

CHAPTER II

LITERATURE REVIEW

This chapter describes about passengers, satisfaction, service, elements of service, facility, public transportation, function and benefits of transportation and Bus Rapid Trans (Trans Musi).

2.1 Passengers

“Penumpang merupakan setiap orang yang diangkut ataupun yang harus diangkut di dalam pesawat udara ataupun alat pengangkutan lainnya, atas dasar persetujuan dari perusahaan ataupun badan yang menyelenggarakan angkutan tersebut” (Damadjati 1995).

It means passenger is the person who transported or who must be transported in an aircraft or other transportation, based on the agreement of the company or organizations that organizes the transport. However, Yoeti (1999) said, *“Penumpang merupakan pembeli produk dan jasa pada suatu perusahaan adalah pelanggan perusahaan barang dan jasa mereka dapat berupa seseorang (individu) dan dapat pula sebagai suatu perusahaan”*. It means passengers are buyers of products and services in a company and the customers of their products and services companies can be in the form of someone (individual) and can also be a company.

The writer concludes that the meaning of passengers can be interpreted as a person (individual) and one company (group) that uses transportation services for a particular trip by spending a sum of money in return for the carrier, in other words, it can be defined as people have bought a ticket.

2.2 Satisfaction

According to Kurniawan (2009), *“Kepuasan adalah tingkat perasaan seseorang (pelanggan) setelah membandingkan antara kinerja atau hasil yang dirasakan (pelayanan yang diterima dan dirasakan) dengan yang diharapkannya”*. It means satisfaction is the level of one's feelings (customers) after comparing between the performances or perceived results (services received and felt) with what he/she expected. The level of satisfaction is a function of the difference between perceived performance and expectations. If the performance is below expectations, the customer will be very disappointed. If performance is as expected, customers will be very satisfied. In addition, Tjiptono & Chandra (2004) stated, *“Kepuasan bisa diartikan sebagai upaya pemenuhan sesuatu atau membuat sesuatu memadai”*. It means satisfaction can be interpreted as an effort to fulfill something or make something adequate.

Therefore, the writer concludes satisfaction is the level of one's feelings towards the results felt in an effort to fulfill their desires.

2.2.1 Consumer Satisfaction Indicators

According to Tjiptono (2004: 62) there are four indicators of consumer satisfaction, namely:

- a. Provision of good service.
- b. Employees are fast in completing work.
- c. Employees are able to find out wants and diagnose things that has to be done quickly.
- d. Employees pay individual attention to consumer complaints

Research by Ma et al. (2015) stated that female customers show a higher level of satisfaction than male customers. In addition, Dong et al. (2011) in their research found that women have a significant effect on the effect of satisfaction on loyalty, in the sense that women are more loyal than men.

2.3 Service

“Pelayanan merupakan suatu proses keseluruhan dari pembentukan citra perusahaan, baik melalui media berita, membentuk budaya perusahaan secara internal, maupun melakukan komunikasi tentang pandangan perusahaan kepada para pemimpin pemerintahan serta publik lainnya yang berkepentingan” (Loina, 2001).

It means service is the overall process of forming the image of company both through the news media, forming the corporate culture internally, and communicating the views of the company to the government leaders and other public concerned. However, Moenir (2005) said, *“pelayanan ialah sebuah proses dari pemenuhan kebutuhan melalui aktivitas orang lain secara langsung”*. It means service is the process of fulfilling the needs that go through the activities of people directly.

It means service is the overall process of forming the image of company both through the news media, forming the corporate culture internally, and communicating the views of the company to the government leaders and other public concerned.

The writer concludes service is a process of fulfilling the needs and formation of images for companies that provide services through providers to recipients of services directly.

