East African Scholars Journal of Psychology and Behavioural Sciences
Abbreviated Key Title: EAS J Psychol Behav Sci
ISSN 2663-1865 (Print) | ISSN 2663-6751 (Online)
Published By East African Scholars Publisher, Kenya

Volume-6 | Issue-6 | Nov-Dec-2024 | DOI: https://doi.org/10.36349/easjpbs.2024.v06i06.001

OPEN ACCESS

Original Research Article

The Impact of the Strategic Location of a Vehicle Steam Wash Facility and Service Quality in Building Customer Loyalty in Jakarta

Adi Kuswanto[1*], Prihantoro[1], Hadir Hudiyanto[1], Jalinas[1]
[1]Gunadarma University, Jakarta, Indonesia

Article History
Received: 23.11.2024
Accepted: 28.12.2024
Published: 31.12.2024

Journal homepage:
https://www.easpublisher.com

Quick Response Code

Abstract: The level of competition in the vehicle washing sector is increasing, because the number of vehicles, both cars and motorbikes, is increasing every year. This is an opportunity for vehicle washing entrepreneurs to increase revenue through customer loyalty. The purpose of this study was to examine the effect of vehicle washing location and service quality on customer loyalty in Jakarta. This study successfully collected data through a customer survey of 130 customers. The sampling method used in this study is the non-probability purposive sampling method. We used multiple regression analysis where customer loyalty is the dependent variable and the location of the vehicle washing and service quality as exogenous variables. The collected data were then processed using the Smart PLS data processing tool. Partial Least Square measures two submodels, namely the outer measurement submodel or outer Measurement Model and the structural model or inner Model or inner Measurement Submodel. The results of this study found that the location of the vehicle washing and service quality have a statistically significant effect on customer loyalty. The implications and limitations of this study are also discussed in this article.

Keywords: Location, Service Quality, Loyalty.

1. INTRODUCTION

The strategic location of the vehicle steam wash facility and the quality of service provided play a significant role in building and maintaining customer loyalty. These two factors are interrelated and have a significant impact on the customer experience, which in turn influences their decision to return and use the service regularly. Strategic location and accessibility in enhancing customer loyalty is one of the most important factors in building customer loyalty. A strategically located steam wash facility makes it easier for customers to access the service without spending too much time or effort. Some essential elements of a strategic location are that a location that is close to residential areas, workplaces, or other frequently visited places will increase customer convenience. For example, if a steam wash facility is located near a shopping mall or in the city center, customers can easily wash their vehicles while they shop or run errands. This convenience allows customers to fit the car wash service into their daily routines without significant time investment. Customer loyalty is the main key for companies to gain profits in the long run. Location selection is a critical long-term decision as it affects costs, attracts customers, and impacts sales, while poor placement can have lasting negative effects (Singh, Tyagi, Kumar, & Agrawal, 2020). Pangarkar (2018) states that location strategy is consistent with preemptive strategy. Strategic locations have incentives (protecting their dominant position) and capabilities (scale, low cost, and a merchandise mix that appeals to the mass market) to adopt a preemptive strategy.

Building a car wash business requires relatively large capital, such as the cost of building a washing area and water drainage, purchasing and installing washing equipment, purchasing tables and chairs for customers, salary costs, supplies costs and so on. This place must meet the requirements desired by customers. Location is crucial because it involves significant fixed investments that are difficult to change without substantial financial consequences, serves as the primary point of contact between customers and providers, and affects accessibility, which influences customers' likelihood of choosing a service or product. Strategic locations enhance business success, although their benefits must be weighed against costs and other factors such as customer satisfaction and the type of service offered

***Corresponding Author:** Adi Kuswanto
Gunadarma University, Jakarta, Indonesia

(Jones *et al*., 2003). In global business, entrepreneurs must study international location strategies and the factors that influence location choice and their importance and assess how locations are acquired and selected (Alexander *et al*., 2018).

For customers with busy schedules, such as office workers, a strategically located steam wash facility allows them to wash their vehicles before or after work, or even on weekends. If the facility is far or hard to access, customers may be discouraged from coming regularly, which can reduce their loyalty. A facility with ample and accessible parking is crucial for customer convenience. If customers struggle to find a safe or convenient parking space, they may be hesitant to return. A steam wash facility with adequate and easily accessible parking ensures a smooth experience for customers, which strengthens their loyalty. Locations situated in areas with high accessibility typically offer extended operating hours, which benefits customers. A steam wash service that operates on weekends, in the evenings, or even 24 hours a day provides greater flexibility for customers who may have tight schedules. This flexibility allows customers to get their vehicles cleaned at a time that suits them, such as after work or on weekends, enhancing their overall experience. Poor location decisions are often irreversible, making it essential for car wash provider to consider market dynamics and competitors (Karande & Lombard, 2005). So important is the location factor for achieving success for business people including car wash businesses, Roig-Tierno *et al*., (2013) state that business success factors are related to location and competition. Verhagen, *et al.*, (2022) confirmed that location congruence and intrusiveness are the location-based message characteristics with the strongest effects on message value and store visit attitudes.

While a strategic location is essential, the quality of service is the primary factor that determines whether customers will remain loyal or seek other options. The level of success and quality of a company is significantly determined by its ability to deliver high-quality services to customers, as this directly influences customer satisfaction, the achievement of a substantial market share, increased profitability, and the company's ability to remain competitive; consequently, the implementation of a robust service quality approach is essential as a core strategy for long-term survival and success in a competitive market environment (Solimun and Fernandes, 2018). Organizations fundamentally exist to create value and deliver superior experiences for their customers, which they achieve by implementing strategies focused on providing excellent services and superior service quality Suha *et al*., 2021). In the banking sector, the importance of service quality is also stated by (Shankar and Jebarajakirthy, 2019) where improving the quality of e-banking services is the main strategy to grow customer loyalty, which leads to the development of the EBSQ scale to assess customer expectations and perceptions specifically towards e-banking services.

Service quality encompasses not only the cleanliness of the vehicle after the wash but also the overall customer experience, from interactions with staff to the timeliness and comfort of the service. Loyalty can translate into their making recommendations to their relatives or family members when they are satisfied with the service quality (Mohanachandran *et al*., 2020). Service quality that meets or exceeds customer expectations is the key to building customer satisfaction and loyalty toward tourist destinations (Castillo-Canalejo and Jimber del Río, 2018).

