

Service Quality as a Determinant of Customer Retention: Unveiling the Mediating Effect of Satisfaction among Gojek App Users

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Abstract. This research aims to validate the roles of tangibility, empathy, reliability, responsiveness, and assurance in shaping customer retention rates, using customer satisfaction as a mediating factor among Gojek users in Indonesia. Adopting an explanatory framework with a quantitative lens. Data was collected from 187 respondents through questionnaires, selectively chosen through purposive sampling, and disseminated via social media platforms. This primary data was then analyzed using the SmartPLS version 3.3.3 software. The findings underscore the influence of Service Quality on Customer Satisfaction and Retention, with Customer Satisfaction significantly bridging the relationship between Service Quality and Customer Retention. In light of these findings, the study offers insights for Gojek and similar platforms to refine their service offerings and strategies, focusing on elevating the most influential service quality dimensions to optimize customer satisfaction and ensure long-term retention.

Keywords: service quality, customer retention, satisfaction, customer behavior

1. Introduction

In the current digital era, technological advancements have influenced almost every aspect of human life, driving a paradigm shift in how we live, work, and play [1]. Technology-based devices and services have dramatically simplified everyday activities, once deemed tedious or time-consuming, leading to a more interconnected and streamlined lifestyle. One sector undergoing a significant revolution, both in scope and operations, is transportation [2]. Integrating technology in transportation has facilitated logistical improvements and profoundly altered how society interacts with transportation services, reshaping commuting patterns and expectations. With these technological developments, a new wave of services has sprung up, and online transportation services like Gojek stand out, embodying the promise of the digital age. These platforms offer unprecedented convenience and efficiency in meeting the mobility needs of the community, acting as a beacon for urban adaptability. This app-based transportation concept is not just an innovative business model; it directly addresses societal challenges such as traffic congestion, unreliable public transport, and fare inconsistencies. Gojek in essence, presents holistic solutions by providing price transparency, enhanced security features, real-time tracking, and reduced waiting times, addressing its users' functional and emotional needs [2]. However, services like Gojek have challenges and drawbacks like any transformative innovation. While they bring convenience to the forefront, there's also the looming shadow of

potential risks, one of which is the potential risk of accidents caused by drivers who may be distracted by constant app notifications or the pressures of quick turnarounds while driving.

Building on the data provided, the rise of ride-hailing and online food delivery services in Indonesia underscores the monumental shift in how consumers interact with transportation and delivery platforms. This trend does more than represent figures; it paints a picture of a rapidly changing urban landscape heavily influenced by technology. Gojek, as one of the pioneers in the Indonesian online transportation sector, has played a pivotal role in driving this transformation [2]. Its existence is not merely about providing transport services but has evolved into a super-app that offers a multitude of services, from food delivery, digital payments, and shopping to even entertainment. This adaptability and expansion of services have cemented Gojek's position as an integral part of daily life for many Indonesians.

According to a survey by the Indonesian Internet Service Providers Association, Gojek is one of the online transportation apps frequently used by the public, with about 19% of Indonesians using Gojek [2]. Indonesia, with its sprawling archipelago and burgeoning middle class, presents a unique set of challenges and opportunities in the realm of transportation. Gojek, having identified and capitalized on these specific needs, has not only created a transportation solution but has also ventured into multiple sectors, becoming an indispensable tool in the daily lives of millions. The company's organic growth is not merely a result of its diversified offerings but is also a testament to its deep understanding of the local market. They've successfully tapped into the cultural nuances, economic conditions, and infrastructural challenges of the nation. The meteoric rise of Gojek is not just an outcome of technological integration but is deeply rooted in its adaptability, agility, and commitment to genuinely serving the Indonesian populace [2]. Their multi-service platform not only caters to the urban elite but also resonates with users from various socioeconomic backgrounds, thereby casting a wide net across the user demographic. This inclusivity and understanding of the local ethos have positioned Gojek not just as a service provider but as an intrinsic part of the Indonesian socio-economic fabric.