2.3.1 Characteristic of Service

Payne (2007:69) said, there are 4 characteristics of services, namely: 1) Intangibility, Services are abstract and intangible. Unlike physical products, services cannot be seen, felt, heard or smelled before the service was purchased. 2) Heterogeneity, Services do not have standards and vary greatly depending on who provide services and when and where they are provided. 3) Inseparability, Services are produced and consumed at the same time and involve customer participation in the process. Unlike physical goods that are produced, stored in inventory, distributed through several sellers, then consumed. If someone provides a service, then the provider is part of that service. Because the client is also present at the time the service is performed, the interaction between client providers is a special feature of service marketing. 4) Perishability, Services cannot be saved and easily disappear. Service products have different characteristics of goods (physical products).

The writer concludes there are 4 characteristics of service: 1) Intangible, Service is an act, appearance or business and is not tangible. 2) Heterogeneity, Services do not have standards and vary greatly depending on who provide services and when and where they are provided. 3) Inseparability, Services are produced and consumed at the same time and involve customer participation in the process. 4) Perishability, Services cannot be saved and easily disappear. Service products have different characteristics of goods (physical products).

2.3.2 Method of quality of service

The servqual method is a questionnaire used to measure service quality. This method was developed in the 1980s by Zethaml, Parasuraman & Berry, and has been used in measuring various service qualities. With this questionnaire, we can find out how big the gap is between the performance of public transportation services and the expectations / perceptions of passengers towards a service company. The servqual questionnaire can be customized (adapted) to suit different service industries.

Servqual scale includes five dimensions of service quality, namely: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. Tangibles (measurable evidence), describing physical facilities, equipment, and appearance of personnel and the presence of users.

1. Reliability , namely the ability to provide services accurate, satisfactory and quality.
2. Responsiveness, namely the desire of the drivers to assist passengers and provide services responsively.
3. Assurance, which covers the knowledge, ability and trustworthiness of the driver, free from danger, risk or doubt and cleanliness of the vehicle.
4. Empathy, which includes ease in making relationships, good communication, personal attention and understanding needs the passengers.
5. Tangible, which includes physical facilities and equipment in public transportation.

In addition, according to Zeithaml, Parasuraman & Berry in (Ratminto and Atik, 2010: 175) states that:

- Tangibles or physical appearance, means the physical appearance of the building, equipment, employees and other facilities owned by the providers.
- Reliability or reliability is the ability to carry out the promised services accurately.
- Responsiveness or responsiveness is a willingness to help costumers and provide services sincerely.
- Assurance or certainty is the knowledge and courtesy of workers and their ability to give confidence to costumers.
- Emphaty is the personal treatment or attention given by providers to costumers.

2.3.3 Service Quality and Service

Considering the role of individuals who deliver services is very important in determining service quality, every company needs superior service, namely an attitude or way of employees serving consumers satisfactorily.

Broadly speaking, according to Wirasasmita et al (1999) there are four elements in this concept, namely:

1. Speed
2. Accuracy
3. Hospitality
4. Convenience

The four components constitute one integrated service, it means that the service or services are not superior, if there are components that are

missing. For this reason, employees must have certain skills, including dress neatly and being friendly to consumers.

2.4 Facility

Sam (2001) said, "*Fasilitas adalah segala sesuatu yang berupa benda maupun uang yang dapat memudahkan serta memperlancar pelaksanaan suatu usaha tertentu*". It means facilities are all things in the form of objects or money that can facilitate the implementation of a particular business. Meanwhile, Nirwana (2004) stated, "*Fasilitas merupakan bagian dari variable pemasaran jasa yang memiliki peranan cukup penting, karena jasa yang disampaikan kepada pelanggan tidak jarang sangat memerlukan fasilitas pendukung dalam penyampaiannya*". It means facility is a part of the service marketing variable that has a quite important role, because services delivered to customers often require support facilities in their delivery.

Some opinions of facilities have the same understanding and in essence, the facilities provided to customers can make the customers easier to use the facilities and infrastructure that have been provided. The facilities referred to in the reports provided by Trans Musi are facilities such as seats and bus stop.

Nirwana (2004, p. 47) also stated there are several factors that need to be considered in designing physical support or physical facilities such as, facility design and aesthetics, the value of functions, supporting condition, supporting equipment, and uniforms of employees.

