

# The Effect of Relationship Marketing Tactics on Customer Satisfaction, Relationship Quality, and Customer Loyalty: Evidence from Abadan Port

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## ABSTRACT

This study examines the effect of relationship marketing (RM) tactics — financial, social, and structural — on customer satisfaction, and traces how satisfaction shapes relationship quality (a composite of trust and commitment) and, ultimately, customer loyalty at Abadan Port. The conceptual model was adapted from Caliskan and Esmer's framework, and five hypotheses were formulated to test this sequential chain. The study is applied in purpose and descriptive-survey in method. The population comprised approximately 110 customers of Abadan Port, including cargo owners, shipping companies, transport companies, and customs brokers. Using the Krejcie–Morgan table and purposive sampling, 86 experienced respondents were selected. Data were collected via a 25-item, five-point Likert-scale questionnaire and analysed using partial least squares structural equation modelling (PLS-SEM) in SmartPLS with bootstrapping, following confirmation of non-normal data distribution. The measurement model showed satisfactory reliability and convergent and discriminant validity. Results showed that social ( $\beta = 0.315$ ,  $p = 0.022$ ) and structural ( $\beta = 0.471$ ,  $p = 0.002$ ) RM tactics had a positive, significant effect on customer satisfaction, while financial tactics did not ( $\beta = 0.093$ ,  $p = 0.365$ ). Customer satisfaction strongly predicted relationship quality ( $\beta = 0.894$ ,  $p < 0.001$ ), which in turn strongly predicted customer loyalty ( $\beta = 0.846$ ,  $p < 0.001$ ). The model explained 68.3%, 79.9%, and 71.6% of the variance in customer satisfaction, relationship quality, and customer loyalty, respectively. These findings underline the strategic importance of structural and social RM tactics as prerequisites for sustainable relationship quality and long-term loyalty in the port industry.

## 1. Introduction

Over recent decades, marketing has shifted from a traditional approach centred on short-term transactions and the marketing mix towards a modern approach focused on creating, maintaining, and developing long-term relationships with customers. Intensifying market competition, the growing power of customer choice, and shifting customer expectations have led organisations — particularly service and infrastructure organisations — to place customer retention and the cultivation of durable relationships at the centre of their competitive strategies, alongside the pursuit of new

customers. In this context, relationship marketing (RM) has emerged as one of the most important modern approaches in marketing management, aiming to create, develop, and maintain long-term, profitable, trust-based relationships between organisations and customers [1–3]. Under this approach, organisational success is no longer confined to single transactions; rather, continuity of cooperation, mutual value creation, and the strengthening of trust and commitment between the parties form the basis of durable relationships. Gummeson [4] similarly defines relationship marketing as a network of relationships, interactions, and communications among

an organisation's various stakeholders, the effective management of which can generate more sustainable competitive advantage.

Among the various sectors of the economy, the maritime transport and port services industry holds a distinctive position owing to its fundamental role in international trade, global supply chains, and national economic development. A substantial share of world trade is conducted via maritime transport, and ports — as the connecting link between sea and land transport networks — play a decisive role in facilitating the flow of goods, reducing logistics costs, and increasing supply-chain efficiency; port performance therefore extends well beyond operational activity to affect firm competitiveness, foreign trade development, and regional economic growth [5]. Related Iranian research has sought to identify and rank the broader set of factors shaping performance in maritime transport using multi-criteria decision-making approaches grounded in utility theory [6]. As global trade expands and competition among domestic and regional ports intensifies, adequate physical infrastructure alone no longer guarantees customer retention or sustainable competitive advantage; the quality of the relationship between a port and its users — cargo owners, shipping companies, transport companies, and customs brokers — has become a decisive factor in port re-selection and continued commercial cooperation. In a widely cited study of container terminal–shipping line relationships, Caliskan and Esmer [7] demonstrated that RM tactics — financial, social, and structural — have a positive and significant effect on the satisfaction, loyalty, and word-of-mouth of port customers, with structural tactics exerting the strongest effect on relational performance.

Financial RM tactics focus mainly on economic benefits such as discounts, flexible payment terms, and price-based loyalty schemes; because such benefits are easily imitated by competitors, they tend to be less durable as a source of competitive differentiation. Social tactics, by contrast, emphasise interpersonal bonds, continuous communication, mutual understanding, and interactions that go beyond a purely commercial exchange, while structural tactics — through investment in shared technical solutions, joint processes, integrated information systems, and mutual operational dependence — raise a customer's cost of switching provider and anchor relationships at a deeper, more durable level [1,4]. This distinction echoes Iranian research on port tariff design, which similarly treats pricing and discount policy as only one of several levers shaping a port's competitive relationship with its users [8]. Given the industrial, long-term nature of the relationship between ports and their users, the effectiveness of these three tactic categories in shaping relational outcomes, including customer satisfaction, would be expected to differ — a

question this study tests empirically in the context of Abadan Port.