Yet, behind its popularity lies a critical aspect that many companies focus on, service quality. In the unfolding tapestry of the digital age, the essence of service provision is undergoing a transformation. The pivotal role of technology-based platforms like Gojek is undeniable in altering transportation dynamics. Chen & Popovich (2003) state that high-quality service is a primary determinant of customer satisfaction, emphasizing the criticality of understanding and meeting customer expectations to ensure long-term customer retention. However, beyond the technological prowess, what determines the success and longevity of such services in a competitive market is the satisfaction they offer to their users. Service quality, delineated into specific dimensions by [4], becomes the cornerstone upon which user satisfaction is built. There's a burgeoning interest in understanding how these distinct facets of service quality influence a user's overall satisfaction. As the digital transportation sector becomes more saturated, comprehending these subtleties of service quality becomes crucial. Not only do they play a central role in retaining a loyal user base, but they also serve as catalysts for positive referrals and sustainable business expansion. Given the societal significance and vast reach of platforms like Gojek, delving deeper into the relationship between these service quality dimensions and user satisfaction is both a strategic imperative and a scholarly endeavor.

In the framework developed by [4], several service quality dimensions are highlighted. This is in line with [5], which emphasized that physical attributes, such as Gojek vehicle conditions, helmet availability, and a user-friendly app interface, can significantly influence a customer's perception of service quality. 'Reliability', as outlined by [6], underscores the importance of consistency in delivering services, and they found a strong correlation between reliability and customer loyalty. This is evident in the driver's punctuality in picking up or the

accuracy in estimating arrival times. 'Responsiveness' signifies the readiness of employees to assist customers. Their study showed that the speed and effectiveness of the response, such as how quickly Gojek drivers respond to orders or customer inquiries, can be a decisive factor in a customer's overall satisfaction. As for 'assurance' and 'empathy', [7] found that these dimensions, which reflect security, trust, and understanding and attention to customer needs, can deeply affect a user's trust in the platform, thus influencing their decision to continue using the service.

By effectively understanding and implementing these dimensions, Gojek can ensure customer satisfaction, leading to higher retention. This is corroborated by [8], who contend that satisfaction is not just transaction-based but is also influenced by overall experiences and holistic evaluations. This is in line with [9], which argues that the benefits of customer retention extend beyond direct revenue implications. They found that long-term customers help firms amortize the cost of acquiring customers and are often less sensitive to price changes, making them more profitable in the long run.

While [10] have highlighted the importance of customer retention in generating positive word-of-mouth and subsequently enhancing a company's reputation, their research primarily delves into more traditional business models and sectors. The landscape of online transportation services, especially in a diverse market like Indonesia, presents unique challenges and dynamics that existing studies may not entirely address. The digital nature of the services, the multi-faceted interactions between the platform, drivers, and users, and the cultural nuances of a region like Southeast Asia necessitate a more focused inquiry. Furthermore, while there's a consensus about the importance of customer retention in traditional business settings, the specific factors influencing retention in digital platforms, especially in ride-hailing services, remain under-explored. Most studies either examine service quality or customer satisfaction in isolation, often neglecting their combined impact on retention within app-based platforms.

2. Literature Review

2.1. Service Quality on Customer Satisfaction

Service quality, as defined by [4], is a multi-dimensional concept that encompasses several aspects of the service delivery process. The concept posits that service quality is not just about the end product but about the processes and interactions that lead to the delivery of the service. Each of these dimensions contributes to the overall perception of service quality from a customer's viewpoint. When a service scores high on these dimensions, it is perceived as high quality. Customer satisfaction, in relation to service quality, is the customer's evaluation of the service provided against their expectations. It is a judgment that the service has either met, exceeded, or fallen short of their expectations.

2.2. Customer Satisfaction on Customer Retention

Customer Satisfaction is a measure of how well the expectations of a customer regarding a product or service provided by a company have been met. If the performance matches or exceeds expectations, the customer is satisfied; if not, the customer is dissatisfied. This concept is central to understanding consumer behavior as it's a key indicator of the potential for repeat business and customer loyalty. It's a critical outcome for businesses because it has a direct impact on repeat purchases, customer loyalty, and word-of-mouth marketing.

