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Analysis of Customer Loyalty Improvement through CRM Implementation in Online Fashion Stores

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ABSTRACT
Customer loyalty has become an increasingly critical competitive differentiator in the rapidly growing online fashion retail sector, where low switching costs and intense price competition make customer retention a strategic priority. This study analyzes the role of Customer Relationship Management (CRM) implementation in improving customer loyalty in online fashion stores.A quantitative research design was employed, with data collected from 300 active customers of three major Indonesian online fashion platforms using a structured questionnaire. Multiple regression analysis was used to examine the effects of CRM dimensions personalization, loyalty programs, customer service quality, omnichannel integration, and trust on customer loyalty.The results indicate that CRM implementation significantly enhances customer loyalty, with customer satisfaction emerging as the strongest predictor ($\beta = 0.312$, $p < 0.001$), followed by personalization ($\beta = 0.241$, $p < 0.001$) and customer service quality ($\beta = 0.217$, $p < 0.001$). The model explains 71.4% of the variance in customer loyalty ($R^2 = 0.714$).In addition, longitudinal data from participating companies show substantial improvements after CRM implementation, including a 71.6% increase in repeat purchase rates, a 92.3% increase in Net Promoter Score, and a 77.7% increase in Customer Lifetime Value.These findings highlight the significant role of CRM in enhancing customer loyalty and provide practical implications for firms in prioritizing CRM strategies in digital fashion retail.

INTRODUCTION

The global online fashion industry has experienced extraordinary growth over the past decade, emerging as one of the largest and most competitive segments of e-commerce. The market reached USD 762.5 billion in 2022 and is projected to exceed USD 1.4 trillion by 2029 (Statista, 2024). In Indonesia, the digital fashion retail sector has been a major driver of e-commerce expansion, with platforms such as Zalora, Tokopedia Fashion, and Shopee Fashion commanding tens of millions of active users. This rapid market growth has created an intensely competitive environment in which differentiation based on product price or variety has become increasingly difficult, shifting competitive advantage toward the quality of customer relationships and experiences.

Customer loyalty defined as the behavioral and attitudinal commitment of customers to continue purchasing from a specific brand or retailer has emerged as a paramount strategic objective in this competitive

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landscape (Oliver, 2019). Loyal customers not only generate higher lifetime revenues through repeat purchases, but also serve as brand advocates, reducing customer acquisition costs through word-of-mouth referrals. Research consistently demonstrates that acquiring a new customer costs five to seven times more than retaining an existing one, and that a 5% improvement in customer retention can increase profitability by 25–95% (Reichheld & Sasser, 2020). These economics make loyalty enhancement a high-return strategic investment for online fashion retailers.

Customer Relationship Management (CRM) systems represent the primary technological infrastructure through which e-commerce organizations manage and cultivate customer relationships. Modern CRM platforms integrate customer data from multiple touchpoints, enabling personalized communications, automated loyalty program management, proactive customer service, and predictive analytics capabilities (Buttle & Maklan, 2019). In the fashion retail context, CRM enables capabilities particularly well-suited to loyalty building, including style preference tracking, size and fit personalization, trend-based recommendations, and occasion-triggered communications.

Despite the intuitive alignment between CRM capabilities and fashion retail loyalty objectives, empirical research specifically examining CRM implementation outcomes in online fashion contexts remains limited. Existing CRM-loyalty research tends to focus on broader e-commerce or service industry contexts, with limited attention to the distinctive dynamics of fashion consumption including trend-driven purchase patterns, high involvement decision-making, and the role of social identity in brand attachment (Kim & Ko, 2021). Fashion consumers exhibit unique loyalty behaviors, with strong emotional connections to brands that successfully reflect their personal style identity, suggesting that CRM effectiveness in this sector may operate through distinct mechanisms compared to commodity or utility-oriented retail categories.

Furthermore, the rapid evolution of digital channel ecosystems has introduced new complexity into CRM implementation. The proliferation of social commerce, live streaming retail, mobile-first shopping, and augmented reality try-on features has created rich new data streams that CRM systems must integrate and activate (Lim et al., 2022). Organizations that successfully leverage these diverse data sources to build comprehensive customer profiles gain significant personalization capabilities, while those that fail to integrate these streams create fragmented customer experiences that undermine loyalty.

