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Customer Relationship Management (CRM) Strategy of PT ASDP Indonesia Ferry (Persero): A Customer Satisfaction and Digital Transformation Approach

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INTRODUCTION

Customer Relationship Management (CRM) has evolved into a critical element of business strategy in today's competitive era. The CRM concept extends beyond information technology systems to encompass a holistic approach to building, maintaining, and enhancing customer relationships (Payne & Frow, 2005). As Indonesia's largest ferry operator, PT ASDP Indonesia Ferry (Persero) faces unique challenges in implementing effective CRM. The ferry transportation industry has distinctive characteristics where customer interactions occur across multiple touchpoints - from ticket purchasing and boarding processes to the travel experience itself (Kumar et al., 2020).

According to the 2023 Customer Satisfaction Index (CSI) report by MarkPlus, ASDP has demonstrated strong commitment to service quality improvement through various strategic initiatives. The achieved CSI score of 5.34 (on a 1-6 scale) in 2023 shows improvement from the previous year (5.31 in 2022). However, in-depth analysis reveals significant satisfaction disparities between customer segments. Walk-on passengers reported higher satisfaction levels (5.39) compared to vehicle users (5.31), indicating the need for differentiated CRM approaches for each segment (Homburg et al., 2020).

ASDP faces three main CRM implementation challenges: first, service quality variations across branches affecting customer experience consistency (Parasuraman et al., 2021). second, uneven digital technology adoption across customer segments; and third, increasingly fierce competition from other ferry operators offering similar services (Verma et al., 2022); (Grewal et al., 2020). This paper will comprehensively analyze ASDP's CRM strategy considering these aspects and provide data-driven recommendations for more effective CRM development.

RESEARCH METHODS

This study employs a mixed-methods approach combining quantitative and qualitative techniques to gain deep understanding of CRM implementation at ASDP. This methodology was chosen as it provides comprehensive insights by integrating measurable numerical data with in-depth qualitative perspectives (Creswell, 2014; Fetters et al., 2020).

The quantitative component is based on Computer-Assisted Personal Interviewing (CAPI) survey data from 2,000 respondents, comprising 990 ASDP customers and 70 competitor customers. The survey measured various aspects of customer experience using standardized instruments including the Customer Satisfaction Index (CSI) on a 1-6 scale, Net Promoter Score (NPS) for loyalty measurement, and Importance-Performance Analysis (IPA) to identify priority improvement areas (Martínez & del Bosque, 2021). Data collection occurred over 10 weeks from August to October 2023, covering 27 ASDP branches across Indonesia.

Qualitatively, the research involved a series of In-Depth Interviews (IDI) with six ASDP directors representing various strategic functions. Conducted online via Zoom platform with 1-1.5 hour sessions, interviews focused on four main themes: (1) customer service improvement strategies, (2) digital transformation, (3) operational challenges, and (4) business development plans. Qualitative data was analyzed using thematic analysis techniques to identify key patterns and insights (Braun & Clarke, 2022).

Data analysis followed a phased approach. First, quantitative data was processed using descriptive statistics to understand demographic profiles and customer behavior patterns. Next, Importance-Performance Matrix was used to map service attributes based on customer-perceived importance and performance levels. Interview qualitative data was coded and categorized to identify strategic themes relevant to CRM development.

RESULTS AND DISCUSSION

This section presents the analyzed research findings supported by data visualizations and discusses their implications in relation to existing theories and industry benchmarks. The analysis follows a three-tiered approach: first examining customer satisfaction dynamics, then evaluating implemented CRM strategies, and finally benchmarking ASDP's performance against competitors. This structure enables comprehensive assessment of both internal performance metrics and external competitive positioning.

Customer Satisfaction and Loyalty Analysis

The research reveals complex customer satisfaction dynamics in ASDP's operational environment. While the aggregate CSI score of 5.34 indicates good overall performance, significant inter-segment disparities exist. Walk-on passengers gave higher ratings (5.39) than vehicle users (5.31), with the gap widening since 2022.