To provide better service quality, organizations need to develop relationships with consumers Behnam *et al*., 2021) For many customers, speed is a critical factor. However, speed should not compromise the quality of the cleaning. A steam wash service that can deliver fast results without sacrificing quality is highly appreciated. Efficient processes, such as timely washing and drying, save customers time and make the service more appealing. Fast service is particularly important for customers who prefer not to wait too long. For example, workers who want their cars washed before work benefit from a service that is both fast and thorough. An organized queue system and timely completion of washing processes increase customer satisfaction and make them more likely to return.

The primary reason customers opt for steam wash services is the quality of cleaning. The use of modern, well-maintained equipment plays a significant role in ensuring a thorough cleaning. For example, using steam technology is more effective in removing dirt without wasting excessive water, which makes the service both environmentally friendly and efficient. High-quality equipment ensures that vehicles are cleaned thoroughly without risking damage, which builds customer trust and confidence. Customers are more likely to return to a place where they know their vehicle will be handled carefully and cleaned thoroughly.

Service quality is also heavily influenced by customer interaction with the staff. Professional, trained, and friendly staff can create a positive and memorable experience, which makes customers feel valued. A friendly staff who listens to the needs of customers and ensures their satisfaction will increase trust and loyalty toward the business. Additionally, staff who are knowledgeable about the proper techniques and equipment to use for each type of vehicle help to ensure a high standard of service. When customers feel that their vehicles are in good hands, they are more likely to return and recommend the service to others.

Customers are increasingly aware of environmental issues and prefer businesses that adopt sustainable practices. A steam wash facility that uses

eco-friendly technologies such as water-saving steam systems or non-toxic cleaning products will appeal to environmentally-conscious customers. By offering services that prioritize sustainability, a steam wash business can build a positive reputation and attract loyal customers who are aligned with these values. However, little prior literature discusses service quality in vehicle steam wash from customers' viewpoints and its relationship to customer loyalty.

This research seeks to examine how the location of vehicle steam wash provider and the quality of their services impact customer loyalty in Jakarta. The study begins with a review of relevant literature and the formulation of hypotheses and research methodologies. It proceeds to present findings and discussions, including an analysis of respondent profiles, assessments of the measurement and structural models, and an evaluation of the model's overall validity. The paper concludes by outlining key findings, along with the study's limitations.

2. Literature Review and Hypotheses Development

Location and Customer Loyalty

The location of a retail store is a cornerstone of its success, playing a significant role in determining customer accessibility, satisfaction, and long-term loyalty. Beyond the traditional logistical considerations, location also encompasses emotional and experiential factors that shape how customers perceive and engage with a brand. In an increasingly competitive retail environment, the strategic selection of store locations has become a pivotal element of business strategy, as it directly impacts customer behavior, purchase decisions, and their propensity to develop loyalty toward the store. Drawing on recent literature, this narrative explores how retail location influences customer loyalty through factors such as accessibility, convenience, experiential value, emotional connection, and technological integration.

Retailers make location decisions with the dual objectives of maximizing customer convenience and aligning with broader strategic goals such as market expansion and brand positioning. Alexander, Nobbs, and Varley (2018) emphasize the role of pop-up stores as a strategic tool for international market penetration. These temporary retail formats allow businesses to engage directly with customers in high-traffic areas, offering unique, memorable experiences that foster stronger brand associations. When located strategically, pop-up stores reduce entry risks and test market dynamics while building emotional connections with customers. These experiences often translate into stronger customer loyalty, as they generate positive brand memories and reinforce engagement.

In the luxury retail sector, Arrigo (2015) highlights how flagship stores located in exclusive urban areas create a "luxury sense of place" that elevates the brand's identity. The proximity of multiple flagship stores in a single area amplifies this effect, establishing a symbolic value that appeals to loyal customers. By enhancing the brand's exclusivity and reinforcing its appeal through strategic clustering, retailers can cultivate an environment that encourages repeat visits and long-term brand loyalty. These findings suggest that location decisions aligned with brand identity and customer expectations significantly contribute to loyalty by enhancing perceived value and emotional engagement.

Pangarkar (2018) further underscores the strategic importance of location through a comparative analysis of two retail players in a competitive market. The study reveals that the dominant incumbent, NTUC FairPrice, adopted a preemptive location strategy to secure prime locations and protect its market share, leveraging operational scale and cost efficiency. In contrast, the second-ranked player, Cold Storage, lacked the resources and market appeal to employ similar strategies. This divergence highlights how strategic location decisions can determine a retailer's ability to attract and retain a loyal customer base, particularly in competitive markets where location plays a decisive role in customer convenience and accessibility.

As technology reshapes the retail landscape, the influence of store location on customer loyalty is increasingly mediated by digital innovations. Verhagen *et al*., (2022) provide evidence of how location-based mobile messages enhance customer perceptions and store visit intentions. Their study demonstrates that personalized and geographically relevant messages significantly increase the perceived value of communication, encouraging customers to engage with the store and fostering loyalty. This finding underscores the importance of integrating digital strategies with physical location choices to create seamless and impactful customer experiences.

Shieh and Ling (2019) expand on this concept by exploring the effectiveness of pull-based versus push-based location advertising approaches. Their research reveals that customers are more likely to respond positively to opt-in (pull) messages, which respect user preferences and timing. These messages foster trust and emotional connection, which are critical components of customer loyalty. Additionally, the study highlights how location-targeted advertisements can enhance the perceived relevance of the store, encouraging repeat visits and long-term engagement. These findings suggest that the integration of location-based technologies amplifies the impact of physical store locations, transforming them into touchpoints for sustained customer interaction.

De Gauquier *et al*., (2021) explore another technological dimension of retail location strategies through their study of humanoid service robots (HSRs). Their research demonstrates that the placement of HSRs—whether inside or outside the store—affects

customer engagement and transaction outcomes. Robots positioned outside the store attract foot traffic and generate curiosity, while those placed inside facilitate in-store experiences and conversions. These findings indicate that technology-enhanced location strategies can influence customer loyalty by improving the overall shopping experience and strengthening emotional bonds with the brand.

While technology plays a crucial role in modern location strategies, human intuition and experiential insights remain indispensable in ensuring that location decisions resonate with customer expectations. Wood and Brown (2007) emphasize the importance of combining quantitative forecasting techniques with qualitative approaches, such as site visits, to better understand local market dynamics. Site visits provide valuable context that complements analytical models, ensuring that location decisions reflect the realities of customer preferences and behaviors. This balanced approach enhances the retailer's ability to create locations that meet customer needs, fostering greater satisfaction and loyalty.

Reynolds and Wood (2010) further advocate for the integration of intuitive insights into location planning processes. Their study highlights how experiential knowledge gained through direct observation complements data-driven models, resulting in more effective and customer-centric location decisions. These findings suggest that successful location strategies are not solely reliant on technical analysis but also require a deep understanding of the social and emotional factors that influence customer loyalty. By aligning location decisions with customer convenience and experiential value, retailers can enhance their ability to build and sustain loyalty.