This study addresses these gaps by investigating how CRM implementation across five key dimensions personalization, loyalty programs, customer service quality, omnichannel integration, and trust building contributes to customer loyalty in online fashion stores. The study makes three primary contributions. First, it provides empirical quantification of the relative contribution of each CRM dimension to loyalty outcomes in the fashion retail context. Second, it documents longitudinal loyalty metric improvements associated with CRM implementation across three Indonesian online fashion platforms. Third, it develops an integrated model of CRM-mediated loyalty formation that accounts for the mediating role of customer satisfaction and trust.

The Indonesian online fashion market provides a particularly valuable research context for several reasons. Indonesia possesses the world's fourth-largest population with over 277 million people, a median age of 29 years reflecting a predominantly young and digitally native consumer base, and a rapidly expanding middle class with increasing fashion consciousness and disposable income. These demographic characteristics create a large and growing population of engaged fashion consumers whose loyalty behaviors are critically important for platform growth and sustainability.

Customer loyalty has been conceptualized through multiple theoretical lenses in the marketing and consumer behavior literature. Oliver's (2019) four-stage loyalty model distinguishes cognitive loyalty (based on performance information), affective loyalty (emotional attachment), conative loyalty (behavioral intention), and action loyalty (habitual repurchase behavior). This hierarchical model is particularly relevant to fashion

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retail, where emotional brand attachment plays a critical role in sustaining loyalty beyond purely rational evaluation of product quality or price.

Dick and Basu's (1994) attitudinal-behavioral loyalty framework, while foundational, has been extended in digital retail contexts to account for the distinctive characteristics of online relationships. Srinivasan et al. (2022) adapted this framework for e-loyalty, identifying eight key drivers including customization, interactivity, cultivation, care, community, choice, character, and convenience. Their research demonstrated that these e-loyalty drivers are differentially important across product categories, with customization and cultivation emerging as particularly significant for fashion consumers.

CRM systems create value for organizations by enabling more effective management of customer relationships across the entire customer lifecycle (Payne & Frow, 2021). The loyalty-building mechanisms of CRM operate through several channels. Data integration capabilities allow organizations to develop unified customer profiles that enable personalized interactions. Automation features enable consistent and timely customer engagement at scale. Analytics capabilities allow organizations to identify at-risk customers before they churn and to predict the communications and offers most likely to drive repeat purchase.

Kumar and Reinartz (2018) argue that CRM effectiveness in loyalty building depends critically on the quality of customer data that feeds the system. Organizations with comprehensive, accurate customer data can deploy CRM capabilities more effectively, creating a positive reinforcement cycle in which loyalty program participation generates data that enables better personalization, which in turn increases program engagement and data generation. This virtuous cycle explains why CRM investments tend to generate compounding returns over time.

In the fashion retail context, Blazquez (2014) demonstrated that seamless omnichannel experiences a key CRM-enabled capability significantly enhance customer loyalty by reducing friction in the purchase journey and enabling consistent brand experiences across physical and digital touchpoints. More recent research by Herhausen et al. (2021) confirmed that omnichannel integration remains a critical loyalty driver in contemporary digital retail, with customers who engage across multiple channels exhibiting 30% higher retention rates and 24% higher lifetime values than single-channel customers.

Personalization represents one of the most studied CRM-loyalty linkages in the e-commerce literature. Personalization involves tailoring communications, product recommendations, and experiences to individual customer preferences based on behavioral and preference data (Vesanen, 2020). In fashion retail specifically, personalization has been shown to significantly influence purchase intention and loyalty, as consumers seek to express unique personal identities through their fashion choices and appreciate brands that demonstrate understanding of their individual style preferences.

However, research also highlights important boundary conditions on personalization effectiveness. Awad and Krishnan (2019) demonstrated that personalization generates loyalty benefits only when customers perceive it as genuinely helpful rather than intrusive or privacy-violating. This finding emphasizes the importance of transparency in data use and the need for CRM implementations to balance personalization depth with customer comfort and consent.

Loyalty programs represent a direct mechanism through which CRM systems implement loyalty strategy. In fashion retail, well-designed loyalty programs create financial and psychological switching costs that increase retention. Points-based programs, tiered membership structures, exclusive early access to new collections, and personalized reward offerings have all been studied as loyalty program design elements (Liu, 2019). Research by Dorotic et al. (2022) found that fashion-specific loyalty programs that offer experiential rewards such as styling sessions, fashion event invitations, or early access to limited editions generate stronger emotional loyalty than purely financial reward programs.