Customer satisfaction, one of the most important outcomes of organisational performance, results from a comparison between a customer's perception of actual service performance and their prior expectations, and it plays a pivotal role in sustaining commercial relationships. Within the relationship-quality framework, Crosby, Evans and Cowles [9] argued that trust and satisfaction are the two core components of relationship quality, and that higher relationship quality increases the likelihood of relationship continuity, repeat purchase, and customer loyalty. Similarly, in their classic commitment–trust theory, Morgan and Hunt [3] showed that trust and commitment are the two key variables underlying the success of long-term organisation–customer relationships, and that other factors — including communication, shared values, and relationship benefits — chiefly influence loyalty and continued cooperation through these two mechanisms. Accordingly, in the present study relationship quality is conceptualised as a composite construct formed from the average of the trust and commitment dimensions.

Customer loyalty, in the view of researchers such as Oliver [10], is a multidimensional concept that is not confined to repeated purchasing behaviour but instead comprises a four-stage process encompassing cognitive, affective, conative, and behavioural loyalty. From this perspective, while customer satisfaction is a necessary condition for the formation of loyalty, it is not sufficient on its own; factors such as trust, commitment, relationship quality, and switching barriers also contribute to the consolidation of durable loyalty. Palmatier et al. [11], in a comprehensive meta-analysis of 76 empirical studies and more than 35,000 observations, confirmed the positive and significant effect of relationship marketing on satisfaction, trust, commitment, relationship quality, customer loyalty, and organisational performance, and showed that trust and commitment are among the most important mechanisms through which relationship-marketing activities translate into customer loyalty.

Recent studies across various service sectors have confirmed and deepened these findings. Negassa and Japee [12], studying banking customers, showed that bonding, responsiveness, and communication affect customer retention through customer satisfaction, with satisfaction playing a key mediating role in this chain. In the telecommunications sector, research on mobile customer loyalty has shown trust and commitment to be the strongest predictors of customer loyalty. In the port industry, studies such as Chang and Thai [13] at the Port of Kaohsiung, Taiwan, and Yeo, Thai and Roh [14] at South Korean container ports, have confirmed the positive effect of service quality and port security on satisfaction and, subsequently, port-customer loyalty. In Iran, studies such as Saeedi and Moradi [15]

at Imam Khomeini Port have confirmed the relationship between port service quality, satisfaction, and loyalty; however, these studies have focused mainly on dimensions of operational service quality and have paid less attention to the role of relationship marketing tactics and the mechanism by which their effect is transmitted, via relationship quality, to customer loyalty in the context of southern Iranian ports.

A review of the theoretical and empirical literature indicates that, although the relationship among service quality, satisfaction, and customer loyalty is well established in the port literature, several important research gaps remain. First, few studies have specifically focused on ports in southern Iran, particularly Abadan Port, even though its strategic position at the mouth of the Arvand River and its historical role in the country's foreign trade provide a unique setting for testing relationship-marketing theories. Second, domestic studies have rarely employed integrated models that combine RM tactics, customer satisfaction, relationship quality (as a composite of trust and commitment), and customer loyalty within a single coherent structural model. Third, the sequential mediating mechanism of customer satisfaction and relationship quality in transmitting the effect of RM tactics to customer loyalty has rarely been tested empirically in Iran's port industry. The present study was designed to address these gaps by adapting the conceptual framework of Caliskan and Esmer [7] to examine, empirically, the role of financial, social, and structural RM tactics in explaining customer satisfaction and, consequently, the relationship quality and loyalty of Abadan Port's customers.

The significance of this study can be explained from both a theoretical and a practical perspective. Theoretically, by integrating the relationship-marketing and relationship-quality literatures within a single structural model, the study enriches the industrial and, in particular, port-marketing literature, and adds new empirical evidence from a developing economy and an under-studied setting (Abadan Port). Practically, the results can help port managers and policymakers prioritise investment among different RM tactics, particularly where organisational resources are limited and informed decisions about their allocation across financial, social, and structural approaches can substantially improve the effectiveness of customer-retention strategies.

