring the success of a business, be it growth or increasing competitive position. Quality is the ability of a product or service to meet all passenger needs. (Heizer et al., 2017). The services provided between one service provider and other service providers are very varied according to the needs and desires of consumers. In achieving an orientation to customer satisfaction, the company's performance will determine consumer perceptions of the quality of services provided. Service quality has a concept that is often known as ServQual which has 5 (five) dimensions, namely physical evidence, reliability, responsiveness, assurance, and empathy. To provide good service quality and in accordance with what is expected by consumers, it is necessary to form the attitudes and behavior of the employees themselves because the human factor contributes 70%, therefore it is not surprising that service quality is difficult to imitate (Rosnaini, 2017).

The following is the number of train passengers at PT. Indonesian Railways Division II West Sumatra in 2018-2019.

Table 1. Data on the Number of Train Passengers at PT. Indonesian Railways Division II West Sumatra from 2018 to 2019

Year	Program	Realization	Percentage
2018	1.326.331	1.398.970	105,5%
2019	1.558.312	1.474.167	94,6%

Source: PT. Kereta Api Indonesia Divre II Sumatera Barat (2021)

Based on Table 1, the increase in the mobility of the population of the city of Padang and the city of Pariaman continues to increase every year. This is influenced by the increasing daily activities of the community, such as; work, school (educational reasons), tourism, returning home and transporting goods. Thus PT. Kereta Api Indonesia (Persero) Regional Division II West Sumatra as one of the providers of public transportation services must be able to meet the needs of the community.

In the city of Padang, rail transportation services are managed by PT. KAI Regional Division II (DIVRE II) West Sumatra which has an important role in increasing the demand for rail transportation services. One of the regular rail transportation services at PT. KAI DIVRE II West Sumatra which is still active today is the Sibinuang train which serves trips from Padang-Pariaman City.

According to information obtained from the PR division of PT KAI DIVRE II West Sumatra, the demand for the Sibinuang train which serves regular trips to Padang-Pariaman City has increased from 2018 to 2019.

Based on the results of the initial survey conducted by researchers on the train station, namely the Padang station or Simpang Haru station, the services provided by PT Kereta Api Indonesia Divre II West Sumatra currently to passengers in accordance with the researchers' initial interviews, passengers still have complaints about the services provided, as for the existing phenomena, including: 1. unfriendly staff, 2) no special carriages for women, 3) toilets that are not kept clean. 4). There are still many passengers who do not get seats that passengers should not stand when there is a high increase in the number of passengers and this causes inconvenience to passengers who have tickets because the train space becomes crowded, 5) Lack of choices or alternative departure hours, because it often happens surge in passengers because the departure schedule is still minimal.

By knowing the complaints felt by the passengers, this shows that the quality of services provided by PT. The Indonesian Railways Division II West Sumatra still has weaknesses. To achieve a good service quality is strongly influenced by good external service quality, an external perspective is used to understand what consumers expect, consumers feel, and customer satisfaction. Based on study (Sholikah & Iriananda, 2017) To measure the quality of service, the Fuzzy-Servqual method is used to determine the variable needs of passengers that are not met by calculating the gap between the services provided and the expectations of passengers as voice of costumers. The criterion that becomes the main priority for improvement and improvement of service quality is the Tangibles dimension. The results of the study show that the negative gap value is -0.912, meaning that passenger expectations have not been achieved. The results of the calculation of the Passenger Satisfaction Index (IKP) of 83.76%. Based on these results can be used as motivation to continue to improve the quality of service to its passengers.

The study (Awasthi et al., 2011) presents a hybrid approach based on SERVQUAL and FUZZY TOPSIS to evaluate the quality of urban transportation system services. The proposed approach consists of three steps. The first step is to develop a SERVQUAL-based questionnaire to collect data to evaluate the quality of metro transportation services. Questionnaires were shared with metro transit users in Montreal. In the second step, questionnaire responses were collected to produce an overall performance score to measure service quality using TOPSIS Fuzzy. The highest scoring alternative is finally chosen. In step three, we conducted a sensitivity analysis to determine how the criteria weighting affects the decision-making process. Then research (Lupo & Bellomo, 2019) This study discusses the evaluation of the quality of campus restaurant services (CRS). That proves the application of the CRS approach, that the employment that makes it possible to identify both best practices and identify the weaknesses of the services that must be addressed and the performance of the service can be explained in relation to the characteristics of the managerial context. Then, (Büyüközkan et al., 2011) Then the results of this study show that hospitals should focus more on specialists, interactivity and accuracy of trust services, the ability and responsiveness to satisfy from providing quality web services. This study will only focus on the external side of the company, namely from the perspective of passengers who use transportation services from PT. Kereta Api Indonesia Divre II West Sumatra for the Padang-Pariman route.

