



THE EFFECT OF PHYSICAL EVIDENCE AND QUALITY SERVICE ON CONSUMER SATISFACTION AT GB PARKING BIJB KERTAJATI AIRPORT

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Abstract. Consumer satisfaction is one of the main factors that can influence the progress of the company. The higher the level of consumer satisfaction, the easier it is for the company to achieve its goals. Consumer satisfaction can be influenced by various factors, two of which are physical evidence and service quality. The purpose of this study was to determine the effect of physical evidence and service quality on consumer satisfaction at the GP Parking of BIJB Kertajati Airport, Majalengka Regency. The research method used is descriptive and verification methods. The sample in this study was taken randomly as many as 100 respondents. The data collection technique used was by distributing questionnaires which were then processed using statistical analysis. The results of the study showed that the physical evidence at GB Parking of BIJB Kertajati Airport was good, and there was an increase in consumer satisfaction along with the increase in physical evidence. The same results also showed an increase in consumer satisfaction along with the increase in the quality of consumer service. The results of multiple regression testing also showed that physical evidence and service quality simultaneously influenced consumer satisfaction. The results of this study indicate that physical evidence and service quality have a significant influence on customer satisfaction, so the management of GB Parking BIJB Kertajati needs to prioritize improving physical facilities such as cleanliness, lighting, and completeness of directional signs, as well as strengthening service quality through officer training, accelerating service processes, and utilizing supporting technology. Improvements in both aspects will help create a more comfortable parking experience, increase customer satisfaction, and encourage user loyalty.

Keywords; Physical Evidence, Service Quality, Consumer Satisfaction.

1 Introduction

Aviation services have become a public necessity. Air traffic activities require the availability of airport facilities, because this can affect consumer satisfaction. One of the facilities available at the airport is parking facilities. Parking is a place where vehicles stop for a short or long period of time, depending on the driver's needs. According to (Nawawi et al., 2015), parking facilities are places where vehicles (motorized or non-motorized) are placed and stopped at a certain location for a certain period of time.

The use of vehicle parking facilities must meet both administrative and technical requirements. According to (Pratama, 2021), administrative requirements include land rights status/use permits, documentation, and traffic impact analysis. Technical requirements include spatial planning, security and safety guarantees, circulation arrangements and parking locations as indicated by traffic signs or road markings, provision of dedicated parking facilities, and environmental sustainability.

GB Parking at BIJB Kertajati Airport strives to achieve customer satisfaction, as declining service satisfaction increases the risk of customer disloyalty or switching services (Quoquab et al., 2016). This will result in decreased profits and even losses. Building customer satisfaction is central

to achieving long-term profitability. Consumer satisfaction at GB Parking at BIJB Kertajati Airport is the difference between consumer expectations and the reality they receive. Thus, the level of satisfaction is a function of the difference between perceived performance and expectations.

The service customers receive at GB Parking at BIJB Kertajati Airport is crucial for their retention. The convenience offered to customers can be a valuable asset for GB Parking, helping them attract more customers. This, in turn, can increase public trust in GB Parking at BIJB Kertajati Airport. This is one of the basic assets for a company to be able to survive in today's era of globalization.

Transaction data from PT. GB Parking in the parking area of Kertajati International Airport, West Java (BIJB), shows that many competitors are starting to dominate this parking business. Based on interviews with the manager of PT. GB Parking in the parking area of Kertajati International Airport, West Java (BIJB), the average number of vehicles parked each month from January 2021 to December 2021 was as follows:

Table 1 Number of Parked Vehicles

No	Month	Volume Year 2021					TOTAL
		Car	Motorcycle	Box/Truck	Taxi	Bus	
1	January	1,256	12,524	118	-	8	13,906
2	February	3,118	8,759	133	-	11	12,021
3	March	4,158	13,181	254	-	8	17,601
4	April	3,987	13,919	159	-	9	18,074
5	May	1,642	16,783	184	-	4	18,613
6	June	3,837	11,637	276	-	10	15,760
7	July	3,284	11,540	25	-	2	14,851
8	August	4,410	13,373	303	-	-	18,086
9	September	4,473	12,565	187	-	8	17,233
10	October	4,705	13,612	262	-	9	8,588
11	November	4,752	13,126	168	-	10	18,056
12	December	5,365	12,384	322	-	-	18,071
TOTAL		44,987	53,403	2,391	-	79	200,860

