

The influence of Customer Relationship Management (CRM) and service quality on customer satisfaction and its impact on customer loyalty: A case study on PPJK PT. Pusaka Golden Trans Utama

Desmawati Makatita

Program Pascasarjana Magister Manajemen, Sekolah Tinggi Ilmu Ekonomi Kusuma Negara, Jl. Raya Bogor KM No.24 Pasar Rebo, RT.3/RW.4, Cijantung, Jakarta Timur, Kota Jakarta Timur, Daerah Khusus Ibukota Jakarta 13770, Indonesia
e-mail: desmawati@stiekusumanegara.ac.id

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ABSTRACT

This study investigates the effect of CRM and service quality on customer satisfaction and their implications for customer loyalty at PPJK PT. Pusaka Golden Trans Utama, a customs clearance service company in Jakarta. This study is positioned within the increasingly competitive service environment of export–import facilitation, where firms are required to provide efficient operational support and maintain long-term customer relationships. This study focuses on four core constructs, namely CRM, service quality, customer satisfaction, and customer loyalty, to explain how relationship- and service-based strategies contribute to sustainable business performance in the customs brokerage sector. This study employed a descriptive quantitative design. Data were collected from 100 customers of PPJK PT. Pusaka Golden Trans Utama using questionnaires, supported by observation, interviews, and documentation. The sample was determined using the Slovin formula and selected using simple random sampling. Path analysis was used to test both direct and indirect effects among variables. The findings indicate that CRM and service quality positively and significantly affect customer satisfaction. CRM and service quality also directly influence customer loyalty, while customer satisfaction contributes positively to loyalty and serves as an intervening variable in the relationship between independent variables and loyalty. Among the tested predictors, service quality appears to exert the strongest influence, particularly in shaping customer satisfaction and reinforcing the loyalty. These findings confirm that effective customer relationship practices and consistently high service quality are essential for strengthening customer trust, improving satisfaction, and sustaining loyalty in customs service companies. The study concludes that companies in the customs clearance sector should prioritize relationship-based service strategies and continuous service quality improvement to remain competitive and retain customers in the long term.

Keywords: customs clearance services; customer loyalty; customer relationship management; customer satisfaction; PPJK; service quality

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1. INTRODUCTION

International trade increasingly depends on speed, accuracy, and transparency of information. Advances in information technology and cross-border communication have made export–import transactions easier to organize; however, they have also intensified competition among firms that provide supporting business services. In this environment, customers no longer choose service providers based solely on price. They compared reliability, responsiveness, communication quality, problem-solving ability, and the provider’s willingness to support their operations over time. For customs brokerage and customs clearance firms, this shift is especially important because the service they sell is not a tangible product but confidence that documents, procedures, and cargo flows will be handled correctly, efficiently, and in line with regulations. Recent service research indicates that customer experience orientation and digital service performance have become central to how firms translate service encounters into satisfaction and loyalty (Arkadan et al., 2024; Arora & Banerji, 2024).

This thesis places this issue in the context of Indonesia’s customs service industry, where the growth of international trade and the complexity of customs compliance have expanded the role of Pengusaha Pengurusan Jasa Kepabeanan (PPJK) or customs service providers. Under Indonesia’s customs framework, importers and exporters may complete their own customs obligations, but many delegate these tasks to PPJK firms because customs procedures require specialized knowledge, proper documentation, and close coordination with the Directorate General of Customs and Excise (DGCE). This delegation creates a broad service market, but also produces sharp rivalry among PPJK firms. As described in this thesis, the industry has experienced unhealthy competition in the form of aggressive price-cutting, pursuit of special treatment, and service practices that may undermine both fair competition and public revenue. In such a market, firms cannot rely solely on transaction-based competition. They must build trust, maintain service standards, and create long-term relationships with customers. This is especially relevant for logistics and trade-related services, where service quality, logistics quality, and customer satisfaction are closely linked to repeated-use intentions and loyalty (Nofrisel et al., 2024; Beanning & Zulkarnain, 2024).

PT. Pusaka Golden Trans Utama is presented in the thesis as a PPJK firm that has operated since 1996 and seeks to differentiate itself from ordinary document-processing intermediaries. The thesis argues that the company is not merely a “Warung EDI,” a term used by some industry participants to refer to customs agents who only process electronic customs declarations. Instead, the company positions itself as a service partner that combines technical customs competence with personalized communication, guidance, and assistance throughout the export–import process. This positioning leads directly to the central managerial question of the thesis: if a PPJK firm wants to retain its customers in a highly competitive market, is it enough to process documents efficiently, or must it also invest seriously in CRM and service quality to generate satisfaction and loyalty? Recent studies in Indonesian service settings likewise suggest that CRM and satisfaction remain important explanatory factors for sustaining loyalty in competitive markets (Aprianti et al., 2024; Ramadhan & Fikriah, 2024).

