
THE EFFECT OF SERVICE QUALITY ON SMART PARKING USER SATISFACTION AT PT MITRAGRAHA INTI UTAMA

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Abstract

This study aims to determine the extent of influence of Service Quality on Smart Parking User Satisfaction at PT Mitragraha Inti Utama. This research is a quantitative study, with a descriptive research objective. This type of research is causal. Meanwhile, the unit of analysis aimed at this study is individuals where smart parking users as respondents in the distribution of this research questionnaire. The sample in this study amounted to 100 respondents. Data were analyzed using validity tests, reliability, partial tests (t), simultaneous tests (f) and determination tests. Based on the results of the research in the reliability test, it was stated that each question was reliable, then based on partial and simultaneous tests the results of the study showed that Service Quality had a positive and significant effect on User Satisfaction. According to the results of the determination test, Service Quality on Smart Parking User Satisfaction at PT Mitragraha Inti Utama is classified as a high level, namely 84.8%, while the rest is influenced by other variables.

Keywords: *service quality, user satisfaction, PT Mitragraha Inti Utama, Smart Parking*

INTRODUCTION

The logistics industry in Indonesia is currently experiencing significant dynamics, influenced by various factors such as infrastructure challenges and technological developments. Technological innovation and the ability to adapt to market changes are key to achieving sustainable growth. To maintain user trust, companies continuously strive to provide optimal service across all operational aspects. Service quality is a crucial issue for every business entity, considering that a company's success is highly dependent on its ability to provide superior and valuable services to its customers.

PT Mitragraha Inti Utama is a company that focuses on logistics and general trading services. PT Mitragraha Inti Utama was founded on November 7, 1998, located at Jl. Moch. Toha No. 182a, Karasak, Astanaanyar District, Bandung City, West Java 40243. PT Mitragraha Inti Utama offers several logistics products and services, one of which is security services, namely smart parking, to develop parking services to optimize customer assets and increase Regional Original Income (PAD).

As a barometer of a company's success, customer satisfaction is a top priority. The level of customer satisfaction is strongly influenced by service quality. Furthermore, service quality is directly correlated with a company's competitiveness and profitability. Service quality reflects the company's approach to implementing continuous quality improvement at every stage of its operational processes and services. In the context of digital services, such as smart parking systems, serious attention is essential. The success of service digitalization is determined by the readiness of three main components: technology, human resources, and governance. These three elements play a crucial role in ensuring the smoothness, effectiveness, and sustainability of digital transformation. (Insani & Adjie, 2023). Referring to the research described previously, it is

necessary to conduct a scientific study with the title: "The Influence of Service Quality on Smart Parking User Satisfaction at PT Mitragraha Inti Utama"

Service quality is the provision of optimal service which is an important element in shaping the customer experience, which ultimately strengthens the image and long-term relationship with the Company.(Usma, 2021). According to(Wiwik Sulistiyowati (2018:14)In an increasingly competitive service industry, service quality plays a key role as a key determinant for service providers to maintain their existence and win market competition. Service quality is a crucial aspect that needs to be continuously improved and refined through continuous innovation, with the goal of achieving customer satisfaction. Service quality must meet the specifications desired by consumers, meaning that quality is what users expect from the products or services they receive.

According to(Rusydi 2017:39)Service quality is a company's ability to provide superior service compared to its competitors. Service quality is considered satisfactory when the customer's experience matches or exceeds their expectations regarding the service standard. Consumer expectations are reflected in various aspects such as professional service, friendly and polite attitude, punctuality, and responsiveness. These values are important indicators in customer assessment of a service. Therefore, companies need to make service quality a top priority, as it directly contributes to customer satisfaction.(Yunanto, 2017)

Service quality cannot be evaluated from the perspective of the organizer or service provider, but must be based on customer perception, because they are the ones who experience the service provided, so they have the right to evaluate and determine the quality of the service. Some terms related to the definition of service quality include: Excellent, Customer Service, Quality, Levels, Consistent (Yamit, 2010: 22)

Quality of service according to(Lovelock-Wright in Rohaeni & Marwa (2018)defined as the quality of products and services provided reflecting the company's ability to optimally meet consumer expectations. According to(Tsalisa et al., 2022) It was found that increasing service quality was directly and significantly correlated with increasing customer satisfaction, which indicates that increasing service quality directly contributes to increasing customer satisfaction, where optimal service encourages the creation of loyalty and ongoing relationships that benefit both parties.