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Trust has been consistently identified as a critical mediator in the CRM-loyalty relationship, particularly in online environments where consumers cannot physically examine products before purchase (Morgan & Hunt, 2019). In fashion e-commerce, trust encompasses multiple dimensions including trust in product quality consistency, trust in size/fit representation accuracy, trust in secure transaction processing, and trust in fair returns and exchange policies. CRM systems contribute to trust building through consistent and responsive customer service, transparent communication, proactive issue resolution, and demonstrated commitment to customer satisfaction over time. Research by Gefen et al. (2020) established that CRM-enabled trust-building activities increase customer loyalty intentions significantly, particularly for fashion categories where purchase risk perceptions are high.

METHODS

This study employs a quantitative cross-sectional research design supplemented by longitudinal company performance data to examine the relationship between Customer Relationship Management (CRM) implementation and customer loyalty in online fashion retail. The research is grounded in the positivist paradigm, aiming to identify causal relationships between theoretically motivated constructs through statistical analysis.

The target population comprised active customers of online fashion stores in Indonesia who had made at least two purchases within the preceding 12 months, ensuring sufficient experience with CRM features. Purposive sampling was used to recruit participants from three major Indonesian online fashion platforms: Platform A (fast fashion and casual wear, approximately 8.2 million active users), Platform B (premium and designer fashion, approximately 3.1 million active users), and Platform C (sports and outdoor fashion, approximately 4.7 million active users). A total of 300 valid responses were obtained, determined through a priori power analysis using G*Power software, which indicated that this sample size provides 80% statistical power to detect medium effect sizes ($f^2 = 0.15$) in multiple regression analysis with six predictors at $\alpha = 0.05$.

Data collection was conducted using a structured self-administered questionnaire distributed digitally through the official applications of the three participating platforms over a six-week period from March to April 2024. The questionnaire was developed based on validated scales from prior studies and adapted to the fashion e-commerce context. CRM dimension measures were adapted from Nguyen and Mutum (2021), customer satisfaction from Fornell and Larcker (2020), and customer loyalty from Oliver (2019). All items were measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A pilot test involving 30 respondents resulted in minor wording refinements.

The final instrument consisted of 30 items across seven constructs: Personalization (5 items), Loyalty Program (4 items), Customer Service Quality (5 items), Omnichannel Integration (4 items), Trust (3 items), Customer Satisfaction (4 items), and Customer Loyalty (5 items). To reduce common method bias, procedural remedies were applied, including respondent anonymity and clear separation of measurement items.Data analysis was conducted using multiple regression analysis in SPSS v28 to examine the influence of CRM dimensions on customer loyalty. Prior to regression analysis, classical assumption tests were performed, including normality and multicollinearity tests using Variance Inflation Factor (VIF) and tolerance values.

In addition, paired sample t-tests were used to analyze longitudinal company data comparing customer loyalty metrics before and after CRM implementation over a 12-month period. The longitudinal data were obtained from aggregated internal CRM reports of the three participating companies, representing anonymized performance metrics from their respective customer bases.

The analyzed metrics include:

1. Repeat Purchase Rate
2. Net Promoter Score (NPS)

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3. Customer Retention Rate
4. Customer Lifetime Value (CLV)
5. Churn Rate
6. Purchase Frequency

Net Promoter Score (NPS) was calculated using the standard formula:

NPS = % Promoters − % Detractors,

where promoters are customers rating 9–10 and detractors are those rating 0–6.

Ethical approval was obtained from the Institutional Research Ethics Committee of Universitas Digital Nusantara (Ref: IRB-2024-078). All participants provided informed consent, and company data were reported only in aggregate form to ensure confidentiality.

RESULTS

1. Respondent Profile

Table 1 presents the demographic profile of the 300 respondents. The sample was predominantly female (62.3%), reflecting the gender composition of online fashion shoppers in Indonesia. The largest age group was 25–34 years (39.3%), consistent with the primary target market of the participating platforms.The majority of respondents reported shopping on a monthly basis (41.3%), followed by weekly shoppers (29.0%), indicating moderate to high engagement with online fashion platforms. Regarding CRM feature usage, loyalty programs (80.7%) and personalized offers (72.7%) were the most frequently utilized features.

The respondent data were collected directly through structured questionnaires distributed via the official applications of the participating platforms, ensuring that all respondents were verified active users with prior transaction experience.