This divergence becomes even more significant when viewed against ASDP's long-term satisfaction trajectory. As illustrated in Figure 1, the company has achieved consistent CSI growth since 2015 ($4.67 \rightarrow 5.34$), with two distinct phases: steady prepandemic gains (2015-2019 CAGR: 1.8%) and accelerated post-digital transformation improvements (2020-2023 CAGR: 2.1%). Notably, the recent plateau in 2022-2023 (+0.03) coincides precisely with the emerging satisfaction gap between segments, suggesting that ASDP's standardized service enhancements may be reaching diminishing returns for vehicle users.



Figure 1. ASDP Customer Satisfaction Level (2015 – 2023)

Further analysis shows that decreased satisfaction among vehicle users primarily relates to three factors: (1) vehicle parking facility discomfort, (2) long waiting times during boarding processes, and (3) limited real-time departure information. These patterns are quantified in Table 1, where the 2021-2023 CSI comparison reveals two critical narratives: consistent gains among walk-on passengers (+0.08 YoY) offset by

vehicle user stagnation (-0.01), and an overall satisfaction improvement (+0.03) that masks growing segment polarization.

Table 1. C	ustomer bans.	iaction index	(CDI) by begine	III (2021-202 <i>3)</i>
Customer Segment	2021 CSI	2022 CSI	2023 CSI	Change (2022-2023)
Walk-on Passengers	5.28	5.31	5.39	+0.008
Vehicle Passangers	5.21	5.32	5.31	-0.01
Overall	5.25	5.31	5.34	+0.03

Table 1. Customer Satisfaction Index (CSI) by Segment (2021-2023)

Customer loyalty mapping based on Net Promoter Score (NPS) shows interesting distribution. With an NPS of 39.8, ASDP ranks "above average" in transportation industry benchmarks. However, respondent composition reveals only 23.2% as Loyalists (score 9-10), while 20.6% are potential Switchers (score 1-6). The largest group is Habitual Buyers (56.2%) who use ASDP services more out of habit than active loyalty (Keiningham et al., 2020).

Demographic analysis shows significant characteristic differences between segments. Vehicle users are predominantly male (78%) of productive age (31-35 years) from upper middle-class backgrounds (34.4%), while walk-on passengers are more diverse with higher female proportion (36%) and younger demographics (20-25 years) from lower middle-class backgrounds (33%). These profile differences necessitate distinct CRM approaches for each segment.

CRM Strategy Implementation

ASDP has implemented various CRM initiatives categorized under three main pillars:

Digital Transformation Pillar:

Development of integrated online ticketing platform Ferizy with multiple Online Travel Agents (OTA).

Implementation of SAFE (Safety Assurance Facility Enhancement) system for real-time facility monitoring.

Data warehouse construction for consolidated customer data from multiple channels.

Service Excellence Pillar:

Ferizy Ambassador program with specialized frontline staff training Standardization of 320 service touchpoints across all branches

Major facility refreshes including toilets and waiting areas at 15 key ports

Customer Engagement Pillar:

Loyalty program development for corporate customers (B2B)

Community engagement initiatives in 3T (Remote, Outermost, Disadvantaged) regions

Social media optimization for two-way customer communication

However, CRM implementation faces several operational challenges. Data shows 80% of vehicle user ticket transactions still occur onsite (go-show), significantly higher than walk-on passengers (45%). This indicates digital strategies haven't fully penetrated the vehicle user segment. Additionally, inter-branch service consistency remains problematic, with significant CSI score variations - from 5.41 at Lake Toba to 5.13 at Biak.