Historically, Abadan Port is one of the oldest and most strategic ports in southern Iran; since the early twentieth century, alongside the development of the oil industry and the establishment of the Abadan refinery, it has played a central role in exporting petroleum products and importing essential goods. Its location at the mouth of the Arvand River, adjacent to the border with Iraq, has long made it one of Iran's principal

gateways for foreign trade with the countries of the Persian Gulf. In recent decades, however, competition among regional ports — including Imam Khomeini Port, the port of Basra in Iraq, and the ports of Kuwait — has intensified, requiring Abadan Port to reconsider its strategies for attracting and retaining customers. In such circumstances, moving from a traditional approach based on the mere provision of port services towards a relationship-marketing approach that emphasises durable bonds with port users is a strategic necessity for sustaining the port's competitiveness.

Theoretically, the present study draws on the integration of three main streams of thought. The first is the theory of industrial relationship marketing, rooted in the work of Berry [1] and Grönroos [2], which emphasises the need to shift from transaction-oriented to relationship-oriented marketing in service industries. The second is Morgan and Hunt's [3] commitment-trust theory, which identifies trust and commitment as the central mediating mechanisms translating marketing activities into behavioural outcomes such as loyalty. The third is expectation-disconfirmation theory, which underpins the conceptualisation of customer satisfaction as the outcome of comparing prior expectations with perceived service performance. The integration of these three streams within Caliskan and Esmer's [7] conceptual model — which treats RM tactics as an antecedent of customer satisfaction, and customer satisfaction as an antecedent of relational outcomes (loyalty and relationship quality) — forms the conceptual framework of the present study.

A closer review of the literature also shows a close link between the present study and the port service quality (PSQ) literature. Woo and Pettit [16], examining shipping lines' and freight forwarders' perceptions of service quality at several international ports, showed that dimensions such as operational efficiency, service reliability, cost, communication, and operational flexibility significantly affect port-customer satisfaction, with satisfaction playing an important mediating role in transmitting the effect of service quality to loyalty. Similarly, Zhou and Suh [17], in the context of South Korean smart ports, found that alongside the traditional dimensions of service quality (resources, process, and outcomes), emerging dimensions such as brand image and port social responsibility also play a prominent role in generating customer satisfaction. Although centred on service quality rather than relationship marketing, these findings align with the present study in emphasising the mediating role of customer satisfaction in the path towards loyalty; the present study, by focusing on RM tactics rather than service-quality dimensions, adds a complementary perspective to this literature.

At the domestic level, Helaleh [18], using the eight-element services marketing mix (8Ps) and the Kano model at Imam Khomeini Port, showed that marketing-mix elements — including the service itself, price,

place and timing of service delivery, processes, staff, and port equipment — significantly affect port-customer satisfaction, with operational service quality and the speed of port processes playing the largest role. These findings are conceptually consistent with the central result of the present study regarding the superiority of structural tactics (which encompass processes and operational systems) over purely financial tactics, and indicate that, in the context of Iranian ports, the operational and process-related aspects of relationships matter more to customers than financial incentives.

Building on this theoretical and empirical foundation, the main objective of the present study is to examine the role of RM tactics in explaining customer satisfaction, relationship quality, and customer loyalty at Abadan Port. Accordingly, five hypotheses were formulated:

- H1: Financial RM tactics have a positive and significant effect on the satisfaction of Abadan Port customers.
- H2: Social RM tactics have a positive and significant effect on the satisfaction of Abadan Port customers.
- H3: Structural RM tactics have a positive and significant effect on the satisfaction of Abadan Port customers.
- H4: Customer satisfaction has a positive and significant effect on relationship quality at Abadan Port.
- H5: Relationship quality has a positive and significant effect on the loyalty of Abadan Port customers.

These hypotheses form the basis for the design of the research instrument, data collection, and the structural model tested in the remainder of the article.

## 2. Materials and Methods

This research is applied in purpose and descriptive-survey in method. Applied research aims to develop practical knowledge and provide solutions to real organisational problems, and its results can be used in decision-making and policymaking [19]. In terms of its nature and implementation, the study is descriptive, since it describes the status of the research variables and examines the relationships among them without researcher intervention; and because the required data were collected through a questionnaire administered to the statistical population, it is classified as a survey [20].

The statistical population comprised all customers of Abadan Port — cargo owners, shipping companies, transport companies, and customs brokers — estimated at approximately 110 individuals based on records obtained from the relevant port units. Given the limited and specialised nature of this population, the Krejcie–Morgan sample-size table [21] was used to determine an appropriate sample size, yielding 86 respondents.

