



Evaluation of Minimarket Parking Quality Based on Customer Perception in Surabaya City

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ABSTRACT

The growth of minimarkets in Surabaya has increased the need for adequate parking facilities to support customer mobility. This study aims to evaluate the quality of minimarket parking based on customer perceptions using William N. Dunn's policy evaluation framework, which includes effectiveness, efficiency, adequacy, equity, responsiveness, and accuracy. The research method used a quantitative approach through a questionnaire of 51 respondents and was analyzed descriptively. The results show that all dimensions of parking quality are in the moderate to high category, with a mean value of 3.47–3.77. In general, parking facilities are considered adequate in supporting customer activities, but the aspects of responsiveness and equity still need improvement. This study emphasizes the importance of parking management as part of public service quality and urban transportation order

INTRODUCTION

Transportation system development plays a very important role in supporting regional economic growth. Transportation serves to expand market access, accelerate the distribution of goods and services, and increase population mobility. The need for transportation is derived demand, which arises as a consequence of social and economic activities, so that the quality of the transportation system is closely related to the level of community productivity. Strengthening the transportation system has been proven to increase regional competitiveness through improved logistics efficiency (Chistianingsih, 2021). From a public policy perspective, the quality of transportation facilities and infrastructure also reflects the government's performance in providing effective and responsive public services (Mustofa, n.d.).

As the second largest metropolitan city in Indonesia, Surabaya has experienced rapid development marked by advances in infrastructure, education, and the trade sector. Relatively stable economic growth has contributed to an increase in people's purchasing power and encouraged consumption, particularly in the retail sector. People's purchasing power is often used as an indicator to observe the dynamics of the urban economy (Juli, 2020). In line with this, an increase in household income has a positive correlation with the growth in the number of minimarkets in urban areas (Putri & Santoso, 2022 (Kewirausahaan, 2025)).

The increase in the activity and mobility of Surabaya's residents has implications for the growing number of motor vehicles that require adequate parking facilities. Limited space and parking facilities can trigger various problems, such as traffic congestion, conflicts over space utilization, and decreased user comfort. Therefore, parking planning is an important part of urban transportation management that needs to be carried out in an integrated manner (Governance & Hukum, 2023). Parking facilities that do not meet standards also have the potential to affect public perception of the overall quality of transportation services (Sari & Hartono, 2021). In the context of public services, user perception is a key indicator in assessing the success of a policy (Mustofa et al., 2017) (Alansyah & Susanti, 2025)

The rapid growth of minimarkets in Surabaya reflects the modernization of the trade sector, marked by increased demand for daily necessities. Minimarkets have flourished because they offer easy access, time efficiency, and service patterns that suit the character of urban communities. This development is influenced by changes in consumer preferences and urban economic dynamics (Hidayah & Setiawan, 2024). However, the rapid expansion of minimarkets is often not accompanied by the provision of adequate supporting facilities, particularly safe and convenient parking areas for users (Kurniawan, 2021).

Parking problems at minimarkets not only affect customer comfort, but also have implications for traffic order and the quality of public services in urban areas. Parking facilities that do not meet standards can reduce user satisfaction and potentially cause social problems, such as traffic congestion and illegal levies. In this case, local governments have a strategic role in maintaining public order through guidance and supervision of the provision of public facilities

(Ilham et al., 2023). The level of business compliance with parking regulations is greatly influenced by the effectiveness of supervision by local governments (Mutiarasari, 2022). From an administrative reform perspective, the effectiveness of supervision reflects the capacity of the bureaucracy to optimally carry out regulatory and public service functions (Mustofa, n.d.).

In an effort to maintain parking order, the Surabaya City Government has enacted Local Regulation No. 3 of 2018, which requires businesses, including minimarkets, to provide parking facilities in accordance with established technical standards. However, the implementation of this regulation still faces various challenges, such as low compliance rates among businesses and limited supervision in the field. Several studies indicate that parking policies have not been optimally implemented due to weak oversight functions (Sari et al., 2023). In addition, implementation constraints are often caused by a lack of coordination between relevant agencies (Wijaya, 2021)(Fitriana et al., 2021). This condition indicates that the success of public policy is not only determined by the existence of formal regulations, but also by the capacity of the bureaucracy to implement these policies effectively (Mustofa, n.d.).

Within the framework of public policy evaluation, William N. Dunn's evaluation theory provides a relevant analytical basis for assessing the effectiveness of parking policies through six key criteria, namely effectiveness, efficiency, adequacy, equity, responsiveness, and accuracy. This approach enables a comprehensive assessment of policies, both in terms of implementation and public acceptance. Dunn's theory is considered capable of revealing various weaknesses in policy implementation in the field (Prasojo, 2021) and is relevant for evaluating facility-based public services, such as parking, because it covers both technical aspects and user perceptions (Fitriani, 2022). These user perceptions are in line with the concept of public service satisfaction, which places the community as the main indicator of policy performance (Mustofa et al., 2017).