The writer concludes facilities is all things in the form of objects or money which has an important role in marketing variables. There are also several factors that need to be considered in designing physical support or physical

facilities such as facility design and aesthetics, function values, supporting conditions, supporting equipment, and employee uniforms.

2.5 Public Transportation

Warpani (1990) stated, *“Angkutan umum merupakan angkutan penumpang yang dilakukan dengan sistem sewa atau bayar dan tujuan diselenggarakannya angkutan umum adalah memberikan pelayanan angkutan yang baik dan layak bagi masyarakat”*. It means public transportation is passenger transportation carried out by leasing or paying system and the purpose of holding public transportation is to provide good and decent transportation services for passengers. Furthermore, According to *Peraturan Pemerintah Republik Indonesia No 41 Tahun 1993* about Road Transportation, *“Angkutan umum adalah pemindahan orang dan atau barang dari suatu tempat ke tempat lain dengan menggunakan kendaraan bermotor yang disediakan untuk dipergunakan untuk umum dengan dipungut bayaran”*. It means public transportation is the transfer of people and or goods from one place to another by using a motorized vehicle that provided for public with a fee.

The writer concludes public transportation is a public vehicle for transporting goods or people from one place to another that is provided by private, private or government, which can be used by anyone by paying or renting.

2.5.1 Criteria of Public Transportation

As a means of public transportation, transportation must meet the criteria of public service. Dagun et. al (2006) stated that good transportation for public services must meet three basic criteria, namely comfort, safety, and speed.

The first provision is comfort, namely the comfort aspect must be felt by passengers using transportation services. Passengers will feel

comfortable in the means of transportation if the facilities are equipped with various facilities that provide comfort for passengers, one of which is air conditioning, smoke-proof motorized vehicles, and the processes that prospective passengers undergo before and after being in a transportation facility.

The second provision is security, which is the aspect of security felt by passengers while getting transportation services. Some of the indicators used in measuring a sense of security include a closed system where transportation facilities are not easily accessed by other parties who are not passengers. In the case of buses, this includes bus stops or terminals that are only accessed by passengers who have purchased a bus ticket. In addition, it is a passenger boarding and alighting system. To maintain security, passengers must get on and off only at designated stops and terminals, and passengers cannot get on and off at places other than official bus stops and terminals. Thus, this closed system can provide a sense of security for passengers from threats of theft, pickpocketing, robbery, or other incidents that threaten the safety of passengers using transportation services.

The third provision is speed, namely the provision of the fulfillment of the time to arrive at the destination quickly and or precisely. This provision can only be fulfilled if the means of transportation are supported by special means, for example, is a special rail owned by a train. So that by adopting rail infrastructure, bus transportation can also be applied by building special routes or what is called the busway.

2.5.2 Function and Benefits of Transportation

According to Tamin (1999, p. 5) transportation has two main functions. First, as a tool to direct development in urban areas. Second, as an infrastructure for the movement of people and goods arising from activities in these urban areas.

Therefore, by looking at the two functions, the first function is often used by regional development planners to be able to develop their territory according to plan. For example, a new area will be developed where in there will never be interested person in the area if the transportation infrastructure system is not provided. So that in these conditions, transportation will be important for accessibility to the region and will have an impact on the high interest of the community to carry out economic activities that is the explanation of the second function of transportation.

Transportation has the biggest benefits in overcoming the problems of a city or region (Soesilo 1999, 14) . The first benefit is operating costs saving. Saving arises because of the increase in the condition of the transport facilities and the different magnitude according to the type of vehicle and the conditions of the facilities. The second benefit is time saving. For passengers, time saving can be attributed to the many other jobs that the passenger can do. The third benefit is accident reduction. Accidents reduction is a tangible benefit of the existence of transportation such as repairs to shipping transportation facilities, railways and so on have been able to reduce accidents. and the last benefit is the economic development. In general, transportation activities will have an impact on the economic activities of a region. The magnitude of this

benefit is highly dependent on production elasticity on transportation costs.