The introduction builds on a broader marketing argument. In a globalized service economy, customers have more information, alternatives, and bargaining power. Because they can compare providers more easily, they also become more selective. Therefore, companies face a strategic transition from being product-driven to customer-driven. In this logic, long-term survival depends not only on attracting customers but also on retaining them. Customer retention is important because loyal customers typically buy repeatedly, are less likely to switch to competitors, and may recommend the firm to other clients. In service businesses, especially those involving legal compliance and operational risk, loyalty is likely to depend on whether customers feel secure, respected, and well-served at multiple touchpoints. From a managerial perspective, the shift toward customer-driven competition also aligns with recent reviews emphasizing the role of digital marketing, retention logic, and customer care strategies in building durable loyalty (Rahayu, 2024; Brzozowska et al., 2024).

This thesis identifies CRM as a key approach to strengthening customer ties. CRM is not simply treated as a technology platform, but as a business approach centered on understanding customer needs,

communicating regularly, handling interactions carefully, and building mutually beneficial relationships. The argument is that when customers feel recognized and informed, they are more likely to trust the firm, evaluate its services positively, and remain loyal. The thesis also emphasizes that CRM should focus on what customers value rather than only on what the company wants to sell. This orientation is relevant in customs services because customers are not just buying document submission; they are buying certainty, clarity, timeliness, and reduced operational friction. Contemporary CRM literature also stresses that relationship management must be understood as a strategic and technological capability for acquisition, retention, and value creation, rather than a narrow communication tool (Prior et al., 2024).

Simultaneously, this study argues that CRM alone is insufficient if the actual service experience is weak. Therefore, service quality was introduced as the second major independent variable. In a customs environment, service quality includes physical and communication facilities, timeliness, employee knowledge, responsiveness to problems, courtesy, and the ability to provide accurate information. A PPJK firm may promise close relationships, but if its employees respond slowly, communicate poorly, or fail to handle complaints, customer satisfaction is likely to suffer. Therefore, this study assumes that service quality remains a fundamental determinant of customer evaluation and may even have a stronger influence on satisfaction than relationship-building efforts alone. Empirical evidence from recent service studies also shows that service quality remains one of the most consistent predictors of both satisfaction and loyalty (Sujana & Yusni, 2024; Hidayat et al., 2024; Silalahi et al., 2024).

Customer satisfaction is the central mediating variable in this study. This thesis treats satisfaction as the result of comparing expectations with the perceived performance of the service provider. When the service meets or exceeds expectations, customers feel satisfied; when it falls short, dissatisfaction emerges. In competitive service industries, satisfaction matters not only as an emotional outcome but also as a strategic bridge to loyalty. A satisfied customer is more likely to repurchase, continue using the same provider, and communicate positively with others. This causal logic leads the thesis to test whether CRM and service quality influence loyalty directly and whether they also influence loyalty indirectly through satisfaction. Recent 2024 findings across retail and restaurant settings similarly confirm that satisfaction often mediates the effect of service quality on continued customer attachment and repeat patronage (Hakim et al., 2024; Soerjanto et al., 2024).

Based on this reasoning, this study formulates descriptive questions about how CRM, service quality, customer satisfaction, and customer loyalty are perceived at PT. Pusaka Golden Trans Utama, as well as causal questions about the direct and indirect relationships among these variables. This research is important for three reasons. First, it contributes to service marketing in a specialized business-to-business setting that is less commonly discussed than retail, banking and hospitality. Second, it offers an applied evaluation of how relationship management and service quality operate in customs brokerage services, where technical accuracy and human interaction are equally important aspects. Third, it provides recommendations to management on how to strengthen customer retention in a market where low-price competition is not sustainable. In short, this thesis argues that customer loyalty is not created by administrative capability alone for a customs service provider. It emerges from the combined effect of relationship management, service quality, and customer satisfaction, all of which shape whether customers see the firm as a dependable and long-term partner. Accordingly, recent studies continue to model loyalty as an outcome shaped jointly by service quality, satisfaction, customer orientation, and CRM-related practices (Ramadhan & Fikriah, 2024; Situmeang & Sugiyanto, 2024).

2. THEORETICAL FRAMEWORK

The theoretical basis of this study combines five connected ideas: relationship marketing, the customs-service context of PPJK firms, CRM, service quality, customer satisfaction, and customer loyalty. The framework is cumulative in nature. A PPJK firm operates within a regulated service environment; within that environment, it must build relationships, deliver high-quality service, satisfy customers, and retain them. This integrated logic is consistent with recent CRM and customer care frameworks that position relationship management, service delivery and retention as mutually reinforcing processes (Prior

et al., 2024; Brzozowska et al., 2024).