However, there is still a research gap in the study of minimarket parking. Most previous studies have emphasized technical aspects, regulatory compliance, or transportation management on a macro scale. Studies that specifically evaluate parking policies based on customer perceptions are still relatively limited. For example, research by Sari and Hartono (2021) focused more on technical aspects without linking them to user experience, while Mutiarasari (2022) emphasized the level of compliance of managers without measuring public satisfaction.

The novelty of this study lies in the integration of William N. Dunn's policy evaluation theory with customer perception analysis in assessing the quality of minimarket parking facilities in the city of Surabaya. This approach offers a different perspective by placing customer experience as the main indicator of policy effectiveness. This research is in line with the administrative reform paradigm that emphasizes the importance of responsive, representative, and community-oriented public services (Mustofa, n.d.).

Based on the above description, this study aims to evaluate the quality of minimarket parking facilities in Surabaya based on customer perceptions using

William N. Dunn's theoretical framework. This evaluation is expected to identify the extent to which the available parking facilities have met the needs of the community and are in line with local government policies (Dewi & Kriswandatu, 2023). In addition to providing academic contributions, the results of this study are expected to strengthen the implementation of parking policies in the future. Thus, this study not only fills the gap in previous studies but also produces recommendations for realizing more effective, responsive, and sustainable parking services (Costa et al., 2014)

LITERATURE REVIEW

Public Policy

In his study of public policy evaluation. William N. Dunn, William N. Dunn (2003) explains that policies need to be analyzed using six criteria, namely effectiveness, efficiency, adequacy, equity, responsiveness, and accuracy. These six criteria provide a comprehensive framework for understanding the extent to which policies can achieve their objectives and have a real impact on society. This approach positions evaluation as an important process in assessing the success of policies in terms of their implementation and their impact on the social environment in a sustainable manner.

A basic understanding of public policy comes from various expert views. Thomas R. Dye states that public policy is anything that the government chooses to do or not to do. This view emphasizes that policy is a series of decisions that have direct implications for the public. Friedrich and Anderson expand on this understanding by emphasizing that public policy includes goals, action processes, and mechanisms for solving social problems. Through Dunn's evaluation theory, the concept of public policy from these experts is understood more deeply because evaluation is able to show the extent to which policies are truly effective, (Agustina, 2024) efficient, responsive, and on target. Thus, Dunn's framework does not only assess policies as normative texts, but as dynamic processes that must be continuously analyzed through their performance in the field.

Government Policy on Parking on Surabaya City

As the second largest metropolitan city in Indonesia, Surabaya faces increased economic activity and community mobility, causing a significant increase in the volume of motor vehicles each year. This growth in the number of vehicles has led to various parking problems, such as limited parking space, rampant illegal parking, and irregularities in the collection of parking fees on public roads, which have an impact on traffic congestion and public inconvenience. These problems indicate that ineffective parking management not only affects the comfort of road users but also impacts the overall effectiveness of the city's transportation system. In this context, the Surabaya City Government has issued a number of more structured parking policies through Local Regulation Number 3 of 2018 concerning Parking Management, which aims to regulate the distribution of parking, control illegal parking practices, and increase supervision and transparency in the collection of parking fees on public roads. Efforts to monitor the collection of parking fees in accordance with

regulations remain a focus to optimize services to the public and increase local revenue. (Margareth & Nainggolan, 2018).

The Surabaya City Government responded to parking issues through Local Regulation No. 3 of 2018 concerning Parking Management, which regulates locations, rates, supervision, and the authority of managers. This policy can be evaluated using Dunn's criteria, including the effectiveness of controlling illegal parking, the efficiency of implementing technology such as e- parking, the adequacy of infrastructure, the equitable distribution of services, responsiveness to public complaints, and the accuracy of policies in resolving parking issues. Research shows that although this Regional Regulation promotes more orderly parking management, challenges in controlling illegal parking still need to be addressed continuously (Ramadhan, 2024).

The implementation of this policy is expected to create an orderly, transparent, and accountable parking system for the community. The government is striving to increase the use of technology such as e-parking, strengthen field supervision, and encourage community involvement in parking control to create a more adaptive and responsive transportation management system that meets public needs. Evaluating policies such as this is important to assess the success of their implementation and their impact on service and community satisfaction. Research on urban parking governance shows that transparency, accountability, and public participation remain key challenges that need to be addressed for parking policies to be effective and sustainable (Riau, 2025).

New Public Management (NPM)

The paradigm shift in public administration is marked by the emergence of the New Public Management (NPM) approach, which emphasizes efficiency, effectiveness, and results orientation in the delivery of public services. This approach has developed in line with increasing public demands for faster, more accurate, and higher quality public services. In the Indonesian context, NPM is in line with bureaucratic reform efforts that emphasize improved performance, accountability, and professionalism of the state apparatus (Edward et al., 2024)..