The cumulative insights from these studies reveal that store location is not just a logistical consideration but a critical driver of customer loyalty. A well-chosen location enhances accessibility and convenience, creating a foundation for repeat patronage. Moreover, strategically located stores contribute to the emotional and experiential value that customers associate with a brand, reinforcing their loyalty. The integration of technology further amplifies these effects, transforming store locations into dynamic touchpoints for ongoing customer engagement. Based on this synthesis, a hypothesis emerges:

H_1: Vehicle steam wash provider location significantly influences customer loyalty.

Service Quality and Customer Loyalty

Mohanachandran et al. (2020) investigate service quality dimensions of tourist destinations in developing a favorable or unfavorable image among travellers which affect visitors' loyalty or disloyalty as well as destination image. However, such claims are seldom evaluated into in avitourism locations, which are a niche tourism, but fast growing. The purpose of their study is to examine the relationship between service quality, visitor satisfaction and destination image and destination loyalty among avian tourists. The results show that the service quality provided by the park management has a positive impact on visitor satisfaction, destination image and destination loyalty. The study also shows partial mediation effect of visitor satisfaction on destination image and destination loyalty among avitourists. The study extends practical, policy and theoretical implications to the stakeholders of avitourism.

Behnam *et al*., (2021) study the influence of consumer knowledge management on attitudinal and behavioral loyalty through service quality and psychological involvement. They reveal that the effects of service quality on psychological involvement were dependent on consumer knowledge management. Furthermore, there were the mediating effects of service quality and psychological involvement in the relationships between the consumer knowledge management and loyalty.

Xie *et al*., (2023) investigate the impacts of return channel type on the relationships between return service quality (RSQ) and customer loyalty (CL) in an omnichannel retailing environment. They find that for BORIS channel, satisfaction of customer returns (CRS) partially mediates the relationship between convenience and CL, and fully mediates that between CL and responsiveness, transparency and competence, respectively. For BSROW channel, CRS partially mediates the relationship between responsiveness and CL, and fully mediates that between CL and convenience, transparency and competence, respectively. The mediation effects indicate that omnichannel customers may feel more satisfied due to higher omnichannel fulfillment (responsiveness and convenience) and omnichannel trust (transparency and competence) provided by retailers. Return channel type moderates the relationship between RSQ-convenience and CL. The results show the different expectations between BORIS and BSROW customers in the return process.

Solimun and Fernandes (2018) investigate the mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty, in a study in Telkomsel-Indonesia. The product used in this research will take the telecommunication service product categories with a number of products available in the market. In this research, the telecommunication service products of Telkomsel with various features as the research objects were studied. They find that the quality of service, service orientation, and strategy marketing mix applied by the company are not all variables can directly affect customer loyalty, but must first going through satisfaction. Which means that companies must

first need to understand what the customer needs through variable service quality, service orientation, and marketing mix strategy so that the customers feel loyal when the level of satisfaction is resolved. The service quality provided by the telecommunications industry needs to be improved in order to improve customer satisfaction and loyalty of telecommunications services, especially for Telkomsel in Malang.

Zhang, Jun, and Palacios (2023) study to identify the salient mobile shopping (m-shopping) service quality dimensions as perceived by mobile shoppers (m-shoppers) and examines the linkages between the derived m-shopping service quality dimensions, customer trust and customer loyalty. They find that five key m-shopping service quality dimensions: responsiveness, personalization, ease of use, aesthetics and perceived risk based on an extensive review of relevant literature. The SEM results show that all the five m-shopping service quality dimensions significantly impact, directly and/or indirectly, customer loyalty. Moreover, the results show that trust plays a partial mediating role in the effects of responsiveness and personalization on loyalty; a full mediating role in the effects of aesthetics and perceived risk on loyalty and no mediating role in the effect of ease of use on loyalty.

Koay *et al*. (2022) study to explore how online food delivery (OFD) service quality influences customer satisfaction and customer loyalty. They find that five dimensions of OFD service quality, including assurance, maintenance of meal quality and hygiene, reliability, security and system operation, are significant to customer satisfaction. Traceability is found to have no significant influence on customer satisfaction. Furthermore, customer satisfaction is a significant predictor of customer loyalty. The NCA results show that all dimensions of OFD service quality are necessary conditions for customer satisfaction and customer satisfaction is a necessary condition for customer loyalty.

Dasanayaka *et al*. (2024) investigate the motivation among customers to be more loyal to online food delivery applications (OFDA) services even after the COVID-19 epidemic by using perceived service quality aspects in Sri Lanka. They reveal that the significant positive effect of interaction, environment, outcome, and food qualities on customer loyalty to OFDA services. There is no impact from the delivery quality on customer loyalty to OFDA services due to outsourced food delivery.

Suhartanto *et al*., (2024) evaluate the loyalty formation model on e-grocery service incorporating food quality, e-grocery quality and relationship quality as determinants of loyalty. They confirm that local food quality, e-grocery service quality and the relationship quality elements of a sense of community and attitudinal attachment, are all loyalty drivers. Next, mediation tests reveal that local food quality and e-grocery service quality influence customer loyalty through customers' attitudinal attachment and a sense of community.

Castillo Canalejo, and Jimber del Río (2018) study the development of a universal model to evaluate the perceived value of tourism services and satisfaction with, and loyalty to, destinations from the consumers' perspective and demonstrated the model's applicability in this context. They show that tourists who visit Seville report a high level of loyalty to, and satisfaction with, this place because of the perceived quality of a variety of services. It is observed that the perceived quality index is much higher (17.95 per cent) than the expected quality index, so the quality of the service received by the tourist during his/her visit to Seville is described as excellent.

Shankar and Jebarajakirthy (2019) investigate a comprehensive moderated mediated mechanism for enhancing customer loyalty toward e-banking platforms via e-banking service quality (EBSQ) practices. Reliability, website design, privacy and security and customer service and support are the dimensions of EBSQ. They show that of the EBSQ dimensions, reliability along with privacy and security enhanced customer loyalty to e-banking. The initial trust in e-banking mediates the effects of EBSQ dimensions on customer loyalty except for website design. The mediation effects of initial trust varied between high and low-involved consumers.

Albuquerque and Ferreira (2022) study co-creation behavior and relationship between perception of service quality, loyalty and co-creation, from Starbucks customers' perspective. They show that service quality has a positive impact on loyalty and co-creation behavior in all its aspects; loyalty can be considered an important attribute in the intention of co-creation by customers.