Competitive Analysis and Benchmarking

The comparative study of ASDP's market position reveals a complex competitive landscape that varies significantly across different route categories. When examining main competitors, several key areas emerge where ASDP requires performance improvement, particularly regarding departure punctuality. Private operators demonstrate 15-20% better on-time performance on premium routes like Batam-Bali, with competitor Pelni achieving 88% punctuality versus ASDP's 79% on the Batam-Singapore route

(p.70). This performance gap stems from three fundamental competitive advantages held by rivals: (1) greater operational flexibility through younger fleets (average age 7 years vs ASDP's 12 years), (2) superior ship-port information system integration enabling automated docking, and (3) more attractive, tiered loyalty programs that drive customer retention (Rust & Huang, 2021).

However, ASDP maintains distinctive competitive strengths that manifest differently across route types. In premium routes, while lagging in punctuality, the company holds price leadership at 15-20% below competitors while maintaining comparable core amenities. Customer perception data reveals an interesting dichotomy - ASDP scores significantly higher on safety perceptions (4.8/5 vs industry average 4.3) but underperforms in entertainment offerings (2.9 vs 3.7), suggesting opportunities for targeted improvement without compromising existing strengths.

The competitive dynamics shift markedly in high-volume commodity routes like the crucial Merak-Bakauheni corridor, where ASDP commands 73% market share. Here, the company faces different challenges from low-cost specialists like Siginjai, which achieves 20% faster boarding times through optimized vehicle staging systems. ASDP's strategic response through dedicated motorcycle lanes has yielded a 15% reduction in boarding delays (p.35), demonstrating how operational innovations can address specific competitive threats. The company's ability to maintain 5-7% price premiums in this segment is justified by consistently superior facility ratings, with 92% of customers rating ASDP toilets as "acceptable" versus just 68% for budget competitors.

ASDP's most impregnable position lies in 3T (remote, outermost, disadvantaged) routes of Eastern Indonesia, where it enjoys 89% market share. This dominance reflects the company's broader port network and its mandate as a state-owned enterprise to serve socially important but economically challenging routes. While satisfaction scores average 0.4 points lower than core routes, the 22% higher customer retention rates indicate exceptionally strong brand loyalty in these underserved regions. This strategic advantage comes with inherent vulnerabilities, as the current absence of competitors in these routes enables cross-subsidization that could be disrupted if new entrants selectively target only the most profitable segments.

The multimodal integration through programs like Bakauheni Harbour City further strengthens ASDP's competitive moat, creating transportation ecosystems that competitors cannot easily replicate. This advantage, combined with the company's scale efficiencies and trusted public enterprise reputation, provides a solid foundation for addressing the identified performance gaps while leveraging existing strengths across all route categories.

CONCLUSIONS AND SUGGESTIONS Conclusion

This study comprehensively examined the Customer Relationship Management (CRM) strategy implementation at PT ASDP Indonesia Ferry (Persero), focusing on customer satisfaction dynamics and digital transformation efforts. The research revealed that while ASDP has made significant progress in CRM adoption, evidenced by the overall CSI score improvement to 5.34 in 2023, several critical challenges persist. The most notable findings include the significant satisfaction gap between walk-on passengers (5.39) and vehicle users (5.31), uneven digital adoption across customer segments, and service quality inconsistencies across different branches. These issues stem from fundamental operational variations, technological adoption barriers, and intensifying competition in key routes.

The mixed-methods approach employed in this research provided robust insights into both quantitative performance metrics and qualitative strategic perspectives. Quantitative analysis of 2,000 customer responses identified specific pain points in service delivery, while in-depth interviews with six directors uncovered strategic

initiatives and implementation challenges. The research confirmed that ASDP's CRM effectiveness varies significantly across its operational network, with digital transformation showing promising results but requiring more comprehensive adoption, particularly among vehicle users. These findings generalize the complex relationship between service standardization, digital adoption, and customer satisfaction in Indonesia's ferry transportation sector.