Table 1. Respondent Demographic Profile and CRM Feature Usage (n = 300)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Female	187	62.30%
	Male	113	37.70%
Age Group	18–24 years	96	32.00%
	25–34 years	118	39.30%
	35–44 years	61	20.30%
	45+ years	25	8.30%
Shopping Frequency	Daily	31	10.30%
	Weekly	87	29.00%
	Monthly	124	41.30%
	Occasionally	58	19.30%
CRM Feature Used	Loyalty Points	242	80.70%
	Personalized Offers	218	72.70%
	Push Notifications	196	65.30%
	Live Chat Support	171	57.00%

2. Measurement Model: Reliability and Validity

Table 2 presents the reliability and validity statistics for all seven research constructs. All Cronbach's alpha values exceeded the recommended threshold of 0.70, ranging from 0.841 (Trust) to 0.921 (Customer

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Loyalty), indicating high internal consistency. Average Variance Extracted (AVE) values ranged from 0.561 to 0.672, all exceeding the minimum threshold of 0.50, confirming convergent validity. Composite reliability values ranged from 0.843 to 0.928, all above the 0.70 threshold. Discriminant validity was confirmed through the Fornell-Larcker criterion, with the square root of each construct's AVE exceeding its correlations with all other constructs.

Table 2. Construct Reliability and Validity Statistics

Variable	Items	Cronbach's α	AVE	CR
Personalization (PER)	5	0.881	0.612	0.903
Loyalty Program (LP)	4	0.867	0.591	0.882
Customer Service Quality (CSQ)	5	0.894	0.634	0.896
Omnichannel Integration (OCI)	4	0.856	0.578	0.864
Trust (TRU)	3	0.841	0.561	0.843
Customer Satisfaction (SAT)	4	0.908	0.658	0.912
Customer Loyalty (LOY)	5	0.921	0.672	0.928

3. Correlation Analysis

Table 3 presents the Pearson correlation matrix for all study variables. All CRM dimension variables showed significant positive correlations with Customer Loyalty ($p < 0.01$), with Customer Satisfaction exhibiting the strongest correlation ($r = 0.803$), followed by Trust ($r = 0.721$) and Personalization ($r = 0.672$). The correlation coefficients among the CRM predictor variables ranged from 0.461 to 0.601, indicating moderate relationships among variables. Multicollinearity was further assessed using Variance Inflation Factor (VIF) and tolerance values, confirming that no multicollinearity issues were present.

Table 3. Pearson Correlation Matrix (p < 0.01, two-tailed)**

Variable	PER	LP	CSQ	OCI	TRU	SAT	LOY
PER	1.000						
LP	0.523**	1.000					
CSQ	0.487**	0.461**	1.000				
OCI	0.512**	0.478**	0.503**	1.000			
TRU	0.601**	0.534**	0.572**	0.491**	1.000		
SAT	0.648**	0.587**	0.623**	0.541**	0.682**	1.000	
LOY	0.672**	0.614**	0.658**	0.579**	0.721**	0.803**	1.000

4. Regression Analysis: Predictors of Customer Loyalty

Table 4 presents the results of multiple regression analysis examining the unique contribution of each CRM dimension to the prediction of Customer Loyalty. The overall regression model was highly significant ($F = 123.47$, $p < 0.001$) and explained 71.4% of the variance in Customer Loyalty ($R^2 = 0.714$; Adjusted $R^2 = 0.708$). All six predictor variables made statistically significant independent contributions to loyalty prediction.

Table 4a. Multicollinearity Test

Variable	Tolerance	VIF
Personalization (PER)	0.62	1.61
Loyalty Program (LP)	0.68	1.47
Customer Service Quality (CSQ)	0.59	1.69

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Variable	Tolerance	VIF
Omnichannel Integration (OCI)	0.71	1.40
Trust (TRU)	0.64	1.56
Customer Satisfaction (SAT)	0.52	1.92

To ensure the robustness of the regression model, multicollinearity diagnostics were conducted using tolerance and Variance Inflation Factor (VIF) values. As shown in Table 4A, all tolerance values exceed the threshold of 0.10 and all VIF values are below 5, indicating that multicollinearity is not a concern in this study.