Retention is a sign of how well the company is able to maintain relationships with its customers. High levels of customer satisfaction improve the chances of retention because satisfied customers are more likely to be repeat buyers, and they are also more resistant to

switching to a competitor based on price or availability. They form an emotional bond with the brand, trust the quality of the product or service, and find value in the relationship beyond the transactional exchange. Customer satisfaction and customer retention are intertwined; satisfaction acts as a precursor to retention. [11] demonstrate the importance of satisfaction in influencing a customer's decision to remain with a brand. This emotional connection, rooted in satisfaction, is crucial for retention because it makes the cost of switching—both in terms of effort and emotional loss—higher than the perceived benefits of an alternative. [12] further solidify the understanding that satisfied customers are more likely to continue their relationship with a company, illustrating that customer satisfaction is indeed a powerful predictor of customer retention.

2.3. Service Quality on Customer Retention through Customer Satisfaction

Service quality's influence on customer retention, when mediated by customer satisfaction, highlights a two-step relational dynamic where the quality of service initially impacts satisfaction, which, in turn, influences retention. [2] have identified that while service quality is instrumental in cultivating customer satisfaction, it does not directly ensure retention. [12] support this by arguing that service quality alone may not be sufficient to guarantee that customers will continue to patronize a business over time. The mediating role of customer satisfaction is crucial in this relationship. It acts as a bridge, translating the positive effects of high Service quality into repeat business and long-term loyalty. [11], who found that satisfaction derived from quality service leads to a higher likelihood of repurchase intentions and customer commitment. [12] take this a step further by demonstrating that customer satisfaction can be a strategic lever through which the benefits of service quality are realized in terms of customer retention. Customers are more inclined to stay with the provider when they are content with the service, underscoring the importance of maintaining high service standards. Essentially, while service quality is the foundation for creating a favorable customer perception, the satisfaction of the customer solidifies the relationship, leading to repeat patronage and retention.

3. Methods

This research uses a quantitative methodology, with questionnaires disseminated to 187 Gojek users in Malang City. The study adopts a purposive sampling technique. Respondent criteria are: (i) being Indonesian nationals, (ii) being aged 17 or older, and (iii) having utilized the Goride feature in the recent month. The questionnaire incorporates a Likert scale. The gathered data will undergo analysis through PLS-SEM, a statistical approach designed to optimize the variance explanation of the latent dependent constructs. This research is classified as explanatory, with PLS-SEM emphasizing the variance explanation in the structural modeling constructs. Unlike conventional SEM methods, PLS-SEM provides greater flexibility in hypothesis formulation and addressing intricate scenarios without heavily relying on robust theoretical assumptions.

A preliminary pilot study will be executed prior to the main data-gathering phase to verify the questionnaire's reliability and validity. This pilot will engage a subset of participants resembling the main study's demographic. Insights from this initial study will inform refinements to the questionnaire, rectifying potential issues or unclear aspects of the survey. The main data collection will adhere to ethical standards, preserving respondent privacy and confidentiality. The resulting data will be processed using suitable statistical methods, encompassing descriptive analytics, correlation analysis, and SEM. PLS-SEM's measurement reliability is gauged using both Cronbach's α and composite reliability, with indicator loadings

standardized to a minimum of 0.70. Construct validity is appraised using the AVE, adhering to a preferred benchmark of 0.50 [13].

The questionnaire's structure draws inspiration from prior studies in analogous areas, utilizing validated measurement scales for constructs like green practices, perceived ecological image, and ecological behavioral intentions. The initial items, crafted in English, were subsequently translated for linguistic precision. These were converted from English to Indonesian and then reverse-translated back to English. This bidirectional translation was intended to ensure consistent expression accuracy and retain the essence across both languages. Such a meticulous translation strategy was employed to guarantee the questionnaire's resonance and relevance to the research participants.