According to experts, service quality is key to a company's ability to meet customer expectations and to determine the extent to which the company is meeting customer desires. To provide the best service on a sustainable basis, companies need to continuously improve service quality and adhere to service performance standards, both internally and externally. Quality standards can determine the quality level of products and services and can also maintain the company's desired quality.(Legistari et al., 2024). Quality standards are obtained by maximizing strategic management for long-term success to determine the product quality class must implement strategic management for long-term product success.(Insani et al., 2024)

Service quality indicators include:

1. Reliability, the ability to provide services according to promises, can be trusted to solve customer problems, deliver services appropriately, provide services on time.
2. Responsiveness, providing clear information to customers regarding the certainty of the time of service implementation, providing services quickly and accurately, showing readiness to help customers, and being responsive in responding to various requests or needs conveyed by customers.
3. Assurance (Guarantee), employees build consumer trust, create a sense of security when making transactions.

4. Empathy, prioritizing customer interests, and understanding their needs with convenient operating hours.
5. Tangibles (Physical Evidence), includes all facilities, equipment, employee appearance, and communication materials used by the company in providing services.(Fandy Tjiptono 2017:201)

Customer satisfaction is a crucial element in customer retention efforts that align with market demands and dynamics. Service quality plays a crucial role in building customer loyalty and commitment, thereby improving company performance. Research indicates a strong correlation between service quality and customer satisfaction, a significant link that directly drives customer retention.(Ibrahim, 2019:177).Customer satisfaction is the perception of the quality of a product or service that is felt to be able to provide comfort and meet needs, either meeting or exceeding customer expectations.(Widayati, 2020)

User satisfaction is a psychological condition that arises as an output from a systematic assessment process of the quality of a product or service experience, which reflects the extent to which user expectations are met by the quality of service received.(Oktarini, 2020). According to(Sasongko 2021)Customer satisfaction is achieved through the process of evaluating or assessing the products or services they have used. When product performance exceeds customer expectations, satisfaction results. Conversely, if perceived performance falls below expectations, satisfaction tends to decrease or even disappear altogether.(Gultometal.,2020)

Customer satisfaction, according to experts, is the result of customer evaluation of the level of conformity between initial consumer expectations and the actual performance of a product or service after use, which is the main indicator in assessing customer satisfaction.

User Satisfaction Indicators.

User Satisfaction Indicators There are indicators that determine user satisfaction according to(Adiwinata & Sutanto, 2014)stated that user satisfaction indicators consist of several dimensions:

1. Content Dimension: This dimension evaluates user satisfaction based on the completeness and relevance of the system content, which includes functions, modules, and information provided to support user needs.
2. Accuracy Dimension: This dimension measures the level of user satisfaction with the accuracy of data processed by the system, starting from the input process to producing valid and reliable information.
3. Format Dimension: This dimension measures user satisfaction based on the interface design, report layout, and information presentation within the system. An intuitive and aesthetically pleasing interface design plays a key role in supporting a comfortable user experience and supporting efficient system use.
4. Ease of use: This dimension reflects the extent to which the system is easy for users to use, including the ease of entering data, accessing information, and performing system functions without technical difficulties.
5. Timeliness: Timeliness is a dimension that assesses user satisfaction based on the speed and timeliness of the system in presenting information in real time or according to the time required.

RESEARCH METHODS

This study applies a quantitative descriptive approach, where data is presented in the form of numbers and statistics to illustrate the relationship between variables. The main objective of this study is to analyze and identify the influence of Service Quality on the level of User Satisfaction of smart parking services at PT Mitragraha Inti Utama. This study uses two types of data: primary data collected directly from respondents through questionnaires, and secondary data obtained from documentation and relevant reference sources. Data were collected using a technique, namely by distributing questionnaires with a Likert scale, which provides flexibility for researchers in evaluating respondents' opinions, perceptions, and attitudes towards the issues or phenomena being studied. The purpose of quantitative data analysis is to evaluate the established hypotheses. (Monica & Marlius, 2023)

This research is a causal research approach, which aims to identify and understand the causal relationship between the independent and dependent variables. This research is non-experimental in nature, as it does not involve intervention in the data or any of the components involved. The unit of analysis is the individual, with each respondent, a user of the smart parking service, also participating in the questionnaire. A sample of 100 respondents was selected for this study.

The questionnaire is planned to be distributed online through the Google Forms platform, which will be distributed using various social media platforms to reach respondents. To ensure the validity of the questionnaire, researchers included a screening question at the beginning of the questionnaire to ensure that respondents who completed it had actually used smart parking services.

The data analysis techniques in this study used validity and reliability tests, partial tests (T), and coefficients of determination (R²) (Hana, 2021). In this study, the independent variable was service quality (X) against the dependent variable, user satisfaction (Y).