Based on this discussion, the first hypothesis of the current study is developed

H_2: Service quality significantly influences customer loyalty.

3. RESEARCH METHOD

The type of the research is descriptive and quantitative with cross-sectional data collection. We develop proposed frame work based on the S-O-R Theory. This model incorporated the quality factors perceived by consumers and car wash location and customer loyalty. Therefore, all constructs and measurement items came from previous studies and were adapted and validated by four marketing and consumer behaviour experts. The research participants completed an electronic form with five-point agreement or disagreement scales, where one (1) means "totally disagree" and five (5) indicates "totally agree". The survey sample consisted of 130 respondents who had had their vehicle washed in Jakarta. Respondents' participation was voluntary. The questionnaire used in

this study was adapted from earlier research with modifications to align with the study's objectives.

First stage of the research methodology involved sample screening. This study adopted non probability purposive sampling method. The respondents had to be someone who had washing his vehicle and regularly visited vehicle wash provider. The justification for the mentioned criteria is that this study focussed on post-purchase experience; hence, only people who had past washing vehicle were chose to participate in this study. Collected via self-administered questionnaires and electronic questionnaire via Google Forms were made available. The questionnaire was available in Indonesia language. Indicators of each variable and questionnaire source are presented in table 1.

Table 1: Variable and Indicators

Variable	Indicator	Source
Vehicle wash location	Location position Ease of Access Environmental comfort Environmental safety Strategic location	Jones *et al*., (2003), and Singh *et al*., (2020).
Service quality	Hospitality Completeness of facilities Completion of work Waiting room and washing area Standard washing procedure	Jones *et al*., (2003), Shankar & Jebarajakirthy (2019).
Loyalty	Frequency of washing vehicles Satisfaction Member offering Recommendation	Behnam *et al*., (2021).

This study employed structural equation modeling using partial least squares (PLS-SEM) to evaluate the proposed hypothetical model. According to Hair *et al*., (2014), PLS-SEM relies on regression techniques to explain the variance of latent constructs, aiming to minimize errors while maximizing the R^2 values of endogenous (dependent) constructs. PLS-SEM is particularly suitable when data deviate from normal distribution. The method follows a two-stage evaluation process: first, assessing the measurement model, and second, examining the structural model. Initially, the reliability and validity of the measurement items are evaluated. Partial Least Squares (PLS) evaluates two key submodels: the outer measurement model (or outer model) and the structural model (or inner model). According to Hair *et al*., (2021), the evaluation of the measurement model includes tests for validity and reliability. Validity assessment involves convergent validity, using factor loadings ≥ 0.70 and Average Variance Extracted (AVE) ≥ 0.50, as well as discriminant validity, evaluated through Fornell-Larcker criteria and cross-loadings. Reliability is assessed using composite reliability requiring a minimum threshold of 0.70. Hypothesis testing involves examining path coefficients and their 90% confidence intervals, while the model's goodness-of-fit and suitability are evaluated through measures such as R-squared values, path coefficients, model fit indices, PLS Predict, and linear tests.

4. RESULTS AND DISCUSSION

Respondent Profiles and Descriptive statistics

Our study uses cross-sectional data. Data were collected using a manual survey (paper-pencil) from 130 car wash customers. The profile of respondents who washed their vehicles and became the research sample is presented in the following figure.

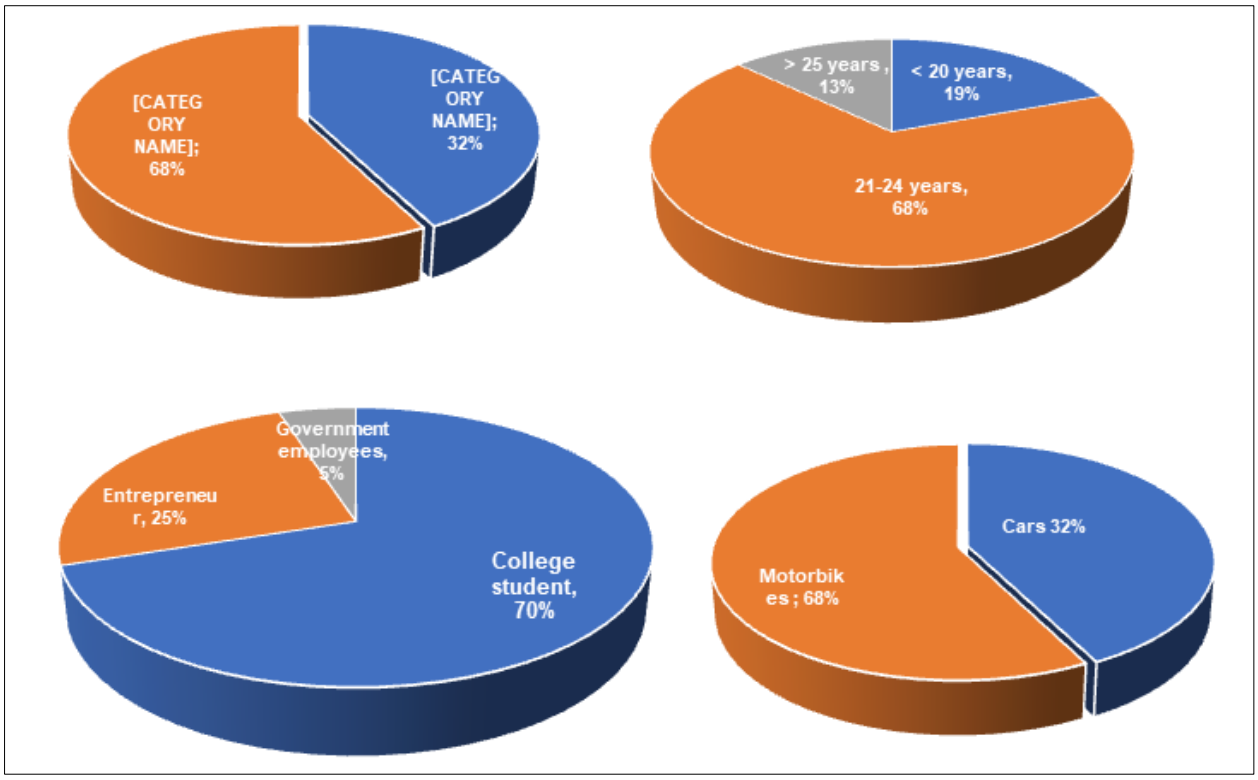


Figure 1: Respondent Profile

This research used 130 respondents with profile explanations as follows. The respondents aged less than 20 years were 19 percent, aged between 21 years and 24 years were 68 percent, and above 25 years were 13 percent Based on their work or status, they consist of 70 percent students, 25 percent entrepreneurs and 5 percent civil servants. Based on the type of vehicle washed, 68 percent were motorbikes and 32 percent were cars.