LITERATURE REVIEW

Service quality

Quality is the ability of a product or service to meet all needs, in this case a product or service can be said to be of quality if the product is able to meet the needs of its consumers. If a product is not able to meet consumer needs, the product can be said to be of poor quality (Heizer et al., 2017). Service quality is the result of customer assessment of how far the difference between expectations and the perceived reality of

a service they receive from the service provider (company), both in part and in whole. If the customer's perception of the service is as expected, the service quality is considered good, but if the customer's perception of the service is not as expected, the service quality is considered poor (Erica & Rasyid, 2018). The dimensions of service quality are Realibility, Responsiveness, Assurance, Empathy, and Tangile Parasuraman, Zeithaml, and Berry in (Erica & Rasyid, 2018). Passenger satisfaction will be achieved if the quality of products provided is in accordance with their needs (Munawaroh, 2015). Definition of quality according to experts: (Heizer et al., 2017), quality is the overall features and characteristics of a product or service that relies on its ability to satisfy the promised and implied needs. (Kotler, 2013), quality as an overall characteristic of service products that support the ability to satisfy needs. The definition emphasizes the focus of passengers. According to (Heizer & Render, 2011), quality is a product or service to meet the needs of consumers. (Harto et al., 2015) the quality of service provided to consumers to create customer satisfaction is the key to success to excel in business competition

According to Sampara Lukman quoted by (Sinambela, 2011), service is an activity or sequence of activities that occurs in direct interaction between a person and another person or machine physically, and provides passenger satisfaction. While in the Great Dictionary of Bahasa Indonesia described service as a thing, way, or the result of the work served. In another sense, according to (Moenir, 2010) the ministry is essentially a series of activities, because it is a process. As a process, the service takes place regularly and continuously, covering all organizations in the community. Then According to (Tjiptono, 2014) the characteristics of services can be described as follows: Intangible Inseparibility Varied (Variability) Perishability According to Gaspersz in (Ariani, 2014), quality management can be said to be "all activities of the overall management function that determine the wisdom of quality, purpose and responsibility, as well as implement it through quality management tools".

Consumment satisfaction

Consumer satisfaction is a person's level of feeling happy or disappointed that arises after comparing the performance / results of the product that is thought to the expected performance (Kotler & Keller, 2012). Satisfaction is also defined as a form of overall after-purchase evaluation that compares product performance perceptions with pre-buyer expectations Fornell 1992 in (Tjiptono, 2012). Conceptually, customer satisfaction can be described in Figure 1 below (Tjiptono 2014).
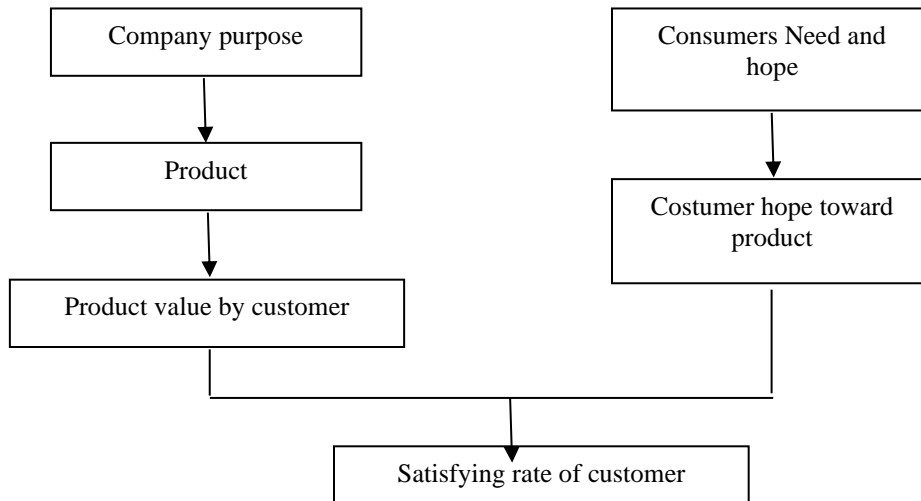

