

WHAT KEEPS COFFEE CUSTOMERS COMING BACK? THE ROLES OF CUSTOMER RELATIONSHIP MANAGEMENT, CUSTOMER ENGAGEMENT, AND CAFÉ ATMOSPHERE

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Abstract

Purpose. Retaining customers in the café segment is increasingly difficult as switching costs approach zero and competing outlets converge on product quality. This study asks why some customers return and disentangles two routes to retention that the prevailing literature has largely treated in isolation: a relational route operating through customer relationship management (CRM) and customer engagement, and an experiential route operating through the café atmosphere. **Design/methodology/approach.** Survey data from 200 patrons of the coffee shop were analysed with partial least squares structural equation modelling (PLS-SEM), incorporating a mediation test for engagement and a moderation test for atmosphere on the CRM–retention link. **Findings.** CRM exerts a small but significant direct effect on retention ($\beta = 0.152$, $p = 0.027$), and a larger share of its influence is channelled through customer engagement (indirect $\beta = 0.224$, $p < 0.001$) a complementary (partial) mediation in which engagement remains the dominant pathway, accounting for approximately 60 per cent of CRM's total effect, without eliminating a direct relational payoff. Café atmosphere is the single strongest driver of retention ($\beta = 0.468$, $p < 0.001$), exceeding both components of the relational route, while its hypothesised amplification of the CRM–retention link is not supported ($\beta = 0.043$, $p = 0.459$). The model explains a moderate share of retention variance ($R^2 = 0.691$). **Originality/value.** The study reframes CRM as an antecedent whose retention payoff is only partly direct and is substantially amplified when it is psychologically converted into engagement, and it shows that the relational and experiential routes operate largely in parallel rather than synergistically an environmental dominance that has practical consequences for how independent cafés allocate scarce resources.

Keywords: *customer retention; customer relationship management; customer engagement; café atmosphere; servicescape; PLS-SEM*

INTRODUCTION

Customer retention has become one of the most consequential indicators of business success in markets defined by rapid digital change, proliferating competitors, and shifting consumer preferences (Ali & Nika, 2025). Retaining existing customers is empirically far more efficient and profitable than acquiring new ones (Al-Fitri & Nirmala, 2025), and a high retention rate signals that customers keep purchasing and resist switching to rivals (Tifliyah et al., 2021). Beyond satisfaction and loyalty, retention captures a more strategic capacity the organisation's ability to keep customers over the long run so that it contributes directly to revenue stability, lower acquisition costs, and sustainable growth (Opoku et al., 2025).

Achieving high retention is difficult. Many organisations struggle because relationships are managed poorly, creating fertile ground for churn (Opoku et al., 2025); in the airline sector, for instance, retention remains fragile despite heavy investment, exposing gaps in relationship-management practice (Mtamike & Magasi, 2025). The challenge is not confined to large-scale industries. It has spread to the food-and-beverage sector, and particularly to the café industry, where the proliferation of new coffee shops has intensified competition. The dynamic is vivid in Cilegon, Indonesia, where the rapid growth of modern coffee shops has fragmented the market and narrowed the space for differentiation. As choices multiply and switching costs approach zero, patrons are no longer tied to a single outlet and move freely to whichever competitor is perceived to offer better value, steadily eroding the customer base on which an independent café depends.

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Jannor Coffee, a coffee shop in Cilegon, illustrates the problem sharply. On public signals of customer activity it performs well: among 33 coffee shops in the city it ranks third by Google review volume (926 reviews) yet holds the highest rating of the leading outlets (4.7 stars), ahead of Starbucks CCM (2,291 reviews, 4.6 stars) and 0254 Coffee Shop (1,024 reviews, 4.5 stars). Its internal records, however, tell the opposite story. Transaction volume fell in consecutive semesters from 34,892 in July–December 2024 to 31,655 (–9.3 per cent), then 24,911 (–21.3 per cent), and 19,000 by January–May 2026 (–23.7 per cent) a cumulative contraction of roughly 45 per cent that traces a steady downward trend rather than seasonal fluctuation. A customer-cohort analysis makes the underlying issue explicit: of 9,426 customers, the oldest cohorts retained only 60.1 and 57.7 per cent by the most recent period, and average pure retention stood at about 67 per cent, with long-standing customers historically the largest contributors to transactions proving the most vulnerable to attrition. The problem, in short, is not merely falling sales but a weakening capacity to retain core customers over time.