According to Ramdani & SAP, the main characteristics of NPM include a focus on results, competition in service delivery, decentralization of authority, separation of operational and supervisory functions, and the application of private sector management principles in public services. This approach requires government agencies to improve their performance and efficiency in the use of resources. When linked to Dunn's evaluation theory, NPM supports efforts to measure the effectiveness and efficiency of policies in a more measurable and output- based manner. (Ramdani & SAP, 2025).

However, the NPM approach has been criticized and has given rise to the concept of New Public Service (NPS), which places greater emphasis on public participation, collaboration, and community welfare orientation. NPS reminds us that public services cannot be equated entirely with business and still require democratic values. This perspective is in line with the dimensions of responsiveness and equity in Dunn's theory, which emphasizes the importance

of developing policies that are inclusive, responsive, and fair to the entire community (Supriyadi, 2021).

System Theory in Public Policy

System theory views public policy as the result of interactions between interrelated components, both internal and external. The social, political, economic, and technological environments are important factors that influence the policy formulation process. This approach helps us understand that public policy cannot stand alone, but rather operates within a dynamic and complex system framework.

Through the concepts of input, conversion process, output, outcome, and feedback, systems theory explains how policies are generated and how they impact society. The aspirations, complaints, or demands of the community become inputs that are then processed within the government mechanism to produce policies as outputs. The impact of policy implementation then generates feedback that forms the basis for evaluation to refine future policies. (Bahadur & Magar, 2025).

In the context of parking policy in Surabaya, systems theory describes how public complaints about illegal parking and irregular tariffs became important inputs that led to the enactment of Local Regulation No. 3 of 2018. The implementation of this policy had an impact on the social environment, resulting in feedback for improving the parking system in the future. This approach is in line with Dunn's evaluation theory, which requires that a policy be evaluated continuously in order to remain adaptive and relevant to the needs of the community.

METHODS

This study uses a quantitative approach with questionnaires as the main instrument for measuring and analyzing customer perceptions of minimarket parking quality in the city of Surabaya. The focus of the research is directed at assessing the quality of parking services based on measurable indicators that refer to the concept of public policy evaluation. A quantitative approach was chosen because it is capable of producing numerical data that can be processed statistically, thereby providing an objective picture of a social phenomenon (Riau, 2025).

The types of data used consist of primary data and secondary data. Primary data was obtained by distributing questionnaires to minimarket customers who had used the parking facilities. The sampling technique used accidental sampling, which is a technique of selecting respondents based on whoever happened to be encountered and was willing to be a respondent (Sugiyono, 2019) (Pribowo et al., 2022). This technique was chosen because minimarket customers are random and heterogeneous in nature. The sample size was determined using the Slovin formula with a 10% margin of error so that the sample obtained could proportionally represent the population of parking users (Yogi & Putra, n.d.).

The research instrument was a questionnaire with a 1–5 Likert scale, ranging from strongly disagree to strongly agree. The questionnaire statements were based on parking service quality indicators such as comfort, safety,

orderliness, availability of space, ease of access, and parking attendant service. The Likert scale is commonly used in quantitative research because it can systematically measure respondents' attitudes, opinions, and perceptions (Pada et al., 2021).

Before use, the research instrument was tested through a validity test using Pearson Product Moment Correlation, where the instrument was declared valid if the calculated r value was greater than the table r (indicating a significant relationship between items and total scores) in accordance with statistical rules in quantitative research. Furthermore, a reliability test was conducted using Cronbach's Alpha to measure the internal consistency of the instrument, where an instrument was declared reliable if the Cronbach's Alpha coefficient exceeded 0.70, as is the general standard in social science research (Sugiarta et al., 2023).

Secondary data was obtained through document reviews such as technical parking guidelines, local government regulations, scientific literature, and previous research results. Secondary data was used to strengthen the analysis and serve as a basis for comparison with the results of customer perception measurements (Neuman, 2014).

The collected data were analyzed using descriptive statistics, through calculations of the mean, percentage, and frequency distribution for each evaluation indicator. Descriptive statistics were used to describe the general patterns of the data before drawing more in-depth interpretations (Ghozali, 2016). The results of the analysis were then interpreted to identify aspects of parking services that still needed improvement by the management and local government. With this quantitative approach, the study is expected to provide objective empirical findings regarding the quality of minimarket parking in the city of Surabaya and serve as a basis for decision-making related to improving parking services.

RESULTS AND DISCUSSION

This study involved 51 respondents who were visitors to the minimarkets they frequented. Respondents were selected using purposive sampling based on specific criteria, namely participants who had joined the program. Data was collected through a questionnaire with a Likert scale containing 24 statements, each representing six dimensions of public policy evaluation according to William N. Dunn. From all the data obtained, the majority of respondents were in the productive age group of 20 -45 years old with a high school/ vocational school education level and a bachelor's degree.