Figure 1.Costumer Satisfying Quality
(Source : Tjiptono, 2014)

Servqual

In the journal (Hartono, 2007) according to Parasuraman, Zeithaml, & Berry SERVQUAL method uses five measurement dimensions that can be used to measure the level of user perception of service quality and its effect on user satisfaction. The five dimensions of measurement in SERVQUAL include the dimensions of tangibles, reliability, responsiveness, assurance, and empathy dimensions.

1. Tangibles

    In the form of display or physical evidence of application services that describe the physical form of application services received by consumers. For example, service equipment such as vehicles, helmets and driver display.

2. Reliability

    The ability to provide the promised services reliably and accurately. When viewed in the field of online motorcycle taxi transportation services, a reliable service is when a driver is able to provide services as promised and help solve problems faced by consumers quickly.

3. Responsiveness

    Ability to help customers and provide services quickly. This dimension emphasizes attention and promptness when dealing with consumer requests, questions, and complaints.

4. Assurance

    Assurance or knowledge, courtesy, and ability of drivers to generate confidence and trust. This dimension may be very important in services that require a fairly high level of trust.

5. Empathy

    Personal care and attention given to consumers. The essence of the empathy dimension is showing consumers through the services provided that consumers are special, and their needs can be understood and met.

    Processes, components, and standards that are considered important by the customer is the essence of very important information. To meet the needs of the customer, a business or business must meet what the customer wants which this information is not only for profit for the company but also useful to review, analyze and make new breakthroughs in an effort to improve customer satisfaction (Hayes 1998) In this servqual method there are five gaps that can be seen in the picture below. (Kesuma, 2014) explained that the quality of service is measured by looking at the gap between the quality of service expected by users and the quality of service received by users. Therefore, it is necessary to measure the level of quality of service to know the performance of services provided by determining the gap between expectations and consumer expectations for a service received (Wijayanti & Noya, 2017).

    To be able to obtain this gap, the SERVQUAL questionnaire is used which is divided into two parts, namely the first part consisting of items that indicate the user's expectations for the application services provided. While the second part contains items that show the perception of the users of the service. Here is the equation of SERVQUAL according to (Parasuraman et al., 1985). The quality of service is the result of a passenger's assessment of how far the difference between expectations and the perceived reality of a service they receive from a service provider (company), both partially and overall. If the passenger's perception of the service is in accordance with expectations then the quality of service is considered good, but if the passenger's perception of the service is not in line with expectations then the quality of service is considered bad (Erica & Rasyid, 2018). With the good quality of service, new consumers will come and old consumers will become passengers, consumers assess the quality of service based on their perception of the technical results provided which is the process by which the results are delivered (Verriana &Anshori, 2018). According to Parasuraman, Zeithaml, and Berry in (Erica & Rasyid, 2018) there are five main dimensions to measure the quality of service. The main dimensions are: Reliability (Realibility) Responsiveness Assurance Empathy Physical Evidence (Tangibles).

Fuzzy logic

Fuzzy logic is an appropriate way to map an input space into an output space. For example: a taxi passenger tells the taxi driver how fast the vehicle is desired, the taxi driver will adjust the taxi's gas footing. Fuzzy system is a system based on rules (knowledge). The system is built by a collection of IF-THEN rules. Example: IF the engine is hot THEN turn the fan faster (Kusumadewi, 2006). Fuzzy logic is not only about two states but also recognizes a number of states that range from a false state to a true state(Zadeh, 2008).

According to (Nurdiyanto and Dodik, 2008) fuzzy logic is an extension of the crisp set, namely the set that divides a group of individuals into several categories. In actual conditions, some aspects in the real world, some conditions can be outside the mathematical model, this uncertainty drives the emergence of fuzzy logic, fuzzy logic allows users of unclear samples or if there is missing data and is able to analyze when there are some defects in the data (Aydin and Pak Dil, 2008).