Descriptive Statistics

Descriptive statistics of the variable's vehicle wash location, service quality, and customer loyalty are presented in the following table.

Table 2: Descriptive statistics

Indicator	Mean	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
LOC3	4.13	3	5	0.44	1.50	0.65
LOC5	4.15	2	5	0.52	2.09	-0.15
Mean	4.14					
SQ1	4.19	2	5	0.48	2.80	0.05
SQ2	4.02	2	5	0.58	2.83	-0.74
SQ3	4.11	1	5	0.64	4.22	-1.01
SQ5	4.27	2	5	0.57	0.99	-0.31
Mean	4.15					
LOYALTY 2	4.22	3	5	0.51	-0.01	0.28
LOYALTY 3	3.42	2	5	1.06	-1.27	-0.07
LOYALTY 4	3.35	2	5	1.07	-1.30	0.05
Mean	3.38					

Evaluation of Model

The evaluation of the PLS model involves three key components: measurement model assessment, structural model assessment, and overall model fit evaluation.

Evaluation of Measurement Models

The measurement model is assessed through two main tests: validity and reliability. Validity testing includes convergent validity, which is evaluated using factor loadings with a threshold of ≥ 0.70 and Average Variance Extracted (AVE) with a criterion of ≥ 0.50. It also involves discriminant validity tests, assessed using the Fornell-Larcker criteria and cross-loadings. Reliability is assessed using composite reliability, requiring a value greater than 0.70 (Hair *et al*., 2021). The findings from these validity and reliability assessments are detailed in Appendix 1.

Appendix 1 shows that in the Outer Loadings/Loadings Factor table in appendix 1, it is known that there are several invalid indicators, namely the LOC 1, LOC 2 and LOC 4 indicators of the location variable, the SQ4 indicator, and the LOYALTY 1 and LOYALTY 5 indicators. The Construct Reliability and Validity table shows that the location is invalid. The Fornell-Larcker Criterion test shows a lower value for each variable compared to other variables except for the service quality variable. The cross loading test shows that all indicators of each variable are valid. The reliability test using the Composite Reliability test shows that all variables have reliable status. For this reason, the LOC 1, LOC 2 and LOC 3 indicators of the location variable, the SQ4 indicator of service quality, and the LOYALTY 1 and LOYALTY 5 indicators of customer loyalty were dropped from the analysis and the data was reprocessed and the results are as follows.

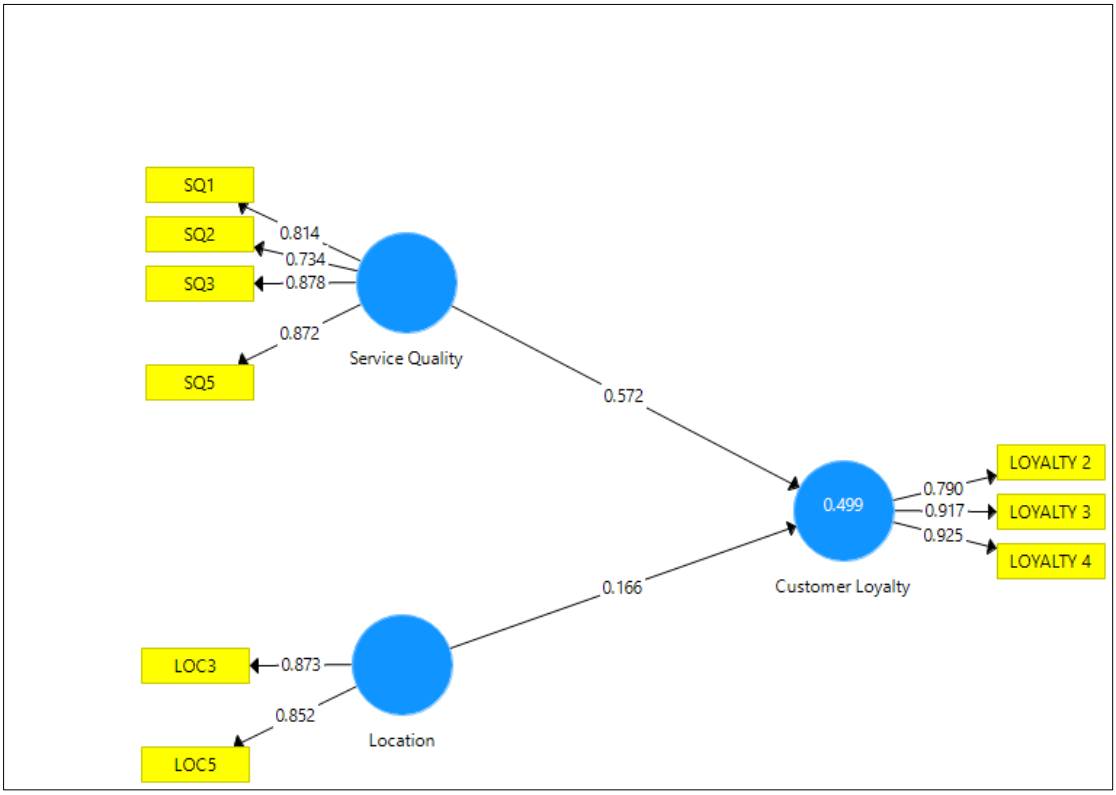


Figure 2: Path Coefficient

Indicators for each variable provide a factor loading value of more than 0.7, composite reliability for each variable has more than threshold of 0.7, and average variance extracted (AVE) with a minimum value of 0.5, are presented in table 2.

Table 3: Convergent Validity and Reliability

Variable	Indicator	Loading Factor	Composite Reliability	AVE
Location	LOC3	0.873	0.853	0.744
	LOC5	0.852		
Service Quality	SQ1	0.814	0.896	0.683
	SQ2	0.734		
	SQ3	0.878		
	SQ5	0.872		
Consumer Loyalty	LOYALTY 2	0.790	0.911	0.774
	LOYALTY 3	0.917		
	LOYALTY 4	0.925		

Table 2 shows that the convergent validity test using factor loadings has a value of more than 0.7 for all indicators for each variable and average variance extracted has a value of more than 0.5 for each variable. This shows that all variables meet the convergent validity criteria.