The writer concludes the function of transportation is as an infrastructure for the movement of people and goods arising from activities in these urban areas. And the benefits of transportation are: to operating costs saving, time saving, accident reduction, and economic development.

2.5.3 The Facilities of Passenger Stopping of Public transportation

The minimum facilities that must be owned by a bus stop to be able to provide adequate service to passengers are the main facilities for a stop, including the identity of the stop in the form of a name or number, signposts, route information boards, lighting, seats. Meanwhile facilities for TPB consist of signposts, route information boards, TPB identification in the form of names or numbers. For additional facilities in the form of a telephone public, trash cans, fences, billboards / announcements. At intersections, the placement of these additional facilities should not interfere with the free viewing space. Another facility that must be considered in the operation of BRT stops is that ramps are provided to serve people with physical limitations, and are useful for passengers who have carriages in the form of strollers, wheeled luggage, and other heavy luggage. People with disabilities who can still use stairs will prefer ramps if they are available and are more comfortable. A ramp should not have a slope greater than 8.3%, the typical slope used is 4% to 6.25% (*Ditjen Perhubungan Darat, 2006*).

2.6 Transportation level of service

Vuchic (1981) states that the level of service is a measure of the overall service characteristics that affect service users. The level of service is a basic element of the appearance of the transportation components, so that travelers are interested in using a transportation service product. The main factor being compared is the level of service transportation can be divided into 3 (three) groups, namely:

1. The performance of elements that affect service users, such as: operating speed, trustworthiness and security
2. Quality of service, including qualitative elements of service, such as: comfort, passenger behavior, beauty and cleanliness
3. The price that must be paid by service users to get services.

In addition, Harries (1976) states that public transport services can be made to approach private transportation to make public transportation more attractive and private transport users interested in switching to public transportation. This can be measured in relative terms of service satisfaction. Some of the criteria for ideal public transportation include:

- Reliability: every time available, arrival on time, total time short trips from home, less time walking to angkot, no need to change vehicles.
- Convenience: polite service, protected from bad weather on an angkot, easy to get on and off the vehicle, available seating at all times, not overcrowding.
- Security: avoid accidents, body protected from impact wounds, free from crime.
- Cheap: relatively cheap fare is affordable.
- Travel time: time on the vehicle is short.

The performance of public transportation in cities is influenced by the following factors:

1. Safety

Covers driving safety (both users and non-users) and on stopping, including safety from pickpockets and physical crime as well as vehicle safety from violence (vandalism).

2.comfort

Covers the physical comfort of passengers in the vehicle and at stops. These conveniences include: the quality of the ride, the environment of the public transportation and outside the public transportation, arrangement of seats / standing, handrails, ease of entry and exit and fare payment, space for necessary luggage. Aesthetics include: cleanliness and beauty of vehicle design, stopping places, shelters, attractive sidewalks, environmental protection (air / noise pollution), facilities for seniors and people with disabilities or disabled, friendly and pleasant crew.

3. Accessibility

Regarding the adequate distribution of routes in all areas, vehicle capacity, frequency and hours of operation, identification of vehicle stops and distribution of information on fares, schedules, and ease of paying fares as well as the correct placement of stops and stops.

4. Reliability

Reflects a low level of damage / disturbance, a backup fleet that is always ready, the accuracy of the schedule and adequate information if there is a change in service as well as guaranteed connection (transit) at the transfer point.

5. cost

One of the factors of important information in the management of public transport is the fare price. Tariff setting will largely determine the economic value of the existence of public transportation. Incorrect tariff setting can cause general transportation function to decline.

6. Efficiency

Includes high average speed with minimum stopping time and freedom from traffic delays, adequate number of stops for minimum walking distance, coordinated schedule and transfer points for hassle-free and straightforward routes, if fast (patas) or special service is required if appropriate. Also included here is a system that is easy to maintain with adequate facilities, efficient management and a limited number of crews (Munawar, 2000 in Dian, 2005).