Source: Management of PT. GB Parking in the parking area of Kertajati International Airport, West Java (BIJB)

Table 1 shows that the number of parked vehicles fluctuated from January to December 2021, with a downward trend. The largest increase in the number of parked vehicles occurred in May 2021, with 18,613 vehicles. The lowest number of parked vehicles occurred in October 2021, with 8,588 vehicles. (Handi, 2010) stated that the decline in visitor numbers could be influenced by a decline in customer satisfaction. Based on the results of a pre-survey conducted through interviews with several motorists, expectations regarding a parking space include sufficient distance between vehicles to facilitate drivers when removing and removing them and to avoid damage to the vehicle body, affordable parking fees, and a shaded and safe parking area.

One of the factors that influence customer satisfaction is physical evidence. According to (Lupiyoadi, 2014), physical evidence is the place where the service is created,

where the service provider and customer interact, plus any tangible elements used to communicate or support the role of the service. The measurement indicators for physical evidence are seen from the exterior (including: cleanliness of the surrounding environment, clearly visible signage installed outside) and interior (including: completeness of equipment, suitability of equipment, layout, air quality / temperature). The next factor that influences customer satisfaction is service quality. According to (Kotler & Armstrong, 2002), service quality is explained as how far the difference between reality and customer expectations for the service they receive or obtain. According to (A et al., 2005), it explains that indicators for measuring service quality consist of *tangible, reliability, responsiveness, assurance, empathy* .

Consumer satisfaction is an important thing, especially for companies, because it is the ultimate goal of marketing which has an impact on the continuity and success of the business. According to (Haeruddin, 2019) This empirical research explains that customer satisfaction significantly influences customer loyalty, meaning satisfied customers tend to stick with a product or service . Likewise, anyone who comes to the airport, whether they are a passenger, a pick-up person, an employee, or anyone else who has an interest in going to the airport, certainly expects excellent service, especially parking. Companies can determine several strategies that will support their business success, including physical evidence. and quality of service.

Based on this background, there are several urgent research needs, namely the improvement of physical evidence and facilities is very necessary in this era of modern public services, service quality is a key indicator for consumers of transportation services and BIJB Kertajati Airport is now developing so that it requires an increase in supporting services. Therefore, researchers are interested in knowing consumer satisfaction that is influenced by physical evidence and service quality. However, unlike previous research, in this study the sample taken is parking consumers located in a developing city, namely GB Parking BIJB Kertajati Airport located in Majalengka Regency. Thus, this study aims to determine the effect of physical evidence and service quality on consumer satisfaction at GB Parking BIJB Kertajati Airport.

2 Research methods

This study uses a quantitative research method with an associative research type. According to (Sugiyono, 2020) associative research is a study that aims to determine the influence of independent variables on dependent variables, in this case physical evidence and service quality on customer satisfaction. This study uses a survey method from a population by relying on a questionnaire as a data collection instrument. This research was conducted at GB Parking at BIJB Kertajati Airport, the research population was 200,860 consumers of GB Parking at BIJB Kertajati Airport, the sample size was calculated using the Taro Yamane formula, so the sample of this study was 100 people. The sampling technique used simple random sampling. According to (Sugiyono, 2020) simple random sampling is the random sampling of sample members from the population without considering the strata in the population . The data collection tool used a questionnaire with

a Likert scale. This questionnaire is used to obtain data on physical evidence, service quality and customer satisfaction of GB Parking at BIJB Kertajati Airport. The collected data is then processed quantitatively using inferential statistics. In this data analysis technique, the statistical test used is multiple linear regression analysis with data processing using SPSS software.

3 Results and Discussion

3.1 Research result

The characteristics of respondents in this study can be explained in table 1.