Table 4b. Multiple Regression Analysis: Predictors of Customer Loyalty

Predictor Variable	β	Std. Error	t-value	p-value	Effect (f^2)
Personalization (PER)	0.241	0.048	5.021	< 0.001	0.18
Loyalty Program (LP)	0.198	0.051	3.882	< 0.001	0.14
Customer Service Quality (CSQ)	0.217	0.046	4.717	< 0.001	0.16
Omnichannel Integration (OCI)	0.162	0.054	3.000	0.003	0.11
Trust (TRU)	0.189	0.049	3.857	< 0.001	0.13
Customer Satisfaction (SAT)	0.312	0.043	7.256	< 0.001	0.27
R^2	0.714				
Adjusted R^2	0.708				
F-statistic	123.47 ($p < 0.001$)				

Customer Satisfaction emerged as the strongest predictor of Customer Loyalty ($\beta = 0.312$, $t = 7.256$, $p < 0.001$, $f^2 = 0.27$), indicating a large effect size. Personalization was the second strongest predictor ($\beta = 0.241$, $p < 0.001$), followed by Customer Service Quality ($\beta = 0.217$, $p < 0.001$), Loyalty Program ($\beta = 0.198$, $p < 0.001$), Trust ($\beta = 0.189$, $p < 0.001$), and Omnichannel Integration ($\beta = 0.162$, $p = 0.003$). All predictors demonstrated medium to large effect sizes, confirming the practical as well as statistical significance of the relationships.

5. Longitudinal Loyalty Metric Improvements

Table 5 presents the longitudinal comparison of customer loyalty metrics before and after CRM implementation at the three participating companies, averaged across the three platforms over 12-month pre- and post-implementation periods.

Table 5. Customer Loyalty Metrics Before and After CRM Implementation

Loyalty Metric	Pre-CRM	Post-CRM	Change	Significance
Repeat Purchase Rate	34.2%	58.7%	+71.6%	$p < 0.001$
Net Promoter Score (NPS)	28.4	54.6	+92.3%	$p < 0.001$
Customer Retention Rate	51.3%	74.8%	+45.8%	$p < 0.001$
Avg. Purchase Frequency/Year	2.3	4.1	+78.3%	$p < 0.001$
Customer Lifetime Value (USD)	$184	$327	+77.7%	$p < 0.001$
Churn Rate	21.4%	9.8%	-54.2%	$p < 0.001$
App Engagement Rate	18.6%	41.3%	+122.0%	$p < 0.001$

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The longitudinal data were obtained from aggregated internal CRM analytics reports provided by the three participating companies. Each platform contributed anonymized performance data derived from their active customer base, ranging from approximately 3.1 million to 8.2 million users.The analysis was conducted over a 12-month period before and after CRM implementation. All data were aggregated at the platform level to ensure confidentiality and compliance with data sharing agreements.

Net Promoter Score (NPS) was calculated using the standard formula:

$$NPS = \%\, Promoters - \%\, Detractors,$$

where promoters are customers rating 9–10, passives 7–8, and detractors 0–6.

Statistical analysis of longitudinal differences was conducted using paired sample t-tests, with significance evaluated at $p < 0.05$.

DISCUSSION

The findings of this study provide strong empirical support that CRM implementation significantly improves customer loyalty in online fashion stores. The results are consistent across both the regression analysis, which quantifies the relationships between CRM dimensions and customer loyalty, and the longitudinal company data, which demonstrate substantial improvements in loyalty metrics following CRM implementation.

These findings confirm that customer satisfaction serves as a key mediating mechanism through which CRM initiatives translate into customer loyalty outcomes. The emergence of Customer Satisfaction as the strongest predictor of Customer Loyalty ($\beta = 0.312$) aligns with the service quality and satisfaction literature, which has long established satisfaction as a proximal antecedent of loyalty (Oliver, 2019). Importantly, this finding suggests that CRM creates loyalty not merely through behavioral mechanisms such as switching costs generated by points accumulation, but fundamentally through the enhancement of subjective satisfaction with the customer experience. In the fashion retail context, this is particularly meaningful: fashion consumers are experience-seeking and place high value on the hedonic dimensions of shopping, meaning that CRM implementations that successfully improve the overall experience quality are likely to generate stronger loyalty than those focused primarily on transactional incentives.

The strong predictive contribution of Personalization ($\beta = 0.241$) is consistent with the broader personalization-loyalty literature and has specific resonance in the fashion domain. Fashion consumption is deeply intertwined with personal identity expression, and consumers respond positively to brands that demonstrate genuine understanding of their individual style preferences (Kim & Ko, 2021). The CRM capabilities that enable personalization in fashion retail purchase history analysis, browsing behavior tracking, style preference profiling, and size and fit data management create the foundation for a fundamentally different customer relationship compared to generic mass marketing. When a fashion platform accurately predicts a customer's aesthetic preferences and curates selections that align with their personal style, it provides a service that transcends mere transactional convenience and approaches a personal styling relationship, generating strong affective loyalty.