Table 1. Respondent Characteristics

Characteristics		Percentage
Gender	Male	19.6
	Female	80.4
	Total	100.0

Age	≤ 17 years old	0
	17-25 years	58.8
	26-35 years	33.3
	36-45 years	7.8
	>45 years old	2
	Total	100.0
Vehicle Type	Motorcycle	82.4
	Car	25.5
	Total	100.0%

Source: Research, 2025

Based on the characteristics of the respondents, it appears that the majority of program participants are woman, numbering 41 or 80.4%, while men number 10 or 19.6%. This indicates that training and certification programs are more popular and attended by women. These findings indicate that in terms of age, respondents were dominated by the 17-25 age group (58.8%), followed by the 26-35 age group (33.3%) and the 36-45 age group (7.8%), with only 2% being over 45 years old. The data illustrates that the majority of participants are in their early to middle productive years, which is relevant to providing experience.

The effectiveness of minimarket parking quality based on customer perceptions in the city of Surabaya

In terms of effectiveness, this assessment focuses on the quality of minimarket parking based on customer perceptions in Surabaya City, which can be understood as the level of parking facility capability in supporting comfort, safety, and ease of access for customers when visiting minimarkets, as reflected in the availability of parking spaces, orderly vehicle arrangement, ease of entering and exiting the parking area, and the sense of security felt by users. Thus, effective parking management not only increases customer satisfaction but also contributes to the smooth flow of traffic and retail services in urban areas. The participants' perceptions of these indicators can be seen in the following table.

Table 2. Effectiveness of Surabaya Minimarket Parking

Statement	Response				
	1	2	3	4	5
The minimarket parking area is easy for customers to find.	0	3.9	9.8	51	35.3
Parking area is easily accessible without obstacles	0	9.8	21.6	47.1	21.6
The parking system facilitates the process of entering and exiting vehicles.	2	9.8	15.7	45.1	27.5
Vehicle security in the parking area is well maintained.	9.8	17.6	23.5	37.3	11.8

Source: Research, 2025

Based on the result in table 2, it shows that the effectiveness of minimarket parking quality based on customer perception in the city of Surabaya is generally considered adequate to effective by customers. This can

be seen from the majority of respondents who gave positive ratings (scores of 4 and 5) on most indicators. The statement that minimarket parking areas are easy to find by customers received a high response, with 51% of respondents agreeing and 35.3% strongly agreeing, indicating that the location and availability of parking are in line with visitor needs. Furthermore, regarding the aspect of ease of access without obstacles, 47.1% of respondents agreed and 21.6% strongly agreed, although there were still some respondents who rated it as adequate, indicating that there were access obstacles in certain locations. On the indicator of a parking system that facilitates the process of entering and exiting vehicles, the majority of respondents also gave positive ratings, with 45.1% agreeing and 27.5% strongly agreeing, indicating that the parking arrangements relatively support the smooth mobility of customers. However, the aspect of vehicle security in the parking area received a more moderate rating, with 37.3% agreeing and 23.5% considering it adequate, indicating that although parking security is considered quite effective, improved security monitoring and management are still needed to optimally achieve the goal of safe and convenient parking

The results of the study on customer satisfaction with the effectiveness of minimarket parking quality in Surabaya show that most respondents gave positive ratings on indicators such as ease of finding a parking area, ease of entry and exit, and parking orderliness. High scores in the agree (4) and strongly agree (5) categories indicate that parking facilities are considered relatively adequate and support the overall customer experience. This is consistent with findings in other studies showing that the quality of parking facilities and services has a positive effect on customer satisfaction, where good parking service quality, including ease of parking, comfort, and safety, significantly increases the level of satisfaction of parking service users in large shopping centers such as malls or other commercial areas. For example, an empirical study on parking services in Denpasar shopping centers shows that the quality of parking services and facilities has a positive and significant influence on customer satisfaction, with a strong contribution from service variables to positive customer perceptions. (Nasional, 2026).

Efficiency of minimarket parking quality based on customer perception in Surabaya City

The efficiency of minimarket parking quality based on customer perceptions in Surabaya City can be interpreted as the level of optimization of parking facility management in utilizing available space, time, and resources appropriately, so that customers can park and retrieve their vehicles quickly, orderly, and without causing space waste or disrupting traffic flow around the minimarket.