The broadest concept is relationship marketing. The thesis defines it as the effort to build long-term, mutually satisfying relationships with stakeholders who influence a firm's success. Instead of focusing only on one-time transactions, relationship marketing emphasizes continuity, trust, commitment, and value creation over time. It is increasingly important because customers now face many alternatives, easier access to information, and lower switching barriers. Therefore, firms need more than basic selling; they need reactive, responsible, proactive, and partnership-oriented interactions. Strong relationships rest on trust and commitment: trust reduces uncertainty, while commitment motivates both parties to preserve cooperation despite short-term alternatives.

This marketing logic is grounded in the customs service sector. PPJK is a business entity authorized to handle customs obligations on behalf of importers and exporters. In this role, the firm processes customs declarations, coordinates with customs authorities, and manages the supporting documents needed for the release of goods. The sector is highly procedural and risk-sensitive because it depends on legal compliance, specialized knowledge, and rapid communication. Therefore, customers evaluate PPJK firms not only by price but also by whether the provider can reduce uncertainty, ensure procedural correctness, and support operational continuity.

CRM is the first explanatory construct in the model. Drawing on Kotler, Keller, Gordon, Dyché, and others, this thesis defines CRM as a comprehensive process for creating, maintaining, and expanding customer relationships through the careful management of customer information and interaction points. CRM is not limited to sales or information systems; it is a cross-functional business strategy. This thesis emphasizes three practical dimensions: people, processes, and technology. People refer to employee enthusiasm, ability, and friendliness. The process covers stages from basic and reactive marketing to proactive and partnership-oriented interactions. Technology refers to communication tools that allow fast and continuous interaction, such as email, telephone, and digital messaging. Effective CRM helps firms identify valuable customers, understand their needs, communicate better, reduce customer defection, and support repeated transactions. Recent CRM-focused evidence has also reported positive links among CRM, satisfaction, and loyalty across diverse service contexts (Aprianti et al., 2024; Ramadhan & Fikriah, 2024).

Service quality is the second major construct in this study. The thesis adopts the service quality literature associated with Parasuraman, Zeithaml, and Berry, and uses the more familiar SERVQUAL-style dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Tangibles refer to physical evidence, such as office layout, parking, cleanliness, and employee appearance. Reliability concerns accuracy and consistency in fulfilling promised services. Responsiveness refers to the speed and readiness of assisting customers. Assurance encompasses competence, courtesy, credibility, and the ability to create trust. Empathy involves access to, communication with, and understanding of customer needs. In customs services, these dimensions are highly relevant because customers expect accurate procedures, timely responses, knowledgeable staff, and clear information. Recent studies across e-commerce, retail, and general service industries continue to confirm the central role of service quality in strengthening satisfaction and loyalty (Dehantiansah & Yolanda, 2024; Hidayat et al., 2024; Rendiansyah & Putra, 2024).

Customer satisfaction is an evaluative response formed by comparing expectations with perceived service performance. This thesis draws on Kotler, Armstrong, Zeithaml, and Bitner to describe satisfaction as a post-service judgment that can range from disappointment to delight. Satisfaction is broader than service quality alone because it may also be shaped by value, price, situational factors, and personal expectations. However, this study assumes that CRM and service quality are among the strongest determinants in the PPJK context. When a provider communicates well, pays attention to the customer, and delivers reliable service, the customer is more likely to feel that their expectations have been met. Comparable 2024 evidence also indicates that satisfaction remains a strong mechanism through which service performance and digital service attributes shape loyalty outcomes (Beanning & Zulkarnain, 2024; Arora & Banerji, 2024).

Customer loyalty was the final dependent construct. This study defines loyalty as the willingness of customers to continue using the same provider over time, to repurchase repeatedly, to resist competitor

offers, and to recommend the firm to others. Loyalty can be viewed behaviorally, attitudinally, or through an integrated perspective that combines both aspects. From these concepts, the thesis develops a causal model: CRM is expected to increase satisfaction and loyalty; service quality is expected to increase satisfaction and loyalty; satisfaction is expected to increase loyalty; and CRM and service quality are also expected to influence loyalty indirectly through satisfaction. This sequence provides the study with its path model and provides the basis for empirical testing. Recent evidence suggests that loyalty is strengthened not only by satisfaction but also by service experience and broader customer perceptions of value and engagement (Sutriani et al., 2024; Aji & Nurlinda, 2024; Rahayu, 2024).