4. Findings

4.1. Demographic Profile

The demography of the respondents, as indicated in Table 1, offers a clear portrait of Gojek users in Malang. Starting with gender distribution, there is a noticeable lean towards the female population. Out of the total respondents, 106 were females, whereas 81 were males. This suggests that women in Malang slightly outnumber men in using Gojek services. The factors behind this inclination could be diverse, potentially pointing toward women finding Gojek services more convenient, safe, or fitting their daily routines and needs. When we shift our focus to age, the majority of Gojek users in Malang fall within the 17-27 age bracket, accounting for 173 respondents. This dominance indicates that Gojek is especially popular among younger users, possibly university students or young professionals, which is not surprising given Malang's status as an educational hub. The number drastically drops for the subsequent age groups, with only 4 users between 28-38 years, 3 users between 39-49 years, and 7 users above 50 years. This steep decline suggests that while the younger generation is quick to adopt app-based transportation solutions, older generations in Malang might still prefer traditional transportation methods or are less tech-savvy. In terms of monthly income, a significant number of respondents (45) have an income below Rp 1.500.000. This could again align with the hypothesis that many users are students or young adults who are just starting their careers. However, the income distribution varies, with 12 respondents earning between Rp 1.500.001 – Rp 2.500.000, 32 respondents in the Rp 2.500.001 – Rp 3.500.000 bracket, 6 in the Rp 3.500.001 – Rp 4.500.000 range, and 5 respondents earning more than Rp 4.500.000. This variety in income distribution highlights the broad appeal of Gojek services, catering to a wide range of socioeconomic backgrounds in Malang.

Table 1: Demography of Respondents

Demography		Frequency
Gender	Male	81
	Female	106
Age (years)	17-27	173
	28-38	4
	39-49	3
	>50	7
Monthly Income (IDR)	<1,500,000	45
	1,500,001 – 2,500,000	12
	2,500,001 – 3,500,000	32
	3,500,001 – 4,500,000	6
	>4,500,000	5

4.2. Measurement Model

The measurement model underwent confirmatory factor analysis to assess its validity. The results indicate strong convergent validity, as all item loadings exceeded the threshold of 0.702 (refer to Figure 1.). Moreover, the AVE for each construct surpassed the value of 0.596, demonstrating that a substantial portion of the construct's variance is accounted for by its measurement items. Additionally, the square root of the AVE for each construct exceeded the correlation coefficients between constructs, indicating the presence of discriminant validity (Table 2). The reliability of the constructs was also satisfactory, as evidenced by Cronbach's α coefficients ranging from 0.897 to 0.951 and composite reliability values ranging from 0.839 to 0.947 (Table 2).

Table 2: Composite Reliability and Cronbach Alpha

	Cronbach's Alpha	Composite reliability	Average Variance Extracted (AVE)
X	0.951	0.957	0.596
Y2	0.897	0.921	0.662
Y1	0.954	0.959	0.610