Table 2. Respondent Characteristics

Category	Frequency	Percentage
Gender		
Man	60	60.00
Woman	40	40.00
Age		
17 - 26 Years	13	13.00
27 - 36 Years	26	26.00
37 - 46 Years	37	37.00
> 46 Years	24	24.00
Level of education		
Elementary School	5	5.00
JUNIOR HIGH SCHOOL	17	17.00
SENIOR HIGH SCHOOL	59	59.00
Diploma D3	14	14.00
SI/S2	5	5.00

Source: primary data (2023)

Based on table 2, it can be concluded that the majority of respondents were male, as many as 60 people (60.00 %). The age of the respondents was mostly in the range of 37-46 years, namely as many as 37 people (37.00 %), and seen from their education level, the majority were high school graduates as many as 59 people (59.00%).

To obtain research results that can be accounted for, validity and reliability tests were first carried out on the physical evidence instruments (questionnaires), service quality and consumer satisfaction.

Table 3. Instrument Test Results

Variables	Statement Items	Validity		Reliability	
		Correlation Coefficient	Information	Cronbach's Alpha	Information
Physical Evidence	1 – 6	>0.30	Valid	0.689	Reliable
Quality of Service	7 – 14			0.744	
Customer Satisfaction	15 - 20			0.739	

Source: primary data (2023)

Table 3 explains that the r value for each questionnaire statement item is obtained with a value of more than 0.30, so that all questionnaire statement items are declared valid. The reliability test uses the Cronbach alpha formula with the provision that $r_{count} \geq r_{table}$ with a significance level of 5%, and the results of all questionnaire statement items for each variable are said to be reliable, so they can be used for research.

This study aims to determine the influence of physical evidence and service quality on consumer satisfaction at GB Parking at BIJB Kertajati Airport. 100 consumers were taken as respondents or research samples. The data from the measurement of physical evidence variables and service quality and consumer satisfaction using a questionnaire were analyzed using multiple regression. The results of multiple regression calculations with SPSS are presented in Table 3.

Table 4. Multiple Linear Regression

Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	.538	1,873		.287
	Physical Evidence	.610	.109	.549	5,605
	Quality of Service	.225	.076	.291	2,965

a. Dependent Variable: Consumer Satisfaction

From the results of multiple regression calculations using SPSS (table 3), a significant effect of the physical evidence variable (X_1) on consumer satisfaction (Y) was obtained with a sig. value of 0.000, which is smaller than $\alpha = 0.05$. This means that physical evidence (X_1) partially has a positive and significant effect on consumer satisfaction (Y). Thus, it can be interpreted that if physical evidence continues to be improved, it can have an impact on increasing customer satisfaction at GB Parking at BIJB Kertajati Airport.

Table 4 also shows a significant effect of the service quality variable (X_2) on consumer satisfaction (Y) with a sig. value of 0.004, which is smaller than $\alpha = 0.05$. This means that service quality (X_2) partially has a positive and significant effect on consumer satisfaction (Y). Thus, it can be interpreted that if the quality of service continues to be improved, it can have an impact on increasing customer satisfaction at GB Parking at BIJB Kertajati Airport. From table 1, the results of the regression equation $Y = .538 + 0.610 X_1 + 0.225 X_2$. This equation shows that all independent variables (physical evidence and service quality) have positive coefficients, so it can be interpreted that if physical evidence and service quality are improved, it can increase customer satisfaction, or all independent variables have a unidirectional influence on variable Y (customer satisfaction). To test the significance of the influence given by physical evidence and service quality on customer satisfaction together, a simultaneous significance test was carried out with the F test. The results of the F test calculation can be seen in table 4.

Table 4. Anova

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	654,046	2	327,023	84,657	.000 ^b
	Residual	374,704	97	3,863		
	Total	1028,750	99			

a. Dependent Variable: Consumer Satisfaction

b. Predictors: (Constant), Service Quality, Physical Evidence

Calculated F_{value} of 84.657 is greater than the F_{table} of 3.090, or the sig value of 0.000 is smaller than $\alpha = 0.05$, indicating that physical evidence (X1) and service quality (X2) together have a positive and significant effect on consumer satisfaction. Thus, it can be interpreted that if physical evidence and service quality to consumers continue to be improved, it will have an impact on increasing consumer satisfaction at GB Parking at BIJB Kertajati Airport. To see the large contribution made by physical evidence and service quality to consumer satisfaction, the coefficient of determination is calculated. The calculation results are presented in table 5.