3. METHODOLOGY

This study was designed as a quantitative explanatory study that focused on PT. Pusaka Golden Trans Utama, a customs-service provider operating in Jakarta. The thesis places the fieldwork at the company's Jakarta branch during regular working hours from Monday to Saturday, 09.00–17.00 WIB. The object of the research is the company as a provider of customs clearance services, while the unit of analysis is an individual service user. Although some parts of the thesis mention managers and operational staff, the analytical section consistently uses a sample of 100 respondents and treats customers as the main unit of analysis. For the purposes of this article, the effective respondent group can therefore be understood as 100 users of the company's export–import customs services.

This study uses four variables. The two independent variables were CRM as X1 and service quality as X2. Customer satisfaction functioned as a mediating variable, and customer loyalty was the final dependent variable. Each variable was translated into observable dimensions and indicators. CRM is measured using people, process, and technology indicators, including employee enthusiasm, ability, friendliness, interaction patterns, and communication tools. Service quality is measured through tangibility, reliability, responsiveness, assurance, and empathy. Customer satisfaction is measured through perceived quality, value, price, and situational and personal factors. Loyalty is measured through both behavioral and attitudinal indicators, such as repeat-use tendency, recommendation, and continued preference for the firm despite competitors.

Data were collected primarily through questionnaires, supported by observations and literature studies. The questionnaire used Likert-style response categories, allowing respondents to indicate their level of agreement with statements regarding CRM, service quality, satisfaction, and loyalty. The thesis also mentions checklists and interview guides, but the statistical analysis was based on questionnaire responses.

For sampling, the thesis states that simple random sampling was used to select the sample. The author presents Slovin's formula with a 10 percent precision level and reports a final sample size of approximately 100 respondents. The practical justification for the sampling choice was the limitations of time, cost, and effort. Regardless of the formula presentation, the empirical analysis in the thesis clearly rests on 100 completed questionnaires.

Before testing the hypotheses, the instrument was evaluated for its validity and reliability. Validity was assessed through item-total correlation using a threshold of $r_{table} = 0.3061$, and the thesis reports that all questionnaire items were valid. Reliability was tested using Cronbach's alpha. All four constructs exceeded acceptable levels: CRM obtained an alpha of 0.925, service quality 0.941, customer satisfaction 0.935, and customer loyalty 0.935. These values indicate strong internal consistency and support the use of this instrument in the main survey.

The analysis combined descriptive and inferential statistics. Descriptive analysis was first used to profile the respondents and summarize how they perceived each variable. This stage identified the strongest and weakest indicators of CRM, service quality, satisfaction, and loyalty. Inferential analysis was used to test the causal relationships among the variables. The thesis discusses analytical assumptions such as normality, heteroskedasticity, and multicollinearity and states that SPSS version 19 was used for the analysis.

The main inferential technique was path analysis, implemented through two multiple regression equations. The first substructure estimated the effects of CRM and service quality on customer satisfaction

(CS). The second study estimated the effects of CRM, service quality, and customer satisfaction on customer loyalty. Statistical significance was evaluated using F-tests for simultaneous effects and t-tests for partial effects at the 5 percent level. The coefficients of determination (R^2) were used to assess explanatory power, while standardized beta coefficients were interpreted as path coefficients. Correlation analysis was used to describe the strength and direction of the associations among the variables. This path-analytic logic is consistent with recent quantitative studies that model direct and indirect effects among service quality, satisfaction, and loyalty using similar causal structures (Hidayat et al., 2024; Situmeang & Sugiyanto, 2024).

Overall, the method was intended to show both the descriptive condition of CRM, service quality, customer satisfaction, and loyalty at PT. Pusaka Golden Trans Utama and the structural relationships among them. Through validated questionnaires, a sample of 100 respondents, and regression-based path analysis in SPSS, this study tested whether CRM and service quality influence loyalty directly and indirectly through customer satisfaction.

4. RESULT AND DISCUSSION

The results section of the thesis combines respondent profiling, instrument testing, descriptive evaluation of the four variables and path analysis. Together, these results show that PT. Pusaka Golden Trans Utama was generally perceived positively by respondents, but the firm still had several weak points in communication behavior, service personalization, and the ability to convert satisfaction into stronger repeat-use commitment.

The respondent profile provides a basic picture of the sample used in this study. The thesis reports 100 respondents, with male respondents forming the majority at 59 percent. Most respondents were in the productive adult age category, and the dominant educational background was undergraduate level (S1), represented by 55 respondents. The sample also reflected several industries using customs services. Although the profile section is brief, it matters because it suggests that the responses came from people who were likely familiar with formal business processes and who may therefore have evaluated the company not only from a casual consumer perspective, but also from an operational and professional perspective. In a business-to-business customs environment, this is important because customers are not simply buying convenience; they are evaluating a partner that can affect timelines, compliance, and business continuity.