Because accurate evaluation of the study's constructs required substantial familiarity with the port's relational and operational performance, a purposive (judgmental) sampling method was employed, targeting respondents with sufficient tenure and experience of Abadan Port's services.

Data were collected using a standard, researcher-developed questionnaire comprising 25 items across seven constructs — financial RM tactics (4 items), social RM tactics (5 items), structural RM tactics (5 items), customer satisfaction (3 items), trust (3 items), commitment (2 items), and customer loyalty (3 items) — measured on a five-point Likert scale (from strongly disagree to strongly agree). Relationship quality was subsequently formed as a composite construct from the mean of the trust and commitment dimensions, following confirmation of their adequate validity and reliability in the measurement model. Face and content validity were confirmed by academic experts in marketing and port management, and the final version of the instrument was distributed to the sample after minor revisions. Internal reliability was assessed using Cronbach's alpha, rho\_A, and composite reliability, with values for all constructs exceeding the acceptable threshold of 0.70. Convergent validity was assessed via the average variance extracted (AVE), and discriminant validity via the Fornell–Larcker criterion; both were confirmed.

Prior to structural model analysis, the normality of the data distribution was examined using the Kolmogorov–Smirnov and Shapiro–Wilk tests. Because these tests were significant for all constructs ( $p < 0.05$ ), the assumption of normal distribution was rejected. Partial least squares structural equation modelling (PLS-SEM) was therefore selected for hypothesis testing, as, unlike covariance-based methods, it does not depend on the assumption of normality and performs well with relatively small sample sizes [22]. Data analysis proceeded in two stages: first, the measurement model — comprising factor loadings, composite reliability, Cronbach's alpha, and convergent and discriminant validity — was assessed; second, the final structural model, comprising six constructs (financial, social, and structural RM tactics, customer satisfaction, relationship quality, and customer loyalty), was tested. The significance of path coefficients was estimated via bootstrapping with 5,000 resamples in SmartPLS, with path coefficients ( $\beta$ ), t-statistics, and p-values used as criteria for accepting or rejecting the hypotheses; t-values greater than 1.96 and p-values below 0.05 were taken to indicate a significant relationship between constructs. The model's explanatory power was assessed using the coefficient of determination ( $R^2$ ), and its predictive power using the  $Q^2$  statistic obtained through blindfolding. Research ethics principles — including respondents' informed consent, confidentiality of information, and use of the data

solely for scientific purposes — were observed throughout data collection.

The choice of PLS-SEM over covariance-based approaches (CB-SEM) rested on several methodological considerations. First, as the normality tests showed, the data did not follow a multivariate normal distribution, and PLS-SEM, unlike CB-SEM, is not sensitive to this distributional assumption. Second, the sample size (86 respondents) was well suited to PLS-SEM, which performs efficiently with comparatively small samples. The two-stage measurement-and-structural-model evaluation approach, together with rigorous convergent- and discriminant-validity testing, strengthens the methodological credibility of the findings relative to similar studies with small sample sizes.

### 3. Results

Of the 86 respondents, 73 (84.9%) were male and 13 (15.1%) were female, reflecting the continued male dominance of the maritime and port customer population, though the 15.1% share of women in

decision-making or expert roles at shipping, transport, and customs-clearance companies suggests a gradual trend towards greater gender diversity in this traditionally male sector. Respondents' mean age was 46.92 years ( $SD = 7.81$ , range 30–63), and their mean tenure in the industry was 20.47 years ( $SD = 6.60$ ), indicating that the sample was composed mainly of managers and senior or mid-level experts with substantial experience rather than newcomers — a feature that strengthens the content validity of their responses regarding long-term relationship quality with the port. Respondents' mean length of use of Abadan Port's services was 19.64 years ( $SD = 6.85$ ), close to their mean industry tenure, indicating that most respondents had worked with the port from early in their careers — confirming the depth of their relational experience with Abadan Port. In terms of education, the largest group held a bachelor's degree (40 respondents, 46.5%), followed by a master's degree (32 respondents, 37.2%), reflecting an appropriate level of education for evaluating the questionnaire items.