Table 1. Customer retention by joining cohort.

Joining Cohort	Total Customers (n)	Jul–Dec 2024	Jan–Jun 2025	Jul–Dec 2025	Jan–May 2026	Final Cohort Retention Rate
Pre-July 2024	4,138	4,138	3,755	3,147	2,486	60.1%
Jul–Dec 2024 cohort	1,235	1,235	1,146	944	712	57.7%
Jan–Jun 2025 cohort	1,937	–	1,937	1,745	1,275	65.8%
Jul–Dec 2025 cohort	1,236	–	–	1,236	970	78.5%
Jan–May 2026 cohort	880	–	–	–	880	100.0%
Average pure retention	9,426	5,373	6,838	7,072	6,323	67.1%

Source: Internal transaction data of Jannor Coffee, processed by the authors (2026).

The most direct remedy for this erosion is customer relationship management (CRM) not merely a technology but a cross-functional process for building, maintaining, and enhancing profitable long-term relationships (Etim et al., 2020) whose dimensions, including CRM-based technology, service personalisation, and knowledge management, have been shown to raise retention (Lamrhari et al., 2022; Opoku et al., 2025). Yet the evidence on whether CRM translates into retention is inconsistent. One body of work reports that CRM, while improving satisfaction and loyalty, does not significantly and directly affect retention Moudud-Ul-Huq et al. (2021) find precisely this in a tourism setting whereas another reports a positive and significant direct effect (Al-Fitri & Nirmala, 2025; Mtamike & Magasi, 2025; Tifliyah et al., 2021). The divergence suggests that the CRM–retention relationship is not reliably direct: it may require an intervening variable that carries the effect and a boundary condition that shapes its strength.

This study addresses that inconsistency by modelling customer engagement as a mediator and café atmosphere as a moderator of the CRM–retention relationship, tested on customers of Jannor Coffee. Positioning engagement as the mechanism through which CRM reaches retention reflects a relationship-marketing logic in which relational investments must be internalised as an engaged psychological state before they bind customers; positioning atmosphere as a boundary condition asks whether the physical setting in which relationships are enacted strengthens their payoff. The contribution is threefold. Theoretically, the study reframes CRM as a necessary-but-not-sufficient antecedent of retention whose effect is realised through engagement, helping to reconcile the conflicting direct-effect findings. Empirically, it supplies evidence from an under-researched Indonesian café context. Practically, it offers independent café operators a basis for allocating scarce resources between relationship building and the servicescape. The remainder of the paper develops the theory and hypotheses, describes the method, reports the results, and discusses their implications and limits.

LITERATURE REVIEW

2.1 Relationship marketing and the commitment–trust theory

The study is grounded in relationship marketing, which reconceives marketing as the activities directed at building, developing, and maintaining successful relational exchanges rather than discrete transactions. Its theoretical core is the commitment–trust theory, in which relationship commitment and trust operate as the key mediating variables linking relational antecedents relationship benefits and high-quality communication to relationship outcomes such as continued patronage and a reduced propensity to leave. Commitment denotes an exchange partner's enduring desire to maintain a valued relationship, and trust the confidence that the partner will act reliably and in the customer's interest; because commitment implies vulnerability, customers extend it only to partners they trust, so that reliable communication produces trust, which in turn produces commitment (Herman et al., 2021). Within this study, customer engagement is positioned as the behavioural manifestation of that commitment: an engaged customer expresses in cognition, emotion, and action the enduring desire to sustain the relationship that the theory places at the centre of retention (Adnan et al., 2021).

Relationship marketing explains the relational route to retention but is largely silent on the physical environment in which café consumption occurs. The atmospherics tradition supplies the complement: the designed setting ambience, aesthetics, and sensory conditions shapes customer experience and, through it, the intention to return (Rancati & Gordini, 2023; Sartika & Keni, 2023). Reading retention through both lenses allows the relational and environmental influences to be examined jointly, which is the concern of the model developed below.

2.2 CRM and customer retention

CRM is a firm's systematic effort to know its customers and act on that knowledge through service, communication, and consistent management of customer needs so as to retain them over the long term (Dewnarain et al., 2021; Etim et al., 2020). The relationship-marketing premise holds that such effort accumulates into the trust and commitment that insulate customers against competing offers (Herman et al., 2021), and several studies report a positive and significant CRM–retention effect (Al-Fitri & Nirmala, 2025; Mtamike & Magasi, 2025; Tifliyah et al., 2021). Because this direct effect is contested other work finds it positive but non-significant (Moudud-Ul-Huq et al., 2021) it is hypothesised here while anticipating, in Sections 2.4 and 2.6, that it may be incomplete without an intervening state and a supportive environment.