In each engineering, there are two important sources of information is a sensor that uses numerical measurements of a variable (human) will provide instructions and descriptions about the system linguistically (Nurdiyanto and Dodik, 2008). According to (Anshori, 2012.) Information obtained from sensors is numerical information and information derived from human experts is linguistic. Numeric information is expressed in numbers, while linguistic information is expressed in Boolean logical words, an individual is confirmed as a member of one set only, while on a different set. How much of the excitation in the set can be seen in the value of its membership. According to (Nurdiyanto and Dodik, 2008) the reason linguistic information is often presented in fuzzy terms is

1. Communication is more suitable and efficient if done in fuzzy terms. If the exchange of information is done in numbers it will feel awkward, although the numbers have a high degree of precision.
2. Many real systems are too complex to describe in crisp terms. Often important information about a system is not precise and sometimes a lot of that information we get.
3. Our knowledge of things is basically fuzzy. Often we understand a theory, but we are not sure in detail.
4. Fuzzy numbers are used to express the concept of non-precise numbers, such as approaching "7", between "8 to 9", almost 5 and so on. A triangular fuzzy number is notified with number notified with M= (a,b,c), where a=b=c is a special fuzzy number, which states the fuzzy concept of set M approaching b, the triangular curve is basically a relationship between two lines (linear) as seen in the following image (Mustofa, 2006)
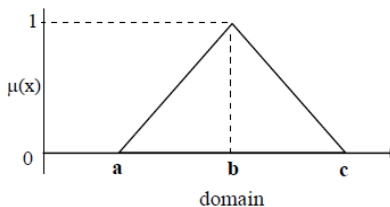

Figure 2. Triangle *fuzzy Curve*

Topsis method
Topsis is one of the multi-criteria decision-making methods that was first introduced by (Yoon & Hwang, 2011). According to (Kusumadewi, 2006) TOPSIS is one of the methods used to assist optimal decision making and solve practical decision problems. The reasons for using TOPSIS are:
1. The concept is simple and easy to understand
2. The computation is efficient.
3. Have the ability to measure the performance of decision alternatives in a simple mathematical form.

TOPSIS uses the principle that the chosen alternative must have the shortest distance from the positive ideal solution and the longest (farthest) distance from the negative ideal solution from a geometric

point of view by using the enclidean distance (distance between two points) to determine the relative proximity of an alternative to the optimal solution. The positive ideal solution is defined as the sum of all the best values that can be achieved for each attribute, while the negative ideal solution consists of all the worst values achieved for each attribute. TOPSIS considers both, the distance to the negative ideal solution by taking the relative proximity to the positive ideal solution and the furthest from the negative ideal solution.

METHOD

The type of research that the author conducts is descriptive research. According to (Sekaran & Bougie, 2017), descriptive research is a method used to find out and be able to explain the characteristics of the variables studied in a situation. In this study the authors took the object of research at PT. Kereta Api Indonesia Divre II West Sumatra which is located at Jalan Station No. 1, East Sawahan Village, East Padang District, West Sumatra. The population is the entire unit in the observation that will be studied to measure its characteristics(Sugiyono, 2009). The population in this study were passengers of the West Sumatra Regional Division II Railway. The sample is the part of the population that can represent or be representative.

According to (Sugiyono, 2018) the sample is part of the population whose values or characteristics will be measured to estimate the characteristics of a representative or representative population. The source is primary data, according to (Sekaran & Bougie, 2017) primary data is data that refers to information obtained directly by researchers. In primary data research in the form of individual sub-subject opinions or groups of observations on an object, event or activity, and test results. How to know the validity of the instruments used in data collection is obtained by correlate each respondent's answer variable score with the total score of each variable, then the correlation result compared to the critical values at a significant level of 0.05 and 0.01 (Aedi,N. 2010). In this study, the pearson bivariate equation (correlation pearson) was used to test validity.