Suggestion

For practical implementation, ASDP should prioritize a two-pronged approach addressing both technological and human resource aspects. Immediately, the company should develop segment-specific CRM programs, particularly targeting vehicle users through enhanced digital ticketing solutions and real-time service updates. Medium-term initiatives should focus on comprehensive digital integration, including the development of a unified mobile platform combining ticketing, tracking, and customer service functions. These technological improvements should be accompanied by intensive staff training programs to ensure consistent service delivery across all branches, with special attention to frontline personnel interacting directly with customers.

For theoretical development and future research, this study highlights the need for more nuanced CRM frameworks tailored to the transportation sector's unique characteristics. Subsequent studies could explore the longitudinal impact of digital CRM adoption on customer loyalty in ferry services, or conduct comparative analyses with international ferry operators. Additionally, research focusing on the psychological factors influencing customer satisfaction in maritime transport could provide valuable insights for service design. ASDP's management is encouraged to establish a dedicated CRM research unit to continuously monitor implementation effectiveness and adapt strategies based on evolving customer expectations and technological advancements in the transportation industry.

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REFERENCE

Creswell, J.W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage Publications.

Kotler, P., & Keller, K.L. (2016). Marketing Management. Pearson Education.

Lemon, K.N., & Verhoef, P.C. (2016). Understanding Customer Experience. Journal of Marketing.

MarkPlus. (2023). CSI Report of PT ASDP Indonesia Ferry. Jakarta.

Payne, A., & Frow, P. (2005). A Strategic Framework for CRM. Journal of Marketing.

Reichheld, F.F. (2003). The One Number You Need to Grow. Harvard Business Review.

Keiningham, T., et al. (2020). The evolution of Net Promoter Score (NPS) research. Journal of Service Research.

Kumar, V., et al. (2020). Digital CRM in the service industry. Journal of Service Management.

Verma, S., et al. (2022). Digital adoption in service industries. Journal of Service Theory and Practice.

Grewal, D., et al. (2020). The future of technology-driven customer engagement. Journal

- of Marketing.
- Martínez, P., & del Bosque, I. R. (2021). CSR and customer loyalty in services. Journal of Business Ethics.
- Braun, V., & Clarke, V. (2022). Thematic Analysis: A Practical Guide. Sage.
- Rust, R. T., & Huang, M. H. (2021). The service revolution and digital transformation. Journal of Marketing.
- Kumar, V., & Rajan, B. (2022). Journal of Marketing, 86(3), 31-49 (Behavioral segmentation)
- Chen, L., et al. (2023). Transportation Research Part E, 172, 103066 (Dynamic pricing ML models)
- Brady, M. K., & Cronin, J. J. (2020). Customer orientation and firm performance: The mediating role of employee and customer satisfaction. Journal of Service Research, 23(2), 145–163.
- Kotler, P., & Keller, K. L. (2020). Marketing management (16th ed.). Pearson.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2020). Unified theory of acceptance and use of technology: A synthesis and the road ahead. Journal of the Association for Information Systems, 17(5), 328–376.
- Tussyadiah, I. P. (2020). A review of research into automation in tourism: Launching the annals of tourism research curated collection on artificial intelligence and robotics in tourism. Annals of Tourism Research, 81, 102883.
- Lemon, K. N., & Verhoef, P. C. (2021). Understanding customer experience throughout the customer journey. Journal of Marketing, 85(6), 69–96.
- Grönroos, C. (2020). Service management and marketing: A customer relationship management approach (5th ed.). Wiley.
- Rafiq, M., & Ahmed, P. K. (2020). Advances in customer relationship management: A critical review and future directions. International Journal of Management Reviews, 22(1), 96–120.
- Oliver, R. L. (2020). Customer satisfaction: A strategic review and guidelines for managers. Journal of Business Strategy, 41(3), 42–52.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (2020). Reassessment of expectations as a comparison standard in measuring service quality. Journal of Marketing, 68(1), 111–124.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (2020). The nature and determinants of customer expectations of service. Journal of the Academy of Marketing Science, 48(1), 1–12.