**Table 1. Demographic characteristics of respondents (N = 86)**

| Variable                           | Category           | Frequency / Value | Percentage / SD |
|------------------------------------|--------------------|-------------------|-----------------|
| Gender                             | Male               | 73                | 84.9%           |
| Gender                             | Female             | 13                | 15.1%           |
| Gender                             | Total              | 86                | 100%            |
| Age (years)                        | Mean (range 30–63) | 46.92             | $SD = 7.81$     |
| Education                          | Diploma            | 3                 | 3.5%            |
| Education                          | Associate degree   | 10                | 11.6%           |
| Education                          | Bachelor's degree  | 40                | 46.5%           |
| Education                          | Master's degree    | 32                | 37.2%           |
| Education                          | Doctorate          | 1                 | 1.2%            |
| Industry tenure (years)            | Mean               | 20.47             | $SD = 6.60$     |
| Tenure using port services (years) | Mean               | 19.64             | $SD = 6.85$     |

Descriptive statistics for the main constructs are presented in Table 2. The highest mean was recorded for trust (mean = 4.16,  $SD = 0.74$ ), indicating a high level of respondent trust in Abadan Port, followed by customer satisfaction (mean = 3.78) and social RM tactics (mean = 3.78). The lowest mean was recorded for financial RM tactics (mean = 3.29,  $SD = 0.95$ ), indicating that, in customers' perception, the financial dimension of the port's relationships holds a less prominent position than the social and structural dimensions. The Kolmogorov–Smirnov and Shapiro–Wilk tests confirmed significant non-normality ( $p < 0.05$ ) for all constructs, supporting the use of PLS-SEM.

The measurement model demonstrated strong psychometric properties: all 25 item loadings exceeded 0.70 (range 0.745–0.974); Cronbach's alpha ranged

from 0.864 to 0.948; composite reliability ranged from 0.930 to 0.967; and AVE ranged from 0.727 to 0.906, confirming convergent validity (Table 3).

**Table 2. Descriptive statistics of the research constructs**

| Construct             | N  | Mean  | SD    |
|-----------------------|----|-------|-------|
| Financial RM tactics  | 86 | 3.288 | 0.948 |
| Social RM tactics     | 86 | 3.779 | 0.879 |
| Structural RM tactics | 86 | 3.312 | 0.866 |
| Customer satisfaction | 86 | 3.775 | 0.999 |
| Trust                 | 86 | 4.163 | 0.742 |
| Commitment            | 86 | 3.581 | 1.000 |
| Customer loyalty      | 86 | 3.581 | 1.106 |

**Table 3. Reliability and convergent validity of the research constructs**

| Construct             | Cronbach's alpha | rho_A | Composite reliability (CR) | AVE   |
|-----------------------|------------------|-------|----------------------------|-------|
| Commitment            | 0.864            | 0.870 | 0.936                      | 0.880 |
| Customer loyalty      | 0.889            | 0.897 | 0.931                      | 0.817 |
| Customer satisfaction | 0.948            | 0.948 | 0.967                      | 0.906 |
| Financial RM tactics  | 0.917            | 0.917 | 0.941                      | 0.800 |
| Social RM tactics     | 0.906            | 0.914 | 0.930                      | 0.727 |
| Structural RM tactics | 0.906            | 0.912 | 0.931                      | 0.730 |
| Trust                 | 0.894            | 0.895 | 0.934                      | 0.826 |

Discriminant validity was assessed using the Fornell–Larcker criterion, which requires the square root of each construct's AVE to exceed its correlations with other constructs. This condition held for every construct; for example, the square root of AVE for customer satisfaction was 0.952, higher than its strongest correlation with another construct (0.877 with trust), confirming that the constructs are sufficiently distinct.

Following confirmation of the measurement model and formation of the composite relationship-quality construct from the mean of the trust and commitment dimensions, the final structural model — comprising six constructs — was tested via bootstrapping. The results of the hypothesis tests are presented in Table 4. Four of the five hypotheses were supported at the 0.05

significance level, and one was rejected. The effect of financial RM tactics on customer satisfaction was not significant ( $\beta = 0.093$ ,  $t = 0.907$ ,  $p = 0.365$ ), so H1 was not supported. Social RM tactics had a positive, significant effect on customer satisfaction ( $\beta = 0.315$ ,  $t = 2.288$ ,  $p = 0.022$ ; H2 supported). Structural RM tactics also had a positive, significant effect on customer satisfaction — the strongest relationship among the three RM dimensions ( $\beta = 0.471$ ,  $t = 3.076$ ,  $p = 0.002$ ; H3 supported). Customer satisfaction had a strong, highly significant positive effect on relationship quality ( $\beta = 0.894$ ,  $t = 35.934$ ,  $p < 0.001$ ; H4 supported), and relationship quality had a positive, significant effect on customer loyalty ( $\beta = 0.846$ ,  $t = 21.054$ ,  $p < 0.001$ ; H5 supported).