RESULTS AND DISCUSSION

a. Validity Test

Validity test using 100 respondents

Table 1 Validity Test of Service Quality (X)

Variablel	Perreality	R count	R tabel 5%	Keter anbro
Quality Service (X)	P1	0.664	0.196	Valid
	P2	0.715	0.196	Valid
	P3	0.741	0.196	Valid
	P4	0.754	0.196	Valid
	P5	0.792	0.196	Valid
	P6	0.742	0.196	Valid
	P7	0.808	0.196	Valid
	P8	0.741	0.196	Valid
	P9	0.750	0.196	Valid
	P10	0.750	0.196	Valid

	P11	0.783	0.196	Valid
	P12	0.661	0.196	Valid
	P13	0.811	0.196	Valid
	P14	0.745	0.196	Valid
	P15	0.723	0.196	Valid

Source: Data processed by SPSS V.31, 2025

Table 2 User Satisfaction Validity Test (Y)

Variablel	Perreality	R count	R tablel 5%	Keter anbro
Satisfaction Users (Y)	P1	0.751	0.196	Valid
	P2	0.792	0.196	Valid
	P3	0.686	0.196	Valid
	P4	0.820	0.196	Valid
	P5	0.676	0.196	Valid
	P6	0.709	0.196	Valid
	P7	0.699	0.196	Valid
	P8	0.787	0.196	Valid
	P9	0.775	0.196	Valid
	P10	0.808	0.196	Valid
	P11	0.773	0.196	Valid
	P12	0.748	0.196	Valid
	P13	0.734	0.196	Valid
	P14	0.746	0.196	Valid
	P15	0.763	0.196	Valid

Source: Data processed by SPSS V.31, 2025

The table above shows the results of the analysis of the two variables, namely Service Quality (X) on User Satisfaction (Y), which obtained a calculated r value $>$ r table. According to the provisions, a variable is said to be valid if the calculated r value $>$ r table with a minimum of 0.5. This means that the correlation between the indicator items above can be said to be valid because it has met the provisions.

b. Reliability Test

Table 3 Reliability Test

Variablel	<i>Cron Bach's Alpha Based Standardizatione d item</i>	Kriteria Standar d	Kateg ori
Quality of Service (X)	0.768	≥ 0.6	<i>Rail eable</i>
User Satisfaction (Y)	0.945	≥ 0.6	<i>Rail eable</i>

Source: Data processed by SPSS V.31, 2025

Based on the table above, the results of the reliability test using Cronbach's Alpha show that the value for variable (X) is 0.768 and variable (Y) is 0.945. All of these values exceed the minimum threshold of 0.60, indicating that each item in the instrument can be categorized as reliable.

c. Data Hypothesis Testing

i. Partial Test (T)

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,905	2,395		2,048	0.043
	Quality of Service	0.930	0.040	0.921	23,393	<,001
a. Dependent Variable: User Satisfaction						

Source: Data processed by SPSS V.31, 2025

Based on the table above, the partial test results (t) show that the significance value for the Service Quality (X) variable on User Satisfaction (Y) is 0.001, which is below the significance threshold of 0.05. In addition, the calculated t value of 23.393 is greater than the t table value of 1.985. Thus, H_{01} is rejected and H_{a1} is accepted, which indicates that there is a significant influence between Service Quality (X) on User Satisfaction (Y).

ii. Simultaneous Test (F)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8371,605	1	8371,605	547,253	<,001b
	Residual	1499,155	98	15,298		
	Total	9870,760	99			
a. Dependent Variable: User Satisfaction						
b. Predictors: (Constant), Service Quality						

Source: Data processed by SPSS V.31, 2025

Referring to the table above, it is known that the significance value for the Service Quality (X) variable on User Satisfaction (Y) is 0.001, <0.05 . In addition, the calculated F value of 547.253 $>$ the F table value of 3.09. Thus, H_{03} is rejected and H_{a3} is accepted, which indicates that Service Quality (X) has a significant effect on User Satisfaction (Y).

iii. Coefficient of Determination Test (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.921a	0.848	0.847	3,911
a. Predictors: (Constant), Service Quality				

Source: Data processed by SPSS V.31, 2025

The R-Square value is classified as strong if the value exceeds 0.67, moderate if it is between 0.33 to 0.67, and weak if the value is above 0.19 but less than 0.33. Based on the table, the R-Square value is 0.848, which means that the Service Quality (X) on User Satisfaction (Y) of smart parking at PT Mitragraha Inti Utama is classified as moderate at 84.8%, while the rest is influenced by other variables.

CONCLUSION

BeirdasarBased on the research results and discussions in the previous chapters, it can be concluded that:

1. Based on the research results, the reliability test using Cronbach's Alpha showed that the value for variable (X) was 0.768 and variable (Y) was 0.945. Because both values were above the minimum required value, which was 0.60, all items in the instrument were declared reliable and suitable for use in data collection.
2. Based on the research results in the Partial Test (T), there is a significant influence between Service Quality (X) on User Satisfaction (Y). This shows that the Service Quality variable carried out by PT Mitragraha Inti Utama has a positive influence on Smart Parking User Satisfaction.
3. Based on the results of the Simultaneous Test (F), it shows that the significance value for the influence of Service Quality (X) on User Satisfaction (Y) is f count 547.253 $>$ f table value 3.09. This means that there is a significant influence of Service Quality (X) on User Satisfaction (Y).
4. Based on the Determination Coefficient Test (R²), the Quality of Service carried out by PT Mitragraha Inti Utama has an effect on Smart Parking User Satisfaction, namely 84.8%, which is classified as high.