The Fornell-Larcker Criterion and cross-loading analysis are utilized to assess discriminant validity, with the results detailed as follows:

Table 3: Discriminant validity

Fornell-Larcker criterion			
Variable	**Location**	**Service Quality**	**Consumer Loyalty**
Location	0.863		0.599
Service Quality	0.758	0.827	0.698
Consumer Loyalty			0.880
Cross loadings			
Indicator	**Location**	**Service Quality**	**Consumer Loyalty**
LOC3	0.873	0.694	0.535
LOC5	0.852	0.611	0.498
SQ1	0.636	0.814	0.582
SQ2	0.523	0.734	0.467
SQ3	0.739	0.878	0.512
SQ5	0.613	0.872	0.700
LOYALTY 2	0.519	0.649	0.790
LOYALTY 3	0.525	0.571	0.917
LOYALTY 4	0.530	0.608	0.925

Table 3 presents the discriminant validity test using the Fornell-Larcker criterion, where each variable demonstrates a value higher than those of other variables. According to the cross-loading analysis, each item should exhibit a higher loading on its respective construct compared to other constructs. Table 3 confirms that all indicators for each variable show higher loading values on their parent constructs than on other variables. Based on the Fornell-Larcker criterion and cross-loading results, it can be concluded that all variables satisfy the discriminant validity requirements. Additionally, Composite Reliability (CR) values for location, service quality, and consumer loyalty exceed 0.70, indicating reliability, as shown in Table 2. This confirms that all variables exhibit acceptable levels of reliability.

Evaluation of Structural Models

Structural model evaluation assesses the predictive capacity of the model in explaining causal relationships (cause-and-effect interactions) between latent variables. The evaluation of the structural or inner model involves analyzing several key metrics, including R-Square (R^2), path coefficients, T-statistics, model fit, predictive relevance (Q^2), and linearity tests. These metrics collectively determine the strength, significance, and predictive accuracy of the relationships within the model.

Table 4: R Square

Variable	**R-square**	**R-square adjusted**
Consumer Loyalty	0.499	0.491

Table 4 indicates that 49,1 percent of the variance of consumer loyalty being studied is explained by the variance of location and service quality.

To test the statistical significance of the relationships between variables in the structural model, particularly to determine whether the path coefficient has a significant effect, T-Statistics is used and the results presented in table 5.

Table 5: T Statistics

	Original sample (O)	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
Location -> Customer Loyalty	0.166	0.165	0.100	1.662	0.097*)
Service Quality -> Customer Loyalty	0.572	0.579	0.090	6.368	0.000

*) Significant at alpha 0,1.

Based on the structural model, location of vehicle steam washing provider predicts consumer loyalty ($\beta = 0.166$ with P value <0.1 and does support H_1. Service quality predicts consumer loyalty ($\beta = 0.572$ with P value <0.001 and does support H_2.

In Partial Least Squares (PLS), model fit is used to assess the extent to which the constructed model aligns with the data used. Although PLS-SEM focuses more on prediction rather than model fit as in CB-SEM (Covariance-Based SEM), evaluating model fit remains important to ensure that the resulting structural model is reliable and consistent with the data. The model fit results are presented in Table 6.

Table 6: Model Fit

	Saturated model	Estimated model
SRMR	0.091	0.091

A rule of thumb is that the *SRMR* should be smaller than 0.10 and may be interpreted as acceptable (Schermelleh-Engel *et al*., 2003). Table 6 indicate that the value of SRMS of estimated model is less than 0.1 and it is interpreted as indicating an acceptable fit.

4.3 DISCUSSION

Location and service quality were found to have a statistically significant influence on loyalty. The location of the vehicle steam wash provider that is close to users and easy access to the vehicle wash location can lead to customer loyalty, because the close distance can save time and costs to get to the vehicle wash location. Environmental comfort and safety can also create customer loyalty, because environmental comfort and safety play an important role in creating customer loyalty because both touch on fundamental aspects of human needs that influence perception, positive experiences, and consumer decisions to strengthen emotional relationships with places.

In an increasingly competitive world, customers are not only looking for products or services, but also satisfying and meaningful experiences. Hospitality, as the first component, plays an important role in creating positive emotional relationships with customers. Customers tend to feel appreciated when served with a friendly, attentive attitude and good communication. This friendly impression builds trust and creates a stronger emotional connection between customers and service providers, which ultimately encourages them to return.

Completeness of facilities is an attraction that provides convenience and efficiency to customers. When customers feel that all their needs are available in one place, such as easy payment facilities, large parking areas, or relevant additional services, they feel appreciated and prioritized. The completeness of these facilities also strengthens the image of professionalism, so that customers believe that the services provided meet high standards.

In addition, fast work completion is a form of respect for customer time. In today's fast-paced life, customers greatly appreciate services that can complete their needs without waiting too long. Timeliness in completing work creates an impression of efficiency and responsibility, which significantly increases customer satisfaction levels.

A comfortable waiting room and washing area provide an additional experience that makes customers feel more relaxed during the process. A clean waiting room, equipped with facilities such as Wi-Fi, drinks, or simple entertainment, can change customers' perceptions of waiting times that are usually boring. Customers who feel comfortable tend to be more patient and appreciate the service provider's efforts to create a positive experience.

Finally, standard washing procedures provide a sense of consistency and reliability. Customers want to be sure that every time they use a service, they will get the same or even better quality. Well-defined standards, such as washing steps that ensure maximum cleanliness, the use of environmentally friendly materials, or attention to detail, create a perception of professionalism and high quality. This is very important because consistency is the foundation of long-term loyalty.

When all these factors come together, customers not only feel that their needs are met, but also that they are valued as individuals. A holistic experience that includes friendliness, efficiency, convenience, and quality creates a deeper connection between the customer and the service provider. Customers will not only return to use the service, but will also be happy to recommend it to others. Thus, customer loyalty is not only created but also strengthened through consistent experiences.

These findings support the idea that location is a necessary initiator of loyalty (Jones *et al*., 2003; Karande & Lombard, 2005; Wood and Brown, 2007; Arrigo, 2015; De Gauquier *et al*., 2021; and Mishra *et al*., 2023) and and service quality is a necessary initiator of loyalty (Mohanachandran *et al*., 2020; Behnam *et al*., 2021; Xie *et al*., 2023; Solimun and Fernandes, 2018; Zhang *et al*., 2023; Koay *et al*., 2022; Dasanayaka *et al*., 2024; Castillo Canalejo, and Jimber del Río, 2018; Shankar and Jebarajakirthy, 2019; and Albuquerque and Ferreira, 2022)

5. CONCLUSIONS, IMPLICATION AND LIMITATION

The conclusion of this study is that the strategic location of the vehicle wash provider and service quality affect statistically and significantly and are positively related to customer loyalty. The results of this study have implications for theoretical and practical contributions. In terms of theoretical contributions, this study found that constructs related to location and service quality provide positive and significant contributions to customer loyalty. These results provide empirical support for the theoretical basis of customer behavior in the context of customers in Jakarta.