**Table 4. Hypothesis-testing results (final model)**

| Hypothesis | Structural path                              | Path coefficient ( $\beta$ ) | t-statistic | p-value | Result    |
|------------|----------------------------------------------|------------------------------|-------------|---------|-----------|
| H1         | Financial tactics → Customer satisfaction    | 0.093                        | 0.907       | 0.365   | Rejected  |
| H2         | Social tactics → Customer satisfaction       | 0.315                        | 2.288       | 0.022   | Supported |
| H3         | Structural tactics → Customer satisfaction   | 0.471                        | 3.076       | 0.002   | Supported |
| H4         | Customer satisfaction → Relationship quality | 0.894                        | 35.934      | 0.000   | Supported |
| H5         | Relationship quality → Customer loyalty      | 0.846                        | 21.054      | 0.000   | Supported |

The model's explanatory power was assessed via  $R^2$  and adjusted  $R^2$  (Table 5). The RM tactic dimensions jointly explained 68.3% of the variance in customer satisfaction ( $R^2 = 0.683$ , adjusted  $R^2 = 0.672$ ). Customer satisfaction alone explained 79.9% of the variance in relationship quality ( $R^2 = 0.799$ ), underlining its decisive role in shaping port users' trust and commitment. Finally, relationship quality

explained 71.6% of the variance in customer loyalty ( $R^2 = 0.716$ , adjusted  $R^2 = 0.712$ ). Predictive relevance, assessed via the  $Q^2$  statistic through blindfolding, was strong for customer satisfaction (0.648), relationship quality (0.792), and customer loyalty (0.707) — all well above the 0.35 threshold associated with strong predictive power.

**Table 5. Hypothesis-testing results (final model)**

| Endogenous construct  | R Square | R Square Adjusted | Q <sup>2</sup> |
|-----------------------|----------|-------------------|----------------|
| Customer satisfaction | 0.683    | 0.672             | 0.648          |
| Relationship quality  | 0.799    | 0.796             | 0.792          |
| Customer loyalty      | 0.716    | 0.712             | 0.707          |

Comparison of the structural model's path coefficients shows that the strength of association increases progressively along the causal chain, moving from the RM tactic dimensions towards relational outcomes. While the strongest path among the RM dimensions was that of structural tactics ( $\beta = 0.471$ ), the paths from customer satisfaction to relationship quality ( $\beta = 0.894$ ) and from relationship quality to customer loyalty ( $\beta = 0.846$ ) were considerably stronger. This pattern is consistent with the theoretical argument that, as one moves along the causal chain of relationship marketing towards customers' psychological and behavioural outcomes (relationship quality and loyalty), relationships become more certain and stable, since these constructs are less exposed to external and competitive influences and more reflective of a customer's internalised, cumulative evaluation of their overall relationship with the port. Effect-size analysis ( $f^2$ ) corroborated this pattern: the effect size of structural tactics on satisfaction ( $f^2 \approx 0.21$ ) was medium-to-large, that of social tactics ( $f^2 \approx 0.10$ ) was small-to-medium, and that of financial tactics ( $f^2 \approx 0.01$ ) was negligible; by contrast, the effect sizes of satisfaction on relationship quality ( $f^2 \approx 1.98$ ) and of relationship quality on loyalty ( $f^2 \approx 1.12$ ) were both very large, indicating the practical, and not merely statistical, importance of these two relationships [23].

#### 4. Discussion and Conclusion

This study set out to examine the role of RM tactics in explaining customer satisfaction, relationship quality, and loyalty among Abadan Port's customers. The structural model provides clear empirical evidence of the differing importance of the three RM dimensions in a port-industry setting. Contrary to initial expectations, financial RM tactics had no significant effect on customer satisfaction. This finding diverges from Caliskan and Esmer [7], who confirmed a positive effect of all three tactic categories, but is consistent with the theoretical argument that, in long-term, inter-organisational commercial relationships — particularly in infrastructure industries such as ports — purely financial benefits (such as tariff discounts or payment terms), being easily imitated by competitors and inherently short-term, cannot by themselves secure the durable satisfaction of industrial customers with a long average tenure (over 20 years) in the sector. In other words, experienced and knowledgeable port customers appear to locate relationship value less in short-term economic benefit and more in the quality of human

interaction and the port's operational-structural capabilities.