The quality of the instrument is one of the first strengths reported in this thesis. All items passed the validity test, using a threshold of r table = 0.3061. Reliability was also high for all constructs. The Cronbach's alphas for CRM, service quality 0.941, customer satisfaction 0.935, and loyalty were 0.925, 0.941, 0.935, and 0.935, respectively. These values were well above the ordinary acceptability thresholds and indicated that the questionnaire items were internally consistent. This is important because the later path analysis depends on the assumption that each construct is measured coherently. In practical terms, the instrument appears stable enough to support the argument that the reported relationships are not random artifacts of poor measurements.

The descriptive findings on CRM show that the respondents generally viewed the company's relationship practices positively. For CRM as a whole, the largest response category was "strongly agree," averaging 56.29 percent, followed by "agree" at 29.29 percent. Combined, positive evaluations reached 85.57 percent. This is a strong starting point and suggests that customers largely feel that the firm has a workable relationship orientation. However, the descriptive details are more informative than the aggregate score. The strongest CRM indicators were the company's ability to provide good service and its habit of confirming or following up with customers. The thesis reports that 98 percent of respondents agreed or strongly agreed that the PPJK had good capability when delivering service, and 97 percent agreed or strongly agreed that the company asked for customer confirmation for each service provided. These findings are consistent with those of a customs service firm that has operational discipline and regular communication routines.

Simultaneously, the weakest CRM indicators are revealed. The thesis notes that 31 percent of

respondents did not positively rate the statement that the company always behaved in a friendly manner when serving customers, and 29 percent did not positively rate the statement that the company worked with customers to find cost-saving solutions or help improve their performance. These two weaknesses are not trivial in nature. This implies that the company's CRM may have been more procedural than relational. In other words, the firm appears to be able to communicate and confirm transactions but is less consistently able to communicate warmth, hospitality, or collaborative value creation. This distinction is important in a business setting, such as customs services. Customers may appreciate technical competence, but long-term relationship quality also depends on interpersonal treatment and the sense that the provider is proactively helping the customer improve their business. The descriptive CRM findings therefore support a mixed interpretation: the company had reasonably strong relationship management fundamentals, but the softer and more strategic CRM elements had not yet been fully optimized.

The descriptive pattern for service quality was also highly positive overall, and in some respects, even stronger than CRM. Respondents most often selected "agree" (56 percent) and "strongly agree" (31.6 percent), producing a combined positive score of 87.46 percent. Several specific indicators received exceptionally high ratings in this study. The neatness of the workspace, room comfort, employee appearance, and employee knowledge of customs specifications each received 99 percent positive responses. These findings suggest that the company is perceived as professional, orderly, and technically competent. In customs services, such signals matter because customers often infer trustworthiness from the physical organization, employee appearance, and command of regulatory detail. These highly rated indicators, therefore, support the thesis argument that the company was not perceived as a low-end transaction intermediary but as a serious service firm. This descriptive pattern is broadly consistent with recent studies showing that customers reward consistent service performance with higher satisfaction and loyalty (Silaahi et al., 2024; Rendiansyah & Putra, 2024).

However, the descriptive details point to a weak zone: communication channels. The lowest service quality evaluations concerned the use of SMS and BlackBerry Messenger (BBM) as communication tools. The thesis reports that 67 percent of respondents did not positively rate the use of SMS for service information and 64 percent did not positively rate the use of BBM. These findings need to be interpreted within the time context of the study, but analytically, they show that service quality was not judged only by core customs performance. Customers also cared about how easily and quickly information was delivered through channels that were practical for them to use. This supports a broader service quality interpretation: in business services, communication infrastructure is part of the service itself. A firm may have strong knowledge and neat facilities, but if it cannot communicate in ways that customers find convenient, the customer experience becomes less effective. The weakness in messaging channels also aligns with the earlier CRM weakness in collaborative and friendly interactions. Together, these issues suggest that information delivery, especially through customer-preferred media, is a key area for improvement. In digital and e-commerce contexts, communication quality and service responsiveness have also been shown to affect satisfaction and loyalty formation (Beanning & Zulkarnain, 2024; Dehantiansah & Yolanda, 2024).

Customer satisfaction, as a mediating construct, was also rated positively. Positive responses ("agree" and "strongly agree") reached 86.13 percent. The strongest single indicator was realism across the service process: 98 percent of respondents agreed or strongly agreed that the firm was realistic from the beginning to the end of handling customer needs. In addition, 95 percent of respondents positively rated the statements that the company positioned customers as central, prioritized quality in serving them, and created value for customers. These findings are important because they indicate that customers do not merely see the company as technically functional; they see it as generally aligned with customer interests and capable of creating a sense of value.