Table 5. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.636 ^a	.636	.628	1.96543

a. Predictors: (Constant), Service Quality, Physical Evidence

From table 5, it can be seen that physical evidence and service quality contribute to consumer satisfaction, and by looking at the $R\text{-Square} = 0.636 \times 100\% = 63.6\%$, it shows that the contribution of physical evidence and service quality to consumer satisfaction is 63.6%. This means that the variables of physical evidence and service quality contribute to consumer satisfaction by 63.6%, while the remaining 36.4% is influenced by other variables not studied.

3.2 Discussion

This study shows that partially there is a positive and significant influence between physical evidence and consumer satisfaction. Thus, it is important to create facilities or equipment in a company to create added value and influence customer satisfaction. Attention to equipment, buildings, and spacious layouts are important concerns and influence customer satisfaction. In addition, the results of this study are in line with research conducted by (Sugiarti et al., 2024) which concluded that there is a significant influence between physical evidence on customer satisfaction at Budi Kolaka Medika Hospital, and research conducted by (Alfa et al., 2014) which concluded that physical evidence has a significant influence of 42.99% on customer satisfaction at PT Pusaka Prima Transport.

This study also shows a positive and significant influence on the service quality variable on customer satisfaction at GB Parking at BIJB Kertajati Airport. These results indicate that a positive assessment of a product, in accordance with the level of service quality provided, encourages consumers to be loyal to the product. The results of this study

are in line with the theory (Fandy Tjiptono, 2016) which states that service quality is a consumer assessment of the reliability and superiority of the overall service. Consumers will make a comparison between what they are given and what they receive. Service quality is built on a comparison of two main variables: customer perceptions of the actual service they receive (perceived service) and the actual service they expect. The results of this theory explain that the results of consumer experiences in using a service product will result in consumer assessments of the service product. If the service product can satisfy consumer desires, consumers will give a positive assessment of the service product. With this assessment, consumers will continue to want to use the service product. These results explain that in general, consumers will consider the quality of service they can get for the money they will spend.

Supported by (Kotler & Amstrong, 2002), service quality must begin with customer needs and end with consumer perception. This means that the image of good service quality is not based on the perspective or perception of the service provider, but rather on the perspective or perception of the consumer. Consumers are the ones who consume and enjoy the company's services, so they are the ones who should determine the quality of service. Consumer perception of service quality is a comprehensive assessment of the excellence of a service from the consumer's perspective. However, it should be noted that the intangible nature of services makes it very difficult for consumers to assess services before they experience them, even after they have consumed a particular service, it is difficult for consumers to assess the quality of the service. This study is in accordance with the results of research (Supriyanto et al., 2021) which states that service quality has a positive and significant effect on customer satisfaction, where service quality has the greatest influence compared to other variables in this study.

The results of this study also demonstrate that physical evidence and service quality simultaneously influence customer satisfaction. This aligns with previous research (Bahrmi, 2021), which found that service quality and physical evidence significantly influence customer satisfaction, both simultaneously and partially.

4 Conclusion

The conclusion of this study is that physical evidence has a partial positive and significant effect on consumer satisfaction. Likewise, service quality partially has a positive and significant effect on consumer satisfaction. Simultaneously, physical evidence and service quality also have a positive and significant effect on customer satisfaction at GB Parking at BIJB Kadipaten Airport. Therefore, improving physical evidence and service quality will result in increased customer satisfaction. This study is limited to customers using GB Parking at BIJB Kertajati Airport, so the results cannot be generalized to other parking services or airports. The study focused on only two variables: physical evidence and service quality, whereas customer satisfaction can also be influenced by price, security, comfort, accessibility, and other external factors. Therefore, the researcher suggests that further research include other variables such as price, security, speed of service, and comfort of facilities to create a more comprehensive analysis model. Mixed methods with in-depth interviews should also be used to explore customer perceptions in more detail.

Furthermore, the study should expand the research object to several other parking service providers or airports to increase the generalizability of the results.

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