Practically, vehicle wash provider managers must be able to maintain and if possible continuously improve the quality of service to customers while the

location of the vehicle wash provider is already in a strategic and profitable location.

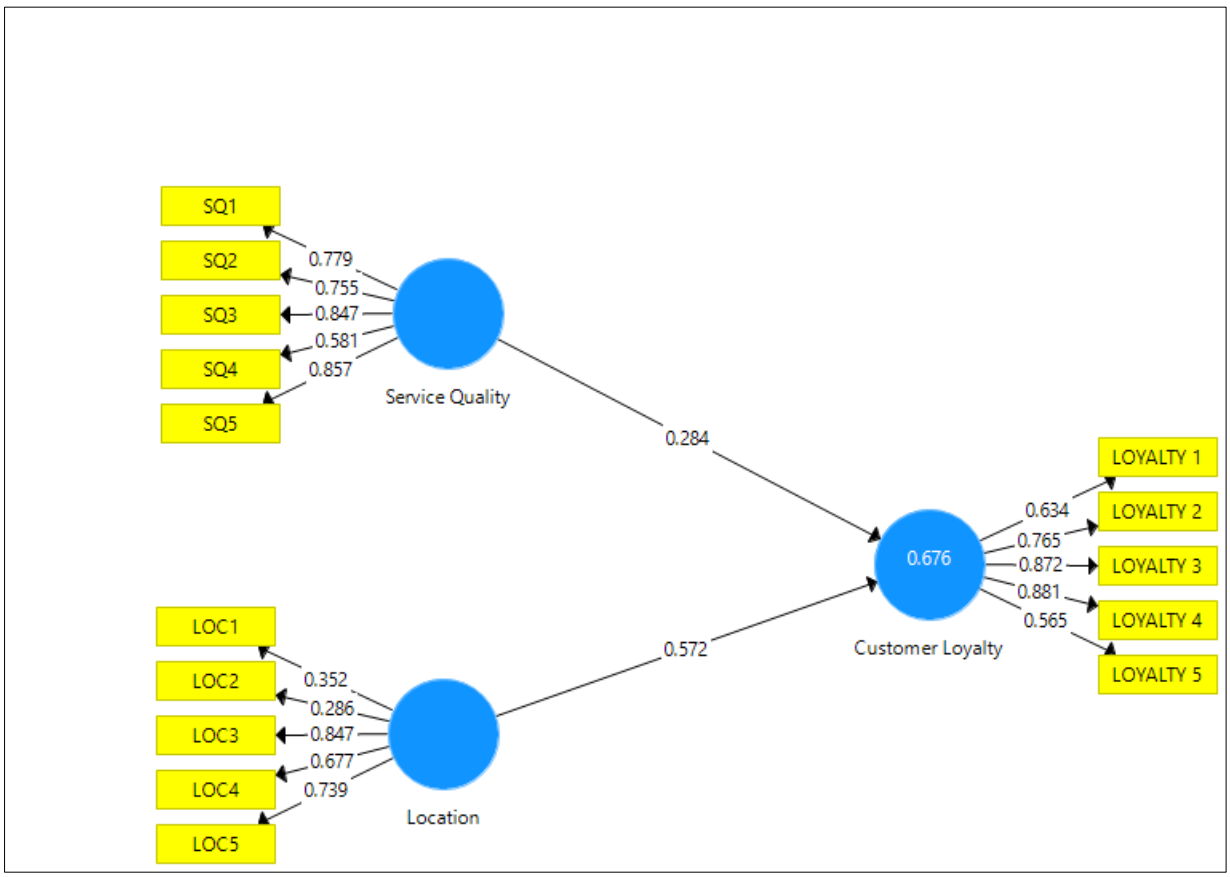
The results of this study have limitations, so there are still opportunities for future research as a continuation of this study. This study focuses on testing the hypothesis of the location of vehicle steam washing service providers and service quality on customer loyalty in Jakarta, so for further research it is recommended to use a wider random sample or in a different context such as comparing washing with steam and washing using a robot. To improve the accuracy of the model, further research can add other variables, namely the perception of washing costs, post-washing warranties and switching costs.

REFERENCES

- Albuquerque, R. P., & Ferreira, J. J. (2022). Service quality, loyalty, and co-creation behaviour: a customer perspective. *International Journal of Innovation Science*, *14*(1), 157-176.
- Alexander, A., Cryer, D., & Wood, S. (2008). Location planning in charity retailing. *International Journal of Retail & Distribution Management*, *36*(7), 536-550.
- Alexander, B., Nobbs, K., & Varley, R. (2018). The growing permanence of pop-up outlets within the international location strategies of fashion retailers. *International Journal of Retail & Distribution Management*, *46*(5), 487-506.
- Arrigo, E. (2015). The role of the flagship store location in luxury branding. An international exploratory study. *International Journal of Retail & Distribution Management*, *43*(6), 518-537.
- Behnam, M., Pyun, D. Y., Doyle, J. P., & Delshab, V. (2021). The impact of consumer knowledge on profitable consumer loyalty through perceived service quality and psychological involvement in non-profit sport clubs. *International Journal of Sports Marketing and Sponsorship*, *22*(2), 407-427.
- Behnam, M., Pyun, D. Y., Doyle, J. P., & Delshab, V. (2021). The impact of consumer knowledge on profitable consumer loyalty through perceived service quality and psychological involvement in non-profit sport clubs. *International Journal of Sports Marketing and Sponsorship*, *22*(2), 407-427.
- Castillo Canalejo, A. M., & Jimber del Río, J. A. (2018). Quality, satisfaction and loyalty indices. *Journal of Place Management and Development*, *11*(4), 428–446. https://doi.org/10.1108/JPMD-05-2017-0040
- Castillo Canalejo, A. M., & Jimber del Río, J. A. (2018). Quality, satisfaction and loyalty indices. *Journal of Place Management and Development*, *11*(4), 428-446.
- Chatterjee, S., Shainesh, G., & Sai Sravanan, C. N. (2018). Does intention translate into action? Investigating the impact of loyalty intention on future usage. *Journal of Indian Business Research*, *10*(2), 151–169. DOI: 10.1108/JIBR-11-2017-0213.
- Dasanayaka, K. D. D. U., Rathnasiri, M. S. H., Jasinghe, D., Dewasiri, N. J., WAID, W., & Singh, N. (2024). Perceived Service Quality and Customer Loyalty: A Study of Online Food Delivery Applications in Platform to Customer (P2C) Service Delivery in Sri Lanka. In *Digital Influence on Consumer Habits: Marketing Challenges and Opportunities* (pp. 19-36). Emerald Publishing Limited.
- De Gauquier, L., Brengman, M., Willems, K., Cao, H. L., & Vanderborght, B. (2021). In or out? A field observational study on the placement of entertaining robots in retailing. *International Journal of Retail & Distribution Management*, *49*(7), 846-874.
- Govindarajo, N. S., & Khen, M. H. S. (2020). Effect of service quality on visitor satisfaction, destination image and destination loyalty–practical, theoretical and policy implications to avitourism. *International Journal of Culture, Tourism and Hospitality Research*, *14*(1), 83-101.
- Jones, M. A., Mothersbaugh, D. L., & Beatty, S. E. (2003). The effects of locational convenience on customer repurchase intentions across service types. *Journal of Services Marketing*, *17*(7), 701–712. https://doi.org/10.1108/08876040310501250
- Koay, K. Y., Cheah, C. W., & Chang, Y. X. (2022). A model of online food delivery service quality, customer satisfaction and customer loyalty: a combination of PLS-SEM and NCA approaches. *British Food Journal*, *124*(12), 4516-4532.
- Mishra, M., Singh, S. P., & Gupta, M. P. (2023). "Location of competitive facilities: a comprehensive review and future research agenda", Benchmarking: *An International Journal*, *30*(4), 1171-1230. https://doi.org/10.1108/BIJ-11-2021-0638
- Niu, L., Saiki, S., Matsumoto, S., & Nakamura, M. (2016). WIF4InL: Web-based integration framework for Indoor location. *International Journal of Pervasive Computing and Communications*, *12*(1), 49-65.
- Omar, S., Mohsen, K., Tsimonis, G., Oozeerally, A., & Hsu, J. H. (2021). M-commerce: The nexus between mobile shopping service quality and loyalty. *Journal of Retailing and Consumer Services*, *60*, 102468.
- Öner, Ö., & P. Larsson, J. (2014). Which retail services are co-located?. *International Journal of Retail & Distribution Management*, *42*(4), 281-297.
- Pangarkar, N. (2018). Location preemption by oligopolists: evidence from the Singapore supermarket industry. *Journal of Strategy and Management*, *11*(1), 131-146.
- Pura, M. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality: An International Journal*, *15*(6), 509-538.