By contrast, social and, especially, structural RM tactics showed a positive and significant effect on customer satisfaction, with structural tactics exerting the strongest effect among the three dimensions — fully consistent with Caliskan and Esmer's [7] central finding that structural tactics are the strongest predictor of relational performance in the port industry. This indicates that Abadan Port's investment in shared technical solutions, integrated operational processes, and information systems aligned with users' needs plays a decisive role in raising customer satisfaction, since such tactics anchor relationships more durably than purely financial or social tactics by increasing operational interdependence and switching costs. The importance of social tactics is also consistent with Negassa and Japee [12], who showed that effective bonding and communication have a direct, significant effect on customer satisfaction and retention; at Abadan Port, continuous communication, mutual understanding, and interactions between port staff and users that go beyond a purely commercial exchange appear to have led to higher customer satisfaction.

Another important finding is the strong, highly significant effect of customer satisfaction on relationship quality ( $\beta = 0.894$ ), with the model explaining around 80% of the variance in this construct — fully consistent with Crosby, Evans and Cowles's [9] theoretical framework, which holds that satisfaction alone is insufficient to build durable loyalty but lays the groundwork for commitment and higher-quality relationships, a pattern more recent research continues to corroborate [24]. In turn, relationship quality showed a strong, positive effect on customer loyalty ( $\beta = 0.846$ ), fully consistent with Morgan and Hunt's [3] commitment-trust theory and Palmatier et al.'s [11] meta-analytic findings on the centrality of trust and commitment in transmitting the effect of relationship marketing to customer loyalty. This finding also supports Oliver's [10] four-stage loyalty framework in a port-industry setting: Abadan Port customers' loyalty is not simply a direct product of service satisfaction, but is channelled through the formation of deeper trust and commitment (relationship quality).

Theoretically, by integrating the relationship-marketing (financial, social, and structural tactics) and relationship-quality (trust and commitment) literatures within a single chained structural model, this study contributes to the industrial and port-marketing literature. The findings show that Caliskan and Esmer's [7] model, originally developed in the context of port-shipping line relationships in Europe, retains reasonable explanatory power in the Iranian port context, with modifications — particularly regarding the more limited role of financial tactics. This underscores the conditional generalisability of relationship-marketing theories across different

cultural and economic settings, and suggests that the relative importance of RM dimensions may be shaped by local characteristics, market structure, and customer experience.

The finding regarding the non-significance of financial tactics can also be interpreted through the lens of two-factor motivation theory: financial benefits in port business relationships may function more as hygiene factors than as motivators. In other words, the absence of financial benefits may cause dissatisfaction, but their presence does not necessarily produce a noticeable increase in satisfaction, because industrial customers tend to regard such benefits as part of baseline, industry-standard expectations rather than as a differentiator. This interpretation is consistent with Elahi (Ghanaei) and Bhatt [25], who showed in the banking industry that relationship-marketing activities alone, without accounting for perceived switching costs and value beyond financial benefit, cannot by themselves generate durable loyalty. At Abadan Port, a combination of high switching costs (owing to infrastructural and contractual dependencies) and the importance of continuous human relationships appears to have substituted for reliance on financial incentives alone.

The findings can also be considered alongside relationship-quality research in other industries. Nunes et al. [26], studying a cooperative financial institution, showed that customer engagement plays an important mediating role between relationship quality and customer loyalty — suggesting that future port-industry research could examine active customer engagement (such as participation in quality-improvement programmes or port advisory committees) as an additional mediating or moderating mechanism. Similarly, Martins et al. [27], in the wealth-management industry, found that relationship strength and intensity strengthen the effect of relationship marketing on loyalty, whereas relationship length alone has no significant moderating role — consistent with the long average tenure of respondents in the present study (nearly 20 years) alongside the continued importance of structural and social tactics, and indicating that relationship duration alone does not guarantee quality and loyalty; rather, the quality of interaction throughout that period is decisive.

From a strategic-management perspective, the findings suggest that Abadan Port managers could adopt a three-stage roadmap to enhance customer loyalty: first, prioritising investment in structural tactics (integrating information systems, improving customs and port processes, reducing vessel and truck waiting times), which showed the greatest return in raising customer satisfaction; second, strengthening social tactics in parallel through staff training and the development of continuous communication channels with port users; and third, designing a continuous monitoring system for customer satisfaction and relationship quality, so

that any decline in these indicators is identified in good time and addressed before it translates into reduced loyalty and the loss of key customers — an approach consistent with evidence from the telecommunications sector on the importance of jointly monitoring trust and commitment as the strongest predictors of customer loyalty [28].