Previous research shows that service quality influences user satisfaction of smart parking services, with a contribution value of 84.8%. It is recommended that PT Mitragraha Inti Utama continue to improve service dimensions such as physical aspects, responsiveness, assurance, empathy, and reliability on an ongoing basis. User satisfaction evaluation needs to be carried out regularly to ensure optimal service quality, accompanied by a responsive feedback system to customer complaints and input.

This research provides a useful basis for evaluating data-driven strategic decision-making and serves as a reference in designing strategies to improve service quality. This

way, companies can maintain user satisfaction and loyalty while increasing competitiveness in the logistics services and parking technology sectors.

BIBLIOGRAPHY

- Anigomang, FR, Tang, SA, & Maruli, E. (2023). The Influence of Service Quality Dimensions on Service User Satisfaction. *Wahana Pendidikan Scientific Journal*, 9(1), 698–709.
- Ari, DPS, & Hanum, L. (2021). The Effect of DJP Website Service Quality on User Satisfaction with Modified E-Govqual. *Profit: Journal of Business Administration*, 15(1), 104–111.
- Insani, S., & Adjie, WH (2023). MEASURING THE READINESS OF DIGITAL TRANSFORMATION OF MSMES IN SLEMAN REGENCY. *SECAD*, 3(2), 45–57.
- Maulidiah, EP, Survival, S., & Budiantono, B. (2023). The Influence of Facilities on Service Quality and Its Implications for Customer Satisfaction. *Jurnal Economina*, 2(3), 727–737.
- Monica, C., & Marlius, D. (2023). The effect of service quality on customer satisfaction at Bank Nagari. *Pundi Journal*, 7(1), 53–62.
- Mooy, PK, Augustinah, F., & Ferriswara, D. (2024). The Influence of Service Quality and Company Image on User Satisfaction of Gress Gustia and Partners Law Firm. *Soetomo Business Administration*, 2(1), 275–286.
- Mumtaza, FA, & Millanyani, H. (2023). The effect of service quality on customer satisfaction in Urban Travel. *Scientific Journal of Management, Economics, & Accounting (MEA)*, 7(2), 1645–1661.
- Putri, AS, Widayati, CC, & Perkasa, DH (2023). The Influence of Service Quality, Servicescape, and Location on Indomaret Drive-Thru Customer Satisfaction (Case Study at Indomaret Drive-Thru Store in West Jakarta). *Journal of Entrepreneurship and Multi-Talent*, 1(3), 124–132.
- Putri, A., Suhartono, C., & Kristanti, M. (2023). The effect of service quality on revisit intention at Kaizen BBQ Grill & Shabu-shabu restaurant in Surabaya with customer experience as a mediating variable. *Journal of Hospitality Management*, 9(1), 46–54.
- Rachmadyaningrum, R., Hariani, D., & Herawati, AR (2022). Analysis of Transjakarta's Service Quality During the Pandemic. *Journal of Public Policy and Management Review*, 11(2), 1–12.
- Setiono, BA, & Melinda, N. (2022). The Effect of Inapornet System Service Quality on Service User Satisfaction. *Journal of Shipping and Port Applications*, 13(1), 42–53.
- Sudrartono, T., Hernawati, E., Adji, WH, Warsiati, W., Insani, S., Martowinangun, K., Nunung, A., Legistari, K., Adji, WZ, & Fatihah, DC (2024). *Modern Corporate Management*.
- Tresiya, D., Djunaidi, D., & Subagyo, H. (2018). The influence of service quality and comfort on customer satisfaction (a study of the online motorcycle taxi company Go-Jek in Kediri City). *JIMEK: Scientific Journal of Economics Students*, 1(2), 208–224.
- Tsalisa, RA, Hadi, SP, & Purbawati, D. (2022). The effect of service quality and price on customer satisfaction of Maxim online transportation users in Semarang City. *Journal of Business Administration*, 11(4), 822–829.
- Urahmah, N., & Andri, A. (2023). Quality of Passport Making Services at the Class I Immigration Work Unit of TPI Banjarmasin in Balangan Regency. *SENTRI: Scientific Research Journal*, 2(8), 3233–3241.
- Wijaya, IGNS, & Suwastika, IWK (2017). Analysis of e-learning user satisfaction using the end-user computing satisfaction method. *E-Proceedings KNS&I STIKOM Bali*, 558–562.