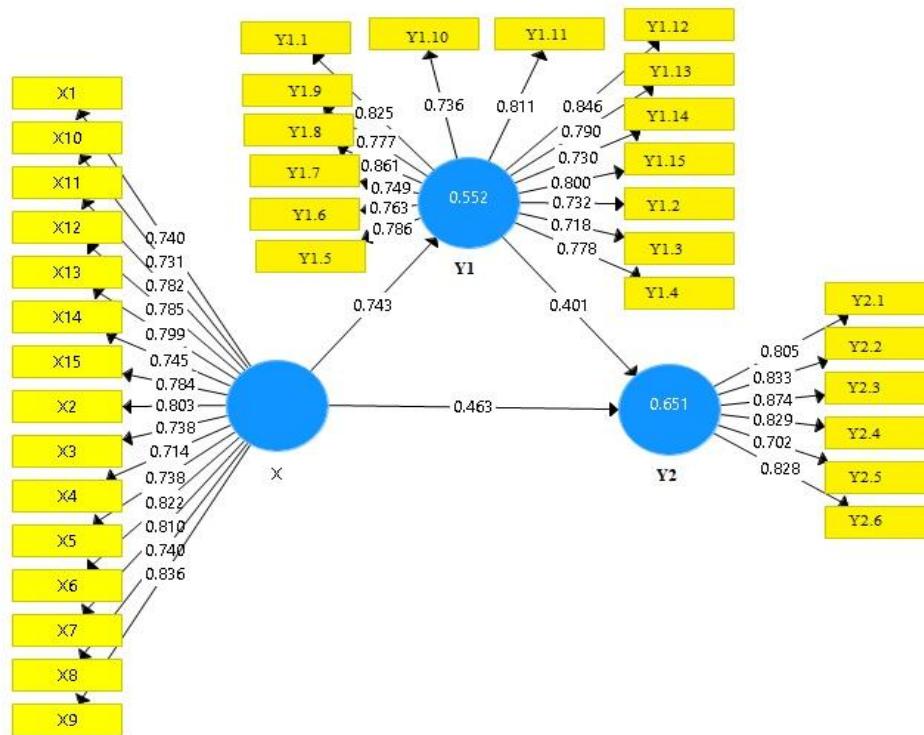


Figure 1: Outer Model

4.3. The Structural Model Estimation

The structural model estimation provides insight into the relationships between constructs and helps ascertain the strength and significance of these relationships. One of the critical metrics is the coefficient of determination, denoted as R^2 . This coefficient measures the amount of variance in the dependent variables that can be explained by the independent variables in the model. For the construct customer satisfaction, the R^2 value is 0.552. This indicates that approximately 55.2% of the variability in customer satisfaction can be explained by the predictors in the model. When adjustments are made for the number of predictors (to prevent overfitting), the adjusted R^2 value is 0.550, which is very close to the original R^2 , suggesting a good fit of the model without excessive predictors. Similarly, for customer retention, the R^2 value is 0.651. This denotes that the model can explain about 65.1% of the variance in customer retention. The adjusted R^2 for this construct is 0.648, which again is very close to the original R^2 . This close proximity between R^2 and adjusted R^2 for both constructs reflects the model's reliability without the risk of overfitting. In summary, the R^2 values for both constructs are relatively high. The slight differences between the R^2 and the adjusted R^2 values for both constructs suggest that the model is robust and not just a result of adding excessive predictors.

Table 3: Results of R^2 values

	R-Square	R-Square Adjusted
Customer Satisfaction (Y1)	0.552	0.550
Customer Retention (Y2)	0.651	0.648

For the relationship between service quality (X) and customer satisfaction (Y1), the original sample value stands at 0.743, closely aligning with a sample mean of 0.747. This consistency underscores the robustness of the observed relationship. Furthermore, the low standard deviation of 0.045 ensures minimal variations in the relationship across bootstrapped samples. The high T-statistics value of 16.554 coupled with a p-value of 0.000 firmly establishes the statistical significance of this relationship. Similarly, the connection between customer satisfaction (Y1) and customer retention (Y2) is also noteworthy. The original sample value is 0.401, precisely mirroring the bootstrap sample mean. With a standard deviation of 0.096, there's slightly more variation in this relationship compared to the former, but its importance remains undiminished, as evidenced by a T-statistics value of 4.201 and a p-value of 0.000.

Table 4: Path Coefficient (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
X -> Y1	0.743	0.747	0.045	16.554	0.000
Y1 -> Y2	0.401	0.401	0.096	4.201	0.000