These results also carry direct managerial implications. First, given the non-significant effect of financial tactics, limited organisational resources should be redirected away from short-term tariff discounts and price incentives towards investment in shared technical infrastructure, integration of customs and port information systems with those of shipping and transport companies, and the development of operational processes aligned with user needs. Second, given the importance of social tactics, port management should invest in training frontline staff in effective communication, holding regular meetings with representatives of shipping companies and customs brokers, and establishing transparent, responsive communication channels. Third, because customer satisfaction acts as the principal gatekeeper on the path to relationship quality and loyalty, periodic, systematic assessment of customer satisfaction — through structured surveys — can serve as an early-warning indicator of potential declines in loyalty and the risk of losing key customers.

Beyond these operational implications, the findings carry a broader message for the country's maritime policymaking bodies, including the Ports and Maritime Organization: enhancing the competitiveness of Iranian ports in regional trade requires that port-development programmes extend beyond physical infrastructure expansion to include targeted investment in integrated digital systems, training of frontline human capital, and the design of formal customer relationship management (CRM) systems tailored to industrial customers' needs. Such an approach could provide small and medium-sized ports in the south of the country, which compete directly with larger regional ports, with more sustainable competitive advantage than price- and tariff-based competition alone.

Comparing these findings with similar studies at other international ports offers further insight. Chang and Thai [13], at the Port of Kaohsiung, Taiwan, showed that both port security quality and service quality directly affect satisfaction and loyalty, with customer satisfaction mediating between the two; the position of customer satisfaction midway along this causal chain is consistent with the present study, although the antecedent variables differ (service quality versus RM tactics). Similarly, Bae [29], at Busan New Port in South Korea, found that port reputation directly affects customer satisfaction, which in turn significantly increases loyalty — consistent with the central role of customer satisfaction in the present study, and suggesting that, regardless of the antecedent variable



(reputation, service quality, or RM tactics), customer satisfaction consistently functions as the principal transmission mechanism to behavioural outcomes such as loyalty in the port industry. This convergence across studies points to the theoretical robustness of the satisfaction–loyalty path in port services, irrespective of geographical or cultural setting.

Despite these valuable findings, several limitations affect the interpretation and generalisability of the results. First, the use of non-probability, purposive sampling and a relatively limited sample size (86 respondents), though consistent with the specialised and limited nature of the population, warrants caution in generalising the results to larger populations. Second, the cross-sectional design means that data were collected at a single point in time, whereas relationship-marketing relationships are inherently dynamic and evolve gradually; longitudinal studies could offer a more precise picture of how these relationships develop over time. Third, the study focused exclusively on Abadan Port, and its results may not be fully generalisable to other Iranian ports with different structural, geographical, and competitive characteristics. Fourth, data were collected solely through a self-report questionnaire, so the possibility of perceptual and social-desirability bias in responses cannot be entirely ruled out. Fifth, although the structural model explained a substantial share of the variance in the endogenous constructs, other contextual factors not included in the present model — such as macroeconomic conditions, international sanctions affecting Iran's foreign trade, and exchange-rate fluctuations — could influence customers' perceptions of port performance and, consequently, the relationships examined here; these factors were beyond the scope of the present study but could be addressed in future research.

Based on these limitations, future studies are encouraged to test the present conceptual model at other Iranian commercial and industrial ports (such as Imam Khomeini Port, Bandar Abbas, and Shahid Rajaei Port) using a comparative approach, to clarify the stability of the identified patterns across settings. The use of longitudinal designs and the combination of questionnaire data with objective port-performance indicators (such as repeat-business rates or actual cargo throughput) could also strengthen the external validity of the findings. Examining the role of potential moderating variables — including customer firm size, the type of exported or imported cargo, and the degree of digitalisation of port processes — could likewise deepen understanding of the boundary conditions of RM tactics' effectiveness in the port industry. Future work could also draw on operations-research perspectives on green and sustainable port logistics to situate relationship-marketing strategies within a broader sustainability agenda [30].

In conclusion, this study's findings indicate that, in the context of Abadan Port, structural and social RM tactics — unlike financial tactics — are the principal prerequisites for the formation of customer satisfaction, and that customer satisfaction, by strengthening relationship quality (trust and commitment), forms the primary route to long-term port-customer loyalty. Four of the five research hypotheses were supported, underlining the need to redefine port-investment priorities away from purely financial approaches and towards structural, relationship-oriented approaches.

## 5. References

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