Table 3. Parking Efficiency of Minimarkets in Surabaya

Statement	Answer				
	1	2	3	4	5
Parking capacity is sufficient so that customers do not have to wait long.	2	5.9	33.3	39.2	19.6

The process of entering and exiting the parking area is fast.	3.9	5.9	37.3	37.3	15.7
Vehicle arrangement in the parking area allows for smooth movement.	3.9	13.7	29.4	27.5	25.5
The time required to find a parking space is relatively short.	3.9	7.8	17.6	43.1	27.5

Source: Research, 2025

Based on the data in Table 3, the efficiency of minimarket parking in Surabaya City is generally considered to be fairly efficient to efficient by customers. On the indicator of available parking capacity, the majority of respondents gave positive ratings, with 39.2% agreeing and 19.6% strongly agreeing, indicating that the parking capacity is relatively able to accommodate customer needs without causing long waiting times, although there are still respondents who rate it as adequate. Furthermore, the indicator of the speed of entering and exiting the parking area also received a dominant response in the agree category at 37.3% and strongly agree at 15.7%, indicating that the flow of vehicle circulation is considered quite smooth and does not take up much of the customers' time. In terms of vehicle arrangement in the parking area, respondents' assessments tended to be more diverse, with a dominance of fairly (29.4%), agree (27.5%), and strongly agree (25.5%) answers, indicating that the parking arrangement has supported vehicle movement, but still needs optimization to be more orderly and efficient. Meanwhile, the indicator of the time needed to find a parking space, which is relatively short, received the most positive assessment, with 43.1% of respondents agreeing and 27.5% strongly agreeing, indicating that in terms of time, the parking facilities of minimarkets in Surabaya have functioned efficiently in supporting customer activities. Overall, these results illustrate that minimarket parking management has been able to minimize customer time and effort, although improvements in parking layout and capacity are still needed to achieve a more optimal level of efficiency.

The results of the study on the efficiency of minimarket parking quality in the city of Surabaya show that customers generally rate minimarket parking facilities as having a fairly good level of efficiency, particularly in terms of available capacity and the time needed to find a parking space. Many respondents stated that adequate parking space capacity meant that customers did not have to wait long, while the relatively short time required to find a parking space indicated that the parking layout and the process of finding a parking space were efficient and in line with user expectations. This is in line with the findings in the study Review of Customer Satisfaction with the Quality of Basement Parking Services at Bandung Supermall Shopping Center, which states that good parking services, including comfort, ease of access, and orderliness, contribute to the satisfaction of parking service users because the convenience and performance of the facilities can meet customer needs. (Yanuardi, 2007).

Adequacy of minimarket parking quality based on customer perceptions in Surabaya

The adequacy of minimarket parking quality based on customer perceptions in Surabaya City can be interpreted as the level of parking facilities' ability to provide adequate space, facilities, and management to meet customer needs, so that customers feel their parking needs are met without experiencing significant difficulties, both in terms of availability, comfort, and safety when parking their vehicles.

Table 4. Adequacy of Parking at Minimarkets in Surabaya

Statement	Answer				
	1	2	3	4	5
The number of parking spaces corresponds to the number of customers visiting.	2	17.6	27.5	37.3	15.7
The parking area is spacious enough for vehicle maneuvering.	0	9.8	31.4	39.2	19.6
The parking space provided is adequate for motorcycles.	2	0	21.6	49	27.5
Parking spaces for cars are available in sufficient numbers.	9.8	13.7	23.5	37.3	15.7

Source: Research, 2025

Based on the data in Table 4, the adequacy of minimarket parking quality in Surabaya City is generally considered adequate to very adequate by customers. On the indicator of the number of parking spaces in relation to the number of customers, the majority of respondents gave a positive assessment, with 37.3% agreeing and 15.7% strongly agreeing, although there were still respondents who rated it as adequate and inadequate, indicating that under certain conditions, especially during peak hours, parking capacity is still considered limited. Furthermore, the indicator of parking areas being spacious enough for vehicle maneuvering received a dominant rating in the agree category at 39.2% and strongly agree at 19.6%, indicating that in general, the space for vehicle movement in the parking area is adequate to support customer parking activities. Regarding the aspect of parking space provided being adequate for motorcycles, respondents' assessments tended to be very positive, with 49% agreeing and 27.5% strongly agreeing, indicating that the parking needs of two-wheeled vehicles, which are the dominant mode of transportation for minimarket customers, have been well met. However, on the indicator of parking space availability for cars, although the majority of respondents agreed (37.3%) and strongly agreed (15.7%), there was still a proportion of respondents who rated it as sufficient to insufficient, indicating that the adequacy of car parking was not yet fully evenly distributed across all minimarket locations. Overall, these results show that the adequacy of minimarket parking facilities in Surabaya City has relatively met customer needs, especially for motorcycles, but an increase in capacity and car parking space management is still needed so that parking adequacy can be felt more optimally by all users.