Figure 2: Path Coefficient

5. Discussion

The exploration into Gojek application users' experiences provides a nuanced understanding of how service quality is a substantial factor in shaping customer satisfaction and customer retention. The significance of this relationship is underscored by the theory that customer satisfaction is not merely a one-dimensional outcome but a complex construct influenced by multiple facets of the service experience. Firstly, service quality acts as the initial touchpoint, a tangible measure for customers to evaluate their interactions with the service provider. [14] emphasize that meeting or surpassing customer expectations in these areas is vital for achieving high levels of satisfaction. Secondly, the importance of service quality can be attributed to its direct visibility to customers. Unlike other organizational processes, service quality is immediately apparent and can quickly sway customer perceptions and future intentions. This immediate impact of service quality is why it is often considered a cornerstone of customer satisfaction. This emotional connection not only heightens satisfaction but also fosters loyalty, making them more likely to return and less likely to switch to competitors, even in the face of potential enticements. Lastly, in the context of a digital platform like Gojek, where service encounters are mediated by technology, the clarity and reliability of the service interface become paramount. A well-designed, user-friendly interface that delivers services efficiently and effectively can significantly enhance the perceived quality of service, leading to higher customer satisfaction.

The effect of customer satisfaction is deeply rooted in the psychological commitment a customer develops towards a service provider. When customers are satisfied, they form an emotional attachment that translates into loyalty and a reluctance to switch to alternatives. This attachment is based on the fulfillment of their expectations and the value they perceive from the service, which, if positive, reinforces their decision to continue the relationship. [15] finds a strong correlation between customer satisfaction and loyalty is foundational to this argument. Satisfaction creates a psychological barrier to exit; satisfied customers are less sensitive to competitors' offers and more forgiving of minor service mishaps. They are also more likely to engage in positive word-of-mouth, further enhancing the service provider's reputation and indirectly contributing to the retention of other customers.

The study's discussion on the mediating role of customer satisfaction also suggests that the benefits of high service quality are optimized when they translate into customer satisfaction. This is because satisfaction is not just an isolated feeling but a confirmation that the service has met the personal and sometimes emotional criteria customers use to judge their service interactions. [16] emphasized that this satisfaction is a potent predictor of a customer's intention

to stick with a service provider. It's not just about meeting the basic needs but creating an experience that resonates with customers on a deeper level. Therefore, service quality's impact on retention becomes most potent when it elevates customer satisfaction, which acts as a significant indicator of whether a customer will remain with the service provider.

In this way, the narrative of the study underscores a strategic imperative for service providers: to deliver excellent service quality that ensures customer satisfaction. This satisfaction then becomes the bedrock for developing a loyal customer base that is less likely to be swayed by competitors, thereby securing sustainable business success through repeat patronage and loyalty. In summary, the study provides a compelling argument for the strategic prioritization of service quality. By enhancing service quality, companies can significantly increase customer satisfaction, which in turn has a direct and positive impact on customer retention. This approach is a strategic imperative in a competitive marketplace, where customer loyalty is both valuable and volatile. For service-centric businesses like Gojek, the message is clear: prioritizing service improvements can lead to increased customer satisfaction, which is the linchpin for customer loyalty and sustained business success.

6. Conclusion

This research provides compelling evidence regarding the pivotal role of Service Quality in fostering customer retention, with customer satisfaction as a significant mediating factor among Gojek app users. The findings affirm that enhanced service quality invariably leads to heightened Customer Satisfaction, propelling better customer retention. The implications are clear for businesses, especially those in the app-based service industry like Gojek. Investing in service quality not only boosts immediate customer reactions in terms of satisfaction but also has longer-term benefits. In a competitive market, customer retention can be a key differentiator, and understanding the link between quality, satisfaction, and retention can offer a competitive edge. Companies should prioritize enhancing their service quality, which will invariably lead to satisfied customers.

While this study offers valuable insights, it is not without limitations. The research primarily focuses on Gojek users from Indonesia, which may not necessarily represent the broader user base in other regions. Although beneficial in certain contexts, the purposive sampling technique may not capture the full diversity of the user experience. Moreover, the study relies on self-reported data from online questionnaires, which can sometimes be subject to bias or inaccuracies. Given the limitations, future research could look at diversifying the sample, possibly incorporating users from other similar apps or different geographic locations. It would also be interesting to explore how other variables, aside from service quality, influence customer retention. Additionally, studies could delve into the specific aspects of service quality that have the most profound impact on satisfaction, paving the way for more targeted business strategies.

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