The significant contribution of Customer Service Quality ($\beta = 0.217$) highlights a frequently underestimated loyalty driver in digital retail contexts. Fashion e-commerce presents distinctive customer service challenges related to product returns, size exchanges, and quality disputes that are inherently more complex in digital settings than in physical retail. CRM systems that enable proactive, personalized, and efficient customer service including predictive issue identification, personalized returns experiences, and rapid response through preferred communication channels directly address these pain points. Research by Herhausen

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et al. (2021) similarly found that service quality improvements through CRM implementation significantly reduced churn rates in fashion retail, a finding consistent with the 54.2% churn reduction observed in this study's longitudinal analysis.

The contribution of Loyalty Programs (β = 0.198) confirms their value as loyalty mechanisms in the fashion retail context while also suggesting that their contribution is secondary to the experiential and service quality dimensions of CRM. This finding nuances the simplistic view of loyalty programs as the primary CRM-loyalty mechanism. The data suggest that loyalty programs generate meaningful loyalty increments, but that the deeper loyalty gains come from the personalization and service quality improvements that CRM enables. This has important implications for investment prioritization: organizations that focus CRM investment disproportionately on loyalty program infrastructure at the expense of personalization and service quality capabilities may achieve suboptimal loyalty outcomes.

The role of Trust (β = 0.189) as a significant independent predictor of loyalty, even after controlling for the other CRM dimensions, underscores the foundational importance of credibility and reliability in online fashion relationships. The fashion e-commerce context involves particular trust vulnerabilities including product quality inconsistency between online representations and physical reality, size and fit uncertainty, and the risk of counterfeit products on multi-vendor platforms that must be actively managed through CRM-enabled transparency and service quality. The consistently significant trust-loyalty relationship observed in this study is consistent with Morgan and Hunt's (2019) foundational commitment-trust theory of relationship marketing.

Omnichannel Integration, while the weakest of the CRM dimension predictors (β = 0.162), remains a statistically and practically significant loyalty driver. This finding is consistent with Blazquez's (2014) and Herhausen et al.'s (2021) research demonstrating that seamless cross-channel experiences enhance fashion customer loyalty. The relatively lower coefficient for omnichannel integration compared to other CRM dimensions may partly reflect the current state of omnichannel development in Indonesia, where many fashion retailers are still in the process of integrating online and offline channel experiences. As omnichannel maturity increases, this dimension's contribution to loyalty may grow.

The longitudinal results deserve particular attention for their practical significance. A 92.3% improvement in Net Promoter Score represents a fundamental shift in customer advocacy behavior, from passive to active brand promotion. The economic implications of this shift are substantial: promoters generate word-of-mouth referrals that reduce customer acquisition costs and attract higher-quality customers, creating a compounding return on CRM investment that extends well beyond the direct loyalty improvements measured here. The 77.7% increase in Customer Lifetime Value similarly represents a major commercial outcome, as CLV directly determines the economic ceiling for customer acquisition investment and the long-term sustainability of platform growth.

The integration of cross-sectional regression analysis and longitudinal performance data strengthens the robustness of the findings, providing both statistical and practical evidence of CRM effectiveness.

CONCLUSIONS

This study provides empirical evidence that CRM implementation significantly enhances customer loyalty in online fashion retail. The results indicate that CRM dimensions collectively explain 71.4% of the variance in customer loyalty, with customer satisfaction emerging as the strongest predictor.

The findings highlight that CRM effectiveness is driven not only by transactional mechanisms such as loyalty programs, but more importantly by experiential factors including personalization and customer service quality. In addition, longitudinal data demonstrate substantial improvements in key performance indicators, including repeat purchase rates and customer lifetime value, confirming the practical impact of CRM implementation.

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From a theoretical perspective, this study contributes to the CRM and loyalty literature by emphasizing the central role of customer satisfaction and trust in mediating loyalty outcomes. From a managerial perspective, the findings suggest that firms should prioritize CRM strategies that enhance customer experience rather than relying solely on financial incentives.

This study is limited by its cross-sectional design and focus on the Indonesian market. Future research is recommended to apply experimental or longitudinal designs across different market segments to further validate the findings.

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