The results of the study show that customers generally consider the quality of parking facilities at minimarkets in Surabaya to be adequate to meet their needs when parking their vehicles. Indicators such as the availability of parking spaces in accordance with the number of customers and the area of the parking lot for vehicle maneuvering were mostly rated as agree and strongly agree, indicating that the available space is relatively adequate to accommodate the volume of vehicles arriving. In addition, respondents also gave a very positive assessment of the adequacy of parking space for motorcycles, reflecting that parking facilities have been adapted to the characteristics of users in urban areas. These findings are in line with the results of the study *Measuring the Level of Satisfaction of Parking Service Users at the Royal Plaza Surabaya Shopping Center*, which found that the availability of spacious parking spaces and parking facilities that meet safety standards and ease of access contribute to a good level of satisfaction among parking service users. In the study, respondents tended to feel satisfied because adequate parking structures helped meet the parking needs of shopping center visitors. (Djaelani et al., 2021).

Equalization of minimarket parking quality based on customer perceptions in the city of Surabaya

The distribution of minimarket parking quality based on customer perceptions in the city of Surabaya shows that, in general, parking facilities are available and accessible to customers at various minimarket locations, both in residential and commercial areas. Most customers assess that parking quality is relatively evenly distributed in terms of ease of access, availability of parking spaces, and basic facility conditions such as markings and vehicle arrangement. However, there are still differences in perception at certain locations, especially those in areas with high traffic density and visitor volume, where limited parking space causes customers to perceive parking quality as less than optimal compared to other locations.

Table 5. Parking Equity at Surabaya Minimarkets

Statement	Response				
	1	2	3	4	5
Parking facilities are evenly distributed for all types of vehicles.	3.9	11.8	23.5	45.1	15.7
Staff provide fair service to all customers.	7.8	9.8	15.7	54.9	11.8
Parking information or signs are easy to understand for all users.	2	2	23.5	52.9	19.6
The parking area is safe and suitable for use by all customers.	9.8	13.7	23.5	37.3	15.7

Source: Research, 2025

Based on the data in Table 5, the element of adequacy of minimarket parking quality in Surabaya City in general. The element of equity in the provision of minimarket parking in Surabaya shows a positive assessment trend from respondents. This is reflected in the dominance of answers in the agree (4) and strongly agree (5) categories in all statements submitted. In response to the

statement "Parking facilities are evenly distributed for all types of vehicles," the majority of respondents answered agree (45.1%) and strongly agree (15.7%). This finding indicates that most customers consider parking facilities at minimarkets to be fairly evenly distributed in accommodating various types of vehicles, although there are still respondents who are neutral (23.5%) and a small number who disagree. Furthermore, the statement "Officers provide fair service to all customers" received a 54.9% agree response and an 11.8% strongly agree response. This percentage is the highest compared to other statements, so it can be concluded that the aspect of fairness in service by parking officers is considered very good and has been felt evenly by parking users. Regarding the aspect "Parking information or signs are easy to understand for all users," the majority of respondents also agreed (52.9%) and strongly agreed (19.6%). This shows that parking information has been conveyed clearly and can be understood by most users, thereby supporting the creation of equal access to information for all customers. Meanwhile, the statement "The parking area is safe and suitable for use by every customer" received 37.3% agreeing and 15.7% strongly agreeing. Although still the majority, this percentage is lower than the other statements and is followed by a fairly high neutral response (23.5%). This indicates that the aspects of parking safety and suitability still need more attention so that all users can feel a sense of security.

The results of the study show that the equality of minimarket parking quality in Surabaya tends to be perceived positively by customers, as seen from the dominance of agree and strongly agree responses on various indicators measured. The majority of respondents assessed that parking facilities are evenly available for various types of vehicles, indicating that minimarkets in Surabaya provide inclusive parking access for motorcycle and car users without noticeable differences in service between locations. This is consistent with research findings analyzing user satisfaction with parking systems in campus environments, where the provision of adequate parking facilities that meet user needs contributes significantly to users' positive perceptions of parking service quality, as users feel that their basic needs are being met. In addition, the indicator of officers providing fair service to all customers received a high percentage, indicating that non-discriminatory service aspects also support the perception of service equality. This is also reflected in the indicator of parking information or signs that are easy to understand by all users, although this indicator also reflects the minimarket's efforts to make it easy for all customers to obtain the same information without barriers. However, on the indicator of safe and usable parking areas for every customer, the positive percentage, although still the majority, is lower and followed by a fairly high neutral response. These findings indicate that perceptions of the safety and suitability of facilities still vary among users, so that the equitable distribution of safety and comfort is not yet fully optimal in all locations (Cahyani et al., 2024)

Responsiveness of minimarket parking quality based on customer perceptions in Surabaya City

The responsiveness of minimarket parking quality based on customer

perceptions in Surabaya shows that managers and parking attendants are generally able to respond to customer needs, complaints, and parking conditions fairly quickly and appropriately, although in certain situations, improvements in service speed and accuracy are still needed.