- Reynolds, J., & Wood, S. (2010). Location decision making in retail firms: evolution and challenge. *International Journal of Retail & Distribution Management*, *38*(11/12), 828-845.
- Shankar, A., & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty: A moderated mediation approach. *International Journal of Bank Marketing*, *37*(5), 1119-1142.
- Shieh, C. H., Xu, Y., & Ling, I. L. (2019). How location-based advertising elicits in-store purchase. *Journal of Services Marketing*, *33*(4), 380-395.
- Singh, J., Tyagi, P., Kumar, G., & Agrawal, S. (2020). Convenience store locations prioritization: a fuzzy TOPSIS-GRA hybrid approach. *Modern Supply Chain Research and Applications*, *2*(4), 281-302.
- Solimun, S., & Fernandes, A. A. R. (2018). The mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty. *Journal of Management Development*, *37*(1), 76-87.
- Suhartanto, D., Dean, D., & Farhani, I. (2024). E-grocery service loyalty: integrating food quality, e-grocery quality and relationship quality (young customers' experience with local food). *International Journal of Quality and Service Sciences*, *16*(1), 87-102.
- Verhagen, T., Meents, S., Merikivi, J., Moes, A., & Weltevreden, J. (2022). How location-based messages influence customers' store visit attitudes: an integrative model of message value. *International Journal of Retail & Distribution Management*, *50*(7), 781-798.
- Wood, S., & Browne, S. (2007). Convenience store location planning and forecasting–a practical research agenda. *International Journal of Retail & Distribution Management*, *35*(4), 233-255.
- Xie, C., Gong, Y., Xu, X., Chiang, C. Y., & Chen, Q. (2023). The influence of return channel type on the relationship between return service quality and customer loyalty in omnichannel retailing. *Journal of Enterprise Information Management*, *36*(4), 1105-1134.
- Yu, J., Zo, H., Kee Choi, M., & P. Ciganek, A. (2013). User acceptance of location-based social networking services: An extended perspective of perceived value. *Online Information Review*, *37*(5), 711-730.
- Zhang, R., Jun, M., & Palacios, S. (2023). M-shopping service quality dimensions and their effects on customer trust and loyalty: an empirical study. *International Journal of Quality & Reliability Management*, *40*(1), 169-191.

Appendix 1



Outer Loadings/Loadings Factor

	Customer Loyalty	Location	Service Quality
LOC1		0.352	
LOC2		0.286	
LOC3		0.847	
LOC4		0.677	
LOC5		0.739	
LOYALTY 1	0.634		
LOYALTY 2	0.765		
LOYALTY 3	0.872		
LOYALTY 4	0.881		
LOYALTY 5	0.565		
SQ1			0.779
SQ2			0.755
SQ3			0.847
SQ4			0.581
SQ5			0.857

Construct Reliability and Validity

	Composite Reliability	**Average Variance Extracted (AVE)**
Customer Loyalty	**0.865**	**0.569**
Location	**0.733**	**0.386**
Service Quality	**0.878**	**0.593**

Fornell-Larcker Criterion

	Customer Loyalty	**Location**	**Service Quality**
Customer Loyalty	0.754		
Location	0.806	0.621	
Service Quality	0.755	0.821	0.770

Cross Loadings

	Customer Loyalty	**Location**	**Service Quality**
LOC1	0.127	0.352	0.206
LOC2	0.211	0.286	0.138
LOC3	0.646	0.847	0.682
LOC4	0.673	0.677	0.609
LOC5	0.523	0.739	0.615
LOYALTY 1	0.634	0.599	0.584
LOYALTY 2	0.765	0.668	0.633
LOYALTY 3	0.872	0.640	0.597
LOYALTY 4	0.881	0.653	0.646
LOYALTY 5	0.565	0.433	0.302
SQ1	0.599	0.658	0.779
SQ2	0.565	0.562	0.755
SQ3	0.563	0.734	0.847
SQ4	0.476	0.448	0.581
SQ5	0.678	0.725	0.857

Cite This Article: Adi Kuswanto, Prihantoro, Hadir Hudiyanto, Jalinas (2024). The Impact of the Strategic Location of a Vehicle Steam Wash Facility and Service Quality in Building Customer Loyalty in Jakarta. *EAS J Psychol Behav Sci*, *6*(6), 132-144.