However, the most important negative satisfaction indicator was the consistency in bearing risks caused by negligence. The thesis reports that 50 percent of respondents did not positively rate the statement that the company was consistent in regard to risks arising from mistakes or negligence. This is a serious issue. In customs services, errors can generate delays, costs, and legal exposure. If customers are unsure of how the firm will respond when something goes wrong, satisfaction is vulnerable, even if daily

service performance is good. This result helps explain why satisfaction, although positive overall, may not automatically translate into unqualified loyalty. Customers may be satisfied with routine services but cautious about a firm's reliability in exceptional or high-risk situations. From a managerial perspective, this is one of the most critical findings of this study because it points to accountability and risk-sharing as central factors in retaining business customers.

The descriptive pattern for loyalty was also generally favorable, with 88.67 percent of responses in the positive range. The highest-rated indicators were obtaining the desired service from the customs clearance process (96 percent), receiving quality consistent with the price paid (95 percent), and feeling satisfied because the service matched the sacrifices made (95 percent). These indicators show that customers largely believe that the service delivers value. They received what they needed, and they generally saw the quality–price exchange as fair. This is a good sign for the company's reputation and suggests that the service proposition is credible.

However, the weakest loyalty indicator is particularly revealing: 23 percent of respondents were not clearly positive about the statement that they would remain loyal and continue using the company's services. This means that even though customers were largely satisfied with the outcomes and value, a non-trivial minority were not firmly committed to continued usage. This gap is common in business-to-business service markets. Customers may acknowledge good performance but still keep alternatives open because they are price-sensitive, risk-aware, or strategically cautious. This finding reinforces the idea that loyalty is more demanding than satisfaction. It requires not only the approval of the current service but also enough trust, attachment, and perceived advantage to discourage switching.

The inferential analysis begins with the first structural equation, which tests the effects of CRM and service quality on customer satisfaction (CS). The simultaneous test was extremely strong. The model was significant at $p < 0.001$, with $F = 1457.986$, and the coefficient of determination was $R^2 = 0.968$. According to this thesis, CRM and service quality together explain 96.8 percent of the variance in customer satisfaction, leaving only 3.2 percent to other factors. This is an unusually high explanatory power and should be interpreted carefully; however, within the logic of the thesis, it indicates that the two variables are dominant drivers of satisfaction in this context.

The partial coefficients in the first model showed a clear pattern. CRM had a significant positive effect on satisfaction ($t = 2.977$, $p = 0.005$), with a standardized path coefficient of 0.145. Service quality also had a significant positive effect on satisfaction ($t = 17.414$, $p = 0.005$), with a much larger standardized path coefficient of 0.848. The resulting path equation is as follows:

$$\text{Customer Satisfaction} = 0.145 (\text{CRM}) + 0.848 (\text{Service Quality}) + \text{error}, \text{ with } R^2 = 0.968.$$

This is one of the most important substantive findings of this study. This shows that both CRM and service quality matter, but service quality matters far more strongly for satisfaction. In practical terms, relationship management alone is not enough to satisfy customers. The direct experience of service performance—accuracy, responsiveness, competence, assurance, comfort, and communication—dominates the customer evaluation. This is theoretically sensible for customs service. Customers may appreciate being contacted and recognized, but satisfaction is more strongly shaped by whether the provider performs well in terms of operations. When shipments, documents, and compliance obligations are involved, competence and reliability are likely to outweigh the relational gestures. The relatively modest CRM coefficient does not mean that CRM is unimportant; rather, it suggests that its effect is more limited unless it is backed by strong service delivery. This pattern is consistent with recent evidence showing that service quality often exerts a larger effect on satisfaction than relational variables alone (Hidayat et al., 2024; Hakim et al., 2024; Sujana & Yusni, 2024).

The first model also reported a strong correlation between CRM and service quality ($r = 0.927$, $p < 0.001$). This implies that the two constructs tend to rise together. Customers who rate a firm highly on relationship management also tend to rate it highly on service quality. Conceptually, this makes sense because service firms often enact CRM through service encounters, and customers may not sharply separate “relationship quality” from “service quality”. However, the path model distinguishes their direct

effects and shows that service quality carries a heavier weight for satisfaction.

The second Structural Equation Model (SEM) tests the effects of CRM, service quality, and customer satisfaction on customer loyalty. Again, the model was significant at $p < 0.001$, with $F = 325.099$ and $R^2 = 0.910$. Thus, 91 percent of the variance in loyalty is explained by the three predictors. This is another very high value and suggests that the model captures most of the factors considered central to loyalty.