The study obtained primary data through the provision of questionnaires to respondents, namely passengers who used the services of PT. Kereta Api Indonesia Divre II West Sumatra which contains passenger expectations and passenger perceptions of the services of PT. Indonesian Railways Division II West Sumatra. Meanwhile technique. collecting data used in this study, namely: 1) Observation, 2) Interview, and 3) Documentation. Data processing was carried out in two stages, the first stage was to test the validity and reliability of the questionnaire, in the second stage to calculate the service quality using the Fuzzy TOPSIS method.

RESULTS AND DISCUSSION

Based on the results of research that has been carried out on 100 respondents, which was carried out with purposive sampling, where the researchers required sampling by setting specific characteristics or criteria that were in accordance with the research objectives, namely anyone who had used the services of PT. Indonesian Railways Division II West Sumatra. The characteristics of the respondents can be obtained as follows:
a. Based on Respondent's Gender
   Characteristics of respondents based on gender in this study can be seen in table 1.

Table 1. Characteristics of Respondents by Age

NO	Age	Total (responden)	Percentage
1	< 20	22	22
2	21-30	35	35
3	31- 40	27	27
4	> 50	16	16
	Total	100	100

Source: Primary data (2021)

Based on Table 1 regarding the characteristics of respondents based on age, it is known that the most respondents in filling out the questionnaire in this study were passengers of PT. The Indonesian Railways Division II West Sumatra, aged 21-30 years, is 35%. This shows that most of the respondents are in productive age.

b. Based on Respondent's Job

Characteristics of respondents based on work in this study can be seen in table 2.

Table 2. Characteristics of Respondents by Occupation

No	Job	Total (people)	Percentage
1	Student	40	40
2	Civil servant	17	17
3	Staff	12	12
4	Traders	8	8
5	Etc	23	23
	Total	100	100

Source: Primary data (2021)

Based on Table 2 regarding the characteristics of respondents by occupation, it can be seen that the largest number of respondents are students who are students, which is 40%, then the 2nd largest number of respondents are passengers who have other jobs such as civil servant, Traders, staffs and others.

c. Based on Respondent's Address

Characteristics of respondents based on addresses in this study can be seen in table 3.

Table 3. Respondents Address

No.	Address	Total	Percentage
1	Padang City	82	82
2	Outside Kota Padang	18	18
	Total	100	100

Source: Primary data (2021)

Based on Table 3 regarding the characteristics of respondents by address, it can be seen that the respondents from this study were mostly passengers who lived in the Padang city area by 82%.

d. Based on the Frequency of Use of Services PT. Indonesian Railways Division II West Sumatra.

Characteristics of respondents based on the frequency of service users of PT. The Indonesian Railways Division II West Sumatra in this study can be seen in table 4.

Table 4. Characteristics of Respondents Based on Frequency of Service Use

No.	Frecuency of service use	Total	Percentage
1	< 5 times	58	58
2	5 – 10 times	17	17
3	10 -15 times	5	5
4	> 15 times	20	20
	Total	100	100

Source: Primary data (2021)

Based on Table 4 regarding the characteristics of respondents based on the use of services, it can be seen that most of the respondents are passengers of PT. Indonesian Railways Division II West Sumatra which has used the services of PT. KAI Divre II West Sumatra was less than 5 times, which was 58%. Meanwhile, 20% of the respondents are passengers who have used the services of PT. KAI Divre II West Sumatra more than fifteen times.

Based on the results of data analysis through the TOPSIS ranking method obtained from the perception assessment and expectation assessment, the PT. Kai Divre II West Sumatra needs to rank the priority of proposed improvements. From the data in table 19, it can be seen that the proposed priority ranking of service improvements of PT. KAI Divre II West Sumatra.

Table 5 priority suggestions for improving the service rating of PT. KAI West Sumatra Divre II Train

No	Criteria	Normalization Content	Ranking
1	Tangible	0.9587	2
2	Reliability	0.8898	5
3	Responsiveness	2.2785	1
4	Assurance	0.9503	3
5	Emphaty	0.9330	4

Source: Processed data (2021)

Based on the results of data processing from table 5, the results obtained, that the service criteria of PT. Kai Divre II West Sumatra which have achieved service satisfaction of respondents who use the services of PT. Kai Divre II West Sumatra is the Responsivenesses criteria with a preference value of 2.2785 . Meanwhile for the second rank is the Tangible criteria with a Preference value of 0.9587. At the third rank level, it is obtained by the criteria by Assurance with a preference value of 0.9503. then rank 4 was obtained by Empathy with a preference value of 0.9330. and the one with the lowest service quality is the Reality criteria with a preference value of 0.8898.