H1. Customer relationship management has a positive direct effect on customer retention.

2.3 CRM and customer engagement

Engagement requires relational infrastructure, and CRM supplies it. Empirically, CRM exerts a positive and significant effect on engagement: in banking, effective relationship management strengthens engagement by managing interaction to deliver satisfaction and forge stronger bonds (Setyono et al., 2021); CRM is a key antecedent that makes customers feel aligned with the brand and thereby raises their engagement (Adnan et al., 2021); and relationship-management theory provides the appropriate basis for engagement, with well-managed customers forming the positive perceptions that active engagement presupposes (Arora et al., 2021). Effective CRM should therefore translate into a heightened engaged state.

H2. The better the customer relationship management, the higher the customer engagement.

2.4 Customer engagement and customer retention

Recent marketing literature consistently treats engagement as a proximal driver of retention. Customers with strong emotional and cognitive attachment to a brand exhibit higher retention (Adnan et al., 2021); engagement generated through social CRM raises loyalty and retention with substantial effect sizes (Arora et al., 2021). Engagement functions as a positive predictor of retention: the more intensively customers participate in a firm's activities, the greater the share who remain (Elgarhy, 2023), and sustaining high engagement is central to preventing churn (Lamrhari et al., 2022). Engagement also elevates repurchase and social-sharing intention the behavioural manifestations of retention (Qiao & Wei, 2021) and in banking contexts stronger engagement translates into more loyal customers (Setyono et al., 2021). Through all of these mechanisms, an engaged customer expresses in cognition, emotion, and action the enduring desire to sustain the relationship that the commitment–trust theory places at the core of retention.

H3. The stronger the customer engagement, the higher the customer retention.

2.5 Café atmosphere and customer retention

Café atmosphere denotes the overall design of the outlet ambience, aesthetics, lighting, aroma, temperature, and layout. Its influence on retention often runs through psychological states such as satisfaction and store image, yet a direct path is also documented: the store atmosphere shapes customer experience, which in turn drives loyalty and repurchase (Rancati & Gordini, 2023), and atmosphere affects loyalty directly by creating emotional attachment and comfort (Sartika & Keni, 2023). In Indonesian coffee-shop settings specifically, the experiential environment is a leading determinant of loyalty and continued patronage (Hasibuan & Hidayat, 2022; Rusli & Pandjaitan, 2023). Because the café visit is consumed on-premises and often for its own sake, atmosphere is expected to exert a direct effect on retention.

H4. The better the café atmosphere, the higher the customer retention.

2.6 Café atmosphere as a moderator of the CRM–retention relationship

Although café atmosphere is well studied as an antecedent or mediator of post-purchase behaviour, it is rarely examined as a moderator of the CRM retention relationship, leaving an empirical gap. The argument for moderation is that relational effort is enacted within a physical setting: even sophisticated CRM personalised service, knowledge management, and CRM-based technology (Opoku et al., 2025) may fall short if it is not supported by a conducive atmosphere, whereas a compelling environment should amplify the retention payoff of relationship building. On this reasoning, the interaction of strong CRM and a favourable atmosphere should produce the highest retention, exceeding what CRM achieves alone (Rancati & Gordini, 2023; Sartika & Keni, 2023). The competing possibility that the two operate as additive, parallel routes rather than synergistically is left open and adjudicated empirically.

H5. Café atmosphere positively moderates the relationship between customer relationship management and customer retention, such that the relationship is stronger when the atmosphere is more favourable.

2.7 Customer engagement as a mediator of the CRM–retention relationship

Linking the two preceding chains of evidence CRM generates engagement (Section 2.3), and engagement drives retention (Section 2.4) produces the mediation proposition that customer engagement bridges the influence of CRM on retention. Within the commitment–trust theory framework, CRM activities supply the relational infrastructure of interaction, personalisation, and communication. These inputs raise commitment and trust, which are internalised by the customer as an engaged psychological state; it is this engaged state, rather than the CRM activity per se, that subsequently motivates the customer to continue the relationship. CRM is therefore a necessary but not sufficient antecedent of retention: its effect is conditional on successfully generating engagement.