The partial effects in the second model were all significant. CRM has a positive effect on loyalty ($t = 2.774$, $p = 0.007$), with a standardized coefficient of 0.237. Service quality positively affects loyalty ($t = 2.154$, $p = 0.034$), with a coefficient of 0.357. Customer satisfaction also had a positive effect on loyalty ($t = 2.205$, $p = 0.030$), with a coefficient of 0.376. The equation is as follows:

$$\text{Customer Loyalty} = 0.237 (\text{CRM}) + 0.357 (\text{Service Quality}) + 0.376 (\text{Customer Satisfaction}) + \text{error},$$

with $R^2 = 0.910$.

These coefficients suggest a more balanced picture than that of the first model. Service quality is overwhelmingly dominant for satisfaction. However, for loyalty, satisfaction becomes the strongest direct predictor, followed closely by service quality, while CRM still contributes meaningfully. This pattern fits the classic service marketing theory. Customers may initially evaluate a company based on service quality, but their decision to remain loyal depends more broadly on their accumulated satisfaction and relational confidence. In other words, loyalty reflects the total experience, not just one dimension of performance. Recent studies also suggest that customer orientation, satisfaction, and service experience together help translate operational performance into loyalty outcomes (Situmeang & Sugiyanto, 2024; Sutriani et al., 2024).

The thesis also reports strong bivariate correlations in the second model: CRM with satisfaction ($r = 0.931$, $p < 0.001$), and service quality with satisfaction ($r = 0.982$, $p < 0.001$). These high correlations further support the centrality of satisfaction in the model. Satisfaction appears to be the key psychological link between what the firm does and whether customers intend to remain.

The mediation results are particularly useful for managerial interpretation. The indirect effect of CRM on loyalty through satisfaction was reported as 5.46 percent, calculated as 0.145×0.376 . The indirect effect of service quality on loyalty through satisfaction is much larger at 31.88 percent, calculated as 0.848×0.376 . These findings show that service quality influences loyalty not only directly but also strongly by raising satisfaction first. CRM also contributes to loyalty through satisfaction, but the mediated route is much weaker than the direct route. This reinforces the earlier conclusion that, for a PPJK firm, technical and experiential service performance is the main mechanism through which satisfaction and loyalty are built.

One issue in the thesis should be noted carefully: the “total effect” calculations presented in Chapter IV appear inconsistent because percentages are added in a way that does not fully follow the standard path-analysis logic. Therefore, the more reliable interpretation comes from the reported direct path coefficients and stated indirect effects rather than from the thesis’s total-effect percentages. Even with this caution, the directional conclusion remains clear. All hypothesized paths were positive and significant, and service quality emerged as the strongest driver of satisfaction and an important indirect driver of loyalty through satisfaction.

Substantively, the results tell a coherent story. PT. Pusaka Golden Trans Utama was already seen as competent, organized, and generally customer oriented. Customers especially appreciated employee capability, confirmation and follow-up, room comfort, employee appearance, and technical knowledge. They also felt that the firm delivered the service they wanted and that the quality–price balance was fair enough. These are not small accomplishments. In a procedural service industry, they indicate an operationally credible provider.

However, the same results also explain why loyalty was not absolute. Weaknesses remained in friendliness, collaborative problem-solving, communication through customer-preferred channels and consistency in handling risk or negligence. These weaknesses affect the parts of the service relationship

that move customers from mere approval to durable commitment. A customer may remain satisfied if a firm processes documents correctly, but loyalty becomes more secure when the customer also feels personally respected, kept fully informed, and protected when problems occur. Therefore, the company's strongest future gains are unlikely to come from basic process capability alone. They will come from translating competence into deeper trust.

Overall, the results support all the major hypotheses of this study. CRM positively affects customer satisfaction and loyalty. Service quality positively affects customer satisfaction and loyalty. Satisfaction positively influences loyalty. Both CRM and service quality also indirectly affect loyalty through satisfaction. However, the magnitude of the effects is important. Service quality is the most powerful predictor of satisfaction, and satisfaction is the strongest direct predictor of loyalty. CRM remains important, but in this study, it functions more as a supporting and reinforcing factor than as the main engine of customer retention. For article purposes, that is the central takeaway: in customs brokerage services, loyalty is built most strongly when high service quality creates real customer satisfaction, whereas CRM strengthens that process by making the relationship more consistent, informed, and personalized. More broadly, recent 2024 studies across restaurant, logistics, retail, and service settings report the same general direction of influence, although the effect sizes vary by context and service design (Soerjanto et al., 2024; Nofrisel et al., 2024; Indra Sani et al., 2024).

Another way to interpret the findings is through the distinction between operational and emotional-security confidence. Operational confidence refers to customers' belief that the provider can competently complete the customs process. On this point, the company performed very well. High ratings for employee knowledge, room organization, service realism, and value for money suggest that customers trust the company's day-to-day capability. Emotional security confidence, however, refers to whether customers feel personally supported, clearly informed, and protected when complications arise. The lower scores for friendliness, collaborative cost-saving support, digital communication convenience, and responsibility for negligence indicate that this second layer of confidence was not equally strong. This distinction helps explain why loyalty remained positive but not absolute: customers trusted the firm's operations more than they trusted the full relationship experience.