From the data on the proposed priority of service improvement, the service on the reliability criteria must be immediately repaired and improved again. With this ranking, it can be seen that at this time the community from the service aspect as expected has not been achieved. Likewise with the empathy criteria which is ranked no.4, PT. Kai Kereta Api Indonesia Divre II West Sumatra, must immediately make improvements to the values of employees who should be able to take the sympathy of passengers while using the services of PT. Kai Kereta Api Indonesia Divre II West Sumatra.

Based on the results of data processing using fuzzy TOPSIS, there are some 5 attributes that are low and must be improved by PT. West Sumatra Divre II Railway, the first proposed improvement is in

the tangible criteria, namely at attribute no. 2 Availability of supporting facilities (canteen, lobby, prayer room, toilet) that is comfortable and clean. This is because the cleanliness and comfort of the facilities provided by the train is certainly very important for service satisfaction. clean toilets and other facilities such as prayer rooms, canteens, etc., are the center of the comfort that will be felt by passengers. If this attribute value is not met, then of course the quality of service will decrease.

The second improvement proposal is on the assurance criteria, namely, "The train conductor helps passengers who have difficulty when they want to get into the train carriage", which from the research results attribute no.18 is included as a point that must be considered. There are conductors who are willing to help passengers who have difficulty when they want to get on the train, in their own research from passengers to staff and the train. However, if this atirbute is not repaired, passengers will feel uncomfortable and anxious when they board the train because they feel that their safety is not guaranteed.

The third improvement proposal is on the empathy criteria for attribute no.19, namely, "The officer understands the Service SOP at PT. Kereta Api:. From the value obtained by the results of this attribute research, it is an attribute that needs to be addressed by the railroad. Because an understanding of standard work procedures is very important for staff in carrying out their duties.

While the fourth proposal is on the Responsiveness criteria, namely, "Officers are quick to respond in providing information needed by passengers. According to the results of this attribute research is also still under passenger satisfaction. And the third improvement proposal is on the reliability criteria, namely at attribute 10, "train conductors are always careful to check passenger tickets". From the results of the study it was concluded that there are still staff who do not check passenger tickets, so that passengers sometimes feel disadvantaged, because passengers who do not have tickets can sit in the passenger seats that have tickets, so there will be misunderstandings and passengers who have tickets feel it very harm them.

CONCLUSION

Based on the results and discussion of the research conducted through the evaluation of the service quality of PT. Kereta Api Indonesia Divre II West Sumatra using the Fuzzy TOPSIS method: a case study of PT. Kereta Api Indonesia Divre II West Sumatra, the researchers can conclude the results of the analysis of the best attribute ranking using the TOPSIS fuzzy method, it can be concluded that:

1. The first criterion that has achieved service satisfaction is the Responsivenesses criteria with a preference value of 2.2785. The highest attribute on this criterion that reaches the highest value is the preference value of 8.7276, which is attribute 14, "Passengers feel safe from criminal acts in the station environment." This is what researchers look at the Responsivenesses dimension with attribute no 18 is the best value from other attributes. .
2. The second criterion is Meanwhile for the second rank is the Tangible criterion with a Preference value of 0.9587. while the level of importance of passengers is at attribute no. 1, namely, "The station has the latest equipment and technology", with a preference value of 1.2675.
3. In the third position, namely the criteria. At the third rank level, it is obtained by the criteria by Assurance with a preference value of 0.9503, with the highest attribute value being at attribute 18, with a preference value of 1.2459, in this attribute the passenger's level of importance is located. For this reason, this attribute has reached the level of patient satisfaction.
4. then rank 4 was obtained by the Empathy criteria with a preference value of 0.9330. while the biggest attribute is in statement no.22, namely, "Employees prioritize the interests of passengers".
5. And the last criterion is Reality with a preference value of 0.8898. with the highest attribute in statement no. 10, with a preference value of 0.8430, namely, "the train director always checks passenger tickets

carefully". And for this reason, the researcher concludes that the importance of passengers is on comfort while on the train.

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