2.7 Theory of Minimum Cost Location

As stated by Alfred Weber (1909) a German economist stated that the location of each industry depends on the total cost of transportation and labor where the sum of the two must be a minimum. A place where the minimum total cost of transportation and labor is identical to the maximum profit level. According to Weber, transportation costs are the first factor in determining the location, while the other two factors are factors that can modify the location.

2.8 Bus Rapid Transit (Trans Musi)



Picture 1 : Bus Rapid Trans (Trans Musi)

Source:

<https://www.kompasiana.com/ardhani-reswari/552df2aa6ea8348d7c8b4599/palembang-aku-pulang>

“Bus Rapid Transit(BRT) adalah suatu flexibel, moda dengan roda karet yang mempunyai transit yang cepat danyang dikombinasikan station (halte), kendaraan, pelayanan, jalan dan elemen Intelligent Transportation System(ITS) dalam satu sistem yang terintegrasi dengan identitas yang kuat.” (Levinson et al.2003, p.12).

It means Bus Rapid Transit (BRT) is a flexible, mode with rubber wheels that has fast transit and combined station (stop), vehicle, service, road, and Intelligent Transportation System (ITS) elements in an integrated system with a strong identity. Meanwhile, Thomas (2001) cited in Nasrulloh (2010) said *“Bus Rapid Transit (BRT) adalah suatu moda transportasi yang cepat yang mengkombinasikan kualitas transportasi kereta dan fleksibilitas bus.”* It means Bus Rapid Transit (BRT) is a fast mode of transportation that combines the quality of train transportation and bus flexibility.

The writer concludes Bus Rapid Transit (BRT) is separate from conventional bus services. In fact, the definition tends to indicate that BRT has many

similarities with rail-based systems, especially in terms of operating performance and service to passengers. The main difference between BRT and the urban rail system is that BRT can usually provide high-quality public transportation services that are easily affordable by the community.

2.9 Definition and Views of Gender in Transportation

There are 4 (four) factors that influence the differences between men and women in the use of transportation, namely social and economic factors, physical differences, power and vulnerability, and psychological (Hamilton et.al., 2005).

1. Social and Economic Factors

Women have a dual role, namely the domestic role of taking care of the household, children, sick family members, the elderly, etc. and the public role as breadwinners. This is different from men who are only responsible as breadwinners. The division of gender roles also affects the pattern of economic activity for women and men. The level of women's economic activity varies widely, depending on the conditions of their household. Women who have pre-school children have lower levels of economic activity (Hamilton et.al.,2005).

2. Physical Difference Factors

Biologically, men and women are different. Women are on average smaller and shorter than men. These physical differences actually have important implications for designing vehicles and transportation facilities (Hoyenga & Hoyenga, 1979; Hamilton & Gregory, 1991 in Hamilton et.al. 2005). Public transport vehicle design who do not take into account the physical differences of children, women, and people who have limited mobility due to age and / or physical disabilities

will reduce the accessibility of public transportation (Yael Hasson & Marianna Polevoy, 2011; Hamilton et al, 1991 in Hamilton et.al. 2005).

3. Power and Vulnerability Factors

Women, children, elderly people, and people with physical limitations are more prone to accidents, harassment, sexual violence and crime in public spaces than men. The phenomenon of violence in public spaces, including on public transport, affects the travel patterns of women (Loukaitou-Sideris 2008; Schulz and Gilbert 2000 in Amy Dunckel-Graglia & Suny Stony Brook 2013). For example, women tend to avoid traveling at night and avoid waiting for public transport in dark places. Several cities and countries have realized the importance of providing women-friendly public transportation.

4. Psychological factors

A survey carried out among Oslo residents on men's and women's perceptions of the mode of transportation shows that men and women have different cultural values related to the types of transportation modes. Women seem to prefer public transport and believe that public transportation makes it easier for them to travel. On the other hand, men prefer to use private cars compared to public transportation.