Table 6. Responsiveness of Minimarket Parking in Surabaya

Statement	Response				
	1	2	3	4	5
Parking attendants respond quickly to customer requests for assistance.	3.9	19.6	23.5	29.4	23.5
Officers provide clear information when necessary.	7.8%	11.8	27.5	37.3	15.7
Staff immediately address any issues that arise in the parking area.	3.9	19.6	23.5	35.3	17.6
Staff attitude towards customers is friendly and helpful.	8	4	30	40	18

Source: Research, 2025

Based on the data in Table 6, the responsiveness of minimarket parking services in Surabaya City is generally rated as good to very good by customers. On the indicator of the speed of parking attendants in responding to customer requests for assistance, the majority of respondents gave positive ratings, with 29.4% agreeing and 23.5% strongly agreeing, although there were still respondents who rated it as fair and poor, indicating that the speed of response of attendants in certain conditions was not yet fully consistent. Furthermore, the indicator of the clarity of officers in providing information when needed received a dominant rating in the agree category of 37.3% and strongly agree of 15.7%, indicating that in general, officers are able to convey information clearly enough to customers. On the indicator of the alertness of officers in handling problems that occur in the parking area, the majority of respondents also gave positive ratings with 35.3% agreeing and 17.6% strongly agreeing, indicating that parking officers are quite responsive in dealing with problems that arise. Meanwhile, on the indicator of staff attitude towards customers, which is friendly and helpful, respondents' assessments tended to be very positive, with 40% agreeing and 18% strongly agreeing, indicating that the attitude of staff has supported the creation of responsive service. Overall, these results show that customers feel that the responsiveness of minimarket parking services in Surabaya is quite good. However, improvements in the consistency of response speed and the equal distribution of service quality are still needed so that all customers can experience optimal responsiveness from parking attendants.

The results of the study on the responsiveness element of minimarket parking services in Surabaya show that most respondents gave positive ratings on indicators such as the speed of staff in responding to requests for assistance, the clarity of information provided, and their readiness in handling problems in the parking area. High scores in the agree (4) and strongly agree (5) categories indicate that parking attendants are considered

to be quite responsive and attentive in meeting customer needs in general. These findings are consistent with other studies showing that service responsiveness is an important dimension of service quality that influences customers' perceptions of service quality and their overall satisfaction. Responsiveness reflects an organization's ability to respond quickly and appropriately to consumer needs and demands. For example, empirical studies show that responsiveness has a positive effect on perceived service quality and customer satisfaction in various service contexts (responsiveness improves perceived service quality and contributes to higher customer satisfaction). (Nafisah, 2024).

However, there are variations in assessments of several responsiveness indicators that tend to be more moderate. Although the majority of respondents gave positive ratings, there are still a proportion of ratings in the fair and poor categories, indicating that the consistency of officer responsiveness is not yet fully uniform, especially in service scenarios with high customer intensity or more specific information needs. This indicates that under certain conditions, customers still experience delays or a lack of clarity in staff responses, which can reduce positive perceptions of overall service quality. These findings are in line with service quality research findings that state that good responsiveness plays an important role in meeting customer expectations and increasing satisfaction, but limitations in terms of speed or accuracy can have a negative impact on customer ratings (Ekonomika et al., 2025).

The quality of minimarket parking based on customer perceptions in the city of Surabaya

The accuracy of minimarket parking quality based on customer perceptions in Surabaya shows that parking facilities and management have generally been adapted to the needs and purposes of parking use by customers. The majority of customers assessed that the layout of the parking space, the arrangement of vehicle traffic, and the presence of parking attendants were appropriately placed to support the smooth flow of vehicles entering and exiting the parking lot and minimize disruption to users. However, in some locations with limited land and high visitation rates, the accuracy of parking management is still considered suboptimal, especially in terms of adjusting parking capacity and regulating usage times. These findings indicate that although the accuracy of minimarket parking quality in Surabaya is generally quite good, continuous evaluation is needed so that parking management is more targeted and in line with the dynamics of customer needs.

Table 7. Parking Accuracy of Minimarkets in Surabaya

Statement	Response				
	1	2	3	4	5
Parking policy is subject to conditions on the ground.	3.9	11.8	29.4	45.1	9.8

Parking regulations are properly enforced by officers.	5.9	7.8	31.4	43.1	11.8
Parking policies support the smooth running of customer activities.	5.9	3.9	25.5	47.1	17.6
The placement of parking facilities is in line with customer needs.	5.9	3.9%	19.6	45.1	25.5

Source: Research, 2025

Based on the results in Table 7, it can be seen that the minimarket parking regulations based on customer perceptions in Surabaya City are generally considered adequate to good. This can be seen from the majority of respondents who gave positive ratings (scores of 4 and 5) on all indicators. The statement that the parking policy is in line with field conditions received a high response, with 45.1% of respondents agreeing and 9.8% strongly agreeing, indicating that the policy implemented is relevant to the actual situation at the parking location. Furthermore, regarding the enforcement of parking rules by officers, 43.1% of respondents agreed and 11.8% strongly agreed, although there were still respondents who rated it as adequate, indicating differences in the level of consistency in implementation in the field. On the indicator of parking policies that support the smooth running of customer activities, the majority of respondents gave a positive assessment, with 47.1% agreeing and 17.6% strongly agreeing, indicating that the parking system relatively supports customer comfort and mobility. However, the aspect of parking facility placement received a more moderate assessment, with a majority of respondents agreeing (45.1%) and finding it adequate (19.6%), indicating that although the layout of parking facilities is considered adequate, improvements are still needed to optimally meet customer needs.