The results also support the practical importance of mediation analysis. If management focuses only on direct effects, it might conclude that service quality and satisfaction simply work side by side. However, the indirect effect results show something more strategic: service quality shapes loyalty not only because customers notice good performance, but also because that performance first becomes satisfaction and then helps stabilize loyalty. In other words, satisfaction is not just an additional variable; it is the conversion mechanism through which good service becomes a retained business. The same logic applies to CRM, although with a smaller effect. CRM contributes to loyalty more effectively when it improves the customer's experience rather than when it remains a formal communication routine.

For the article version, these results can be framed as evidence that B2B customs-service relationships are strongly performance-driven but not performance driven only. Technical competence is the entry ticket to the field. Satisfaction is a bridge. Loyalty is the outcome when competence, communication, and accountability are experienced simultaneously. Therefore, this study contributes a practical message to service management: in a specialized intermediary industry, customer loyalty grows most strongly when high-quality service delivery is reinforced by relationship practices that make customers feel informed, respected, and secure over time.

The final implication of the findings is that retention strategies should prioritize moments when customers most clearly experience uncertainty: status updates, complaint handling, and responsibility when delays or errors emerge. These are the points at which satisfaction is either reinforced or weakened, and therefore, the points where loyalty is most likely to be won or lost.

5. CONCLUSION

This study concludes that CRM, service quality, customer satisfaction, and customer loyalty at PT. Pusaka Golden Trans Utama were all perceived positively by respondents, although not all dimensions were equally strong. Customers generally agreed that the company had capable employees, maintained communication, provided a professional service environment, and delivered value that matched their expectations. The strongest perceived elements included employee capability, confirmation and follow-up during service, neat and comfortable office conditions, strong customs knowledge, and the firm's ability to provide the services customers actually needed. These findings show that the company had already built a credible operational reputation as a customs service provider.

However, the results also reveal several strategically important weaknesses. In the CRM dimension, friendliness and collaborative efforts to help customers reduce costs or improve performance were not rated as strongly as other indicators. In terms of service quality, communication media such as SMS and BBM were viewed as inadequate. In terms of customer satisfaction, the main weakness was the company's consistency in dealing with risks caused by negligence. In terms of loyalty, some respondents still hesitated to express firm commitment to continue using the company's services. This means that the company succeeded in building a favorable service image but had not yet fully converted positive evaluations into secure long-term attachment.

The causal analysis supports this interpretation. CRM and service quality jointly explained a large share of customer satisfaction, and both variables had positive and significant direct effects on satisfaction. However, service quality was by far the stronger predictor. In the customs brokerage context, satisfaction depends on how well the service is performed. CRM also matters, but its influence is smaller unless supported by strong execution. The second structural model showed that CRM, service quality, and satisfaction all had positive and significant direct effects on loyalty, with customer satisfaction emerging as the strongest direct predictor. In addition, both CRM and service quality affect loyalty indirectly through satisfaction, with the mediated effect of service quality being much larger than that of CRM.

Taken together, these findings show that loyalty is built through a sequence rather than a single factor. High service quality creates satisfaction, which strengthens loyalty, and CRM supports this process by improving communication and maintaining the relationship. The main managerial implication is that companies should not treat CRM as a substitute for service performance. Instead, CRM must be integrated into consistently high service quality. For article purposes, the core conclusion is clear: loyalty in customs-service businesses is not secured by document processing alone. It is created when operational excellence and customer-oriented relationship management work together, especially through better responsiveness, clearer communication, stronger interpersonal treatment, and explicit accountability when problems occur. This sequence is consistent with recent studies emphasizing that loyalty is most sustainable when service quality, customer care, digital engagement, and relationship management are aligned (Prior et al., 2024; Rahayu, 2024).

Therefore, this study supports a practical retention strategy for PPJK firms: preserve technical reliability but move further by making customers feel informed, respected, and protected throughout the export–import process. When these conditions are met, satisfaction becomes more stable and loyalty becomes more defensible.

Ethical Approval

Not Applicable

Informed Consent Statement

Not Applicable

Authors' Contributions

Not Applicable

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Data Availability Statement

The data presented in this study are available on request from the corresponding author due to privacy reasons.

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Notes on Contributors

Desmawati Makatita

Desmawati Makatita is affiliated with Program Pascasarjana Magister Manajemen, Sekolah Tinggi Ilmu Ekonomi Kusuma Negara Jakarta.

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