The results of the study on the elements of minimarket parking service regulations in the city of Surabaya show that most respondents gave positive ratings on indicators such as the suitability of parking policies to field conditions, the accuracy of rule enforcement by officers, policy support for the smooth running of customer activities, and the placement of parking facilities according to needs. High scores in the agree (4) and strongly agree (5) categories indicate that parking policies and implementation are perceived as quite appropriate and in line with general customer needs. These findings are consistent with other studies showing that parking service quality, which includes the dimensions of policy consistency, implementation consistency, and facility suitability, influences users' overall perception of the service and contributes to customer satisfaction. Research assessing customer satisfaction levels with the quality of parking services in an academic environment found that service quality attributes such as reliability, responsiveness, tangibility, assurance, and empathy play an important role in shaping users' perceptions of parking service satisfaction. This shows that policy consistency and parking service implementation play a role in creating a better service experience for users. (Kuncoro, 2022).

Table 8. Summary of Result

Variable	Mean	SD	Category
Effectiveness	3.77	0.96	Moderate - High
Efficiency	3.66	1.02	Moderate - High
Sufficiency	3.63	0.95	Moderate - High
Equity	3.62	1	Moderate - High
Responsiveness	3.47	1.13	Moderate - High
Accuracy	3.60	1.01	Moderate - High

Source: Research, 2025

The results of the study indicate that service effectiveness is in the medium to high category. This indicates that, in general, the measured service objectives (service output in line with targets and user needs) have achieved good performance, but there is still room for improvement. Based on Table 8, the research results show that all variables for evaluating the quality of minimarket parking in Surabaya are in the medium-high category, with mean values ranging from 3.47 to

3.77. This indicates that, in general, customers consider the quality of minimarket parking services to be quite good, although there is still room for improvement in certain aspects. The effectiveness variable obtained the highest mean value of 3.77 with a standard deviation of 0.96. This finding shows that minimarket parking facilities and management are considered capable of fulfilling their main objective, which is to provide parking spaces that can be used functionally by customers and support shopping activities. Effectiveness in public policy evaluation relates to the extent to which a policy or service is able to achieve its stated objectives (Dunn, 2003). These results are in line with previous research findings which show that service effectiveness plays an important role in improving the quality of public services and community satisfaction. For example, Syukriyati & Solikin (2025) found that the more effective an agency's internal control is, the more significantly the quality of public services improves. (Profesi, 2018) In addition, studies on the effectiveness of public services show that when services are designed effectively and responsively to user needs, the level of public satisfaction also increases. (Perspektif et al., 2023)

Overall, the quality of minimarket parking in Surabaya City is considered quite good. Effectiveness, efficiency, adequacy, equity, responsiveness, and accuracy are in the medium- high category with a mean value between 3.47 and 3.77. This indicates that, in general, customers consider parking management to be quite good in supporting shopping activities. However, improvements in responsiveness and equity need to be prioritized so that parking service quality can be more optimal and sustainable

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research conducted on the evaluation of minimarket parking quality in the city of Surabaya based on customer perceptions, it can be concluded that the existence and quality of parking facilities are important components in supporting modern retail activities in urban areas. Along with economic growth, community mobility, and the development of minimarkets as providers of daily necessities, the need for adequate parking facilities has become increasingly crucial.

The results of the study show that limited parking facilities, in terms of space capacity, layout, and management systems, have the potential to cause various urban problems. These problems include traffic congestion, conflicts over the use of public space, and a decline in customer comfort when shopping. This condition confirms that parking facilities not only serve as a means of supporting minimarket operations, but also play a role in maintaining order and the quality of the urban environment.

In addition, the evaluation results show that customer perceptions of parking quality are closely related to their level of satisfaction and comfort. Irregular parking and the existence of illegal parking around minimarkets have the potential to reduce the quality of retail services and impact the image of businesses and public services in general. Therefore, evaluating the quality of minimarket parking based on customer perceptions can be used as an objective basis for formulating strategies to improve parking management that is more effective, orderly, and sustainable in the city of Surabaya.

FURTHER STUDY

This research still has limitations so further research is needed regarding Evaluation of Minimarket Parking Quality Based on Customer Perception Representation to perfect this research and increase insight for readers and writers.

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