Empirical support for this mediating chain is direct and consistent. Adnan et al. (2021) explicitly test and confirm that customer engagement mediates the CRM–retention relationship, with their analysis indicating that CRM influences retention by as much as 50 per cent through the engagement pathway a finding that establishes the quantitative significance of the indirect route and explains why direct CRM–retention effects are sometimes weak or non-significant in the literature. Lamrhari et al. (2022) corroborate this using social-CRM data, demonstrating that engagement mediates the link between social CRM practices and customer retention and acquisition. In the banking sector, Setyono et al. (2021) similarly conclude that customer engagement mediates the CRM–loyalty relationship, establishing that relational initiatives must first create emotional and behavioural involvement before they can bind customers in the long term.

The convergence of these findings across contexts commercial services, social CRM, and banking constitutes a strong cumulative case that engagement is the mechanism through which CRM reaches retention, rather than a correlate. This mediation hypothesis is the study's central theoretical claim, and it offers a resolution to the inconsistent direct-effect evidence reviewed in Section 2.2: where CRM fails to affect retention directly, the indirect path through engagement may nonetheless carry a meaningful and significant effect. Confirming this pattern in an Indonesian café context, where it has not previously been tested, would extend the external validity of the mediation chain and supply practitioners with guidance on why relationship investments must be converted into active customer participation before they yield retention returns.

H6. Customer engagement mediates the relationship between customer relationship management and customer retention.

METHOD

3.1 Research design and context

The study adopts a quantitative approach grounded in the positivist paradigm, which treats the phenomenon under study as objective and measurable through numerical data and tests relationships among latent variables using statistical modelling. The empirical context is a single Indonesian café, Jannor Coffee in Cilegon, Banten. The single-site design holds the servicescape and operating model approximately constant, sharpening the comparison between the relational and experiential routes; the corresponding cost to external generalisability is addressed in Section 7. The setting is substantively motivated: despite favourable public reviews, the outlet's internal transaction records show a sustained decline across consecutive semesters, from 34,892 transactions in July–December 2024 to 19,000 in January–May 2026 a cumulative contraction of roughly 45 per cent making retention a concrete managerial problem rather than an abstract one.

3.2 Population, sample, and sampling

The population comprised repeat customers of Jannor Coffee patrons who had made more than one purchase. Because this population is large, of unknown size, and lacks an accessible sampling frame, a non-probability purposive sampling technique was used. Respondents qualified if they had purchased on a dine-in basis at Jannor Coffee Cilegon, had made at least three purchases, and were economically active. Data were gathered through a self-administered online questionnaire distributed via a web form and social-media channels (principally Instagram). Of the 200 respondents, 66.0 per cent were female and 34.0 per cent male; the sample skewed toward early and established adulthood, with 50.5 per cent aged 25–34 and 35.5 per cent aged 17–24. Most respondents were in salaried private-sector employment (53.0 per cent) and held a diploma or bachelor's degree (66.5 per cent).

Sample-size adequacy was considered from two angles. The indicator-to-response heuristic of five-to-ten observations per indicator implies a target of 100 to 200 respondents for the twenty indicators specified, and the study aimed at the upper bound of 200. In the event, 200 usable responses were obtained and analysed, meeting the upper end of the targeted range. To gauge the sensitivity of this achieved sample, the inverse square root method for minimum sample size was applied (Hair et al., 2022): at a 5 per cent significance level and 0.80 power, a sample of 200 is sensitive to a minimum path coefficient of approximately 0.176 ($2.486/\sqrt{200}$). Three of the five structural paths ($CA \rightarrow CR$, $CE \rightarrow CR$, and $CRM \rightarrow CE$) comfortably exceed this benchmark. The $CRM \times$ atmosphere interaction ($\beta = 0.043$) falls well beneath it and remains non-significant, consistent with the post-hoc power analysis reported in Section 4.2. The direct $CRM \rightarrow CR$ path ($\beta = 0.152$) falls just short of the 0.176 benchmark yet reaches conventional significance ($p = 0.027$); its post-hoc power (0.693) is below the 80 per cent convention, so the effect, while statistically detected, is interpreted with some caution pending replication. PLS-SEM remains well suited to a sample of this scale because it accommodates moderate samples and does not require multivariate normality.

3.3 Measures and instrument

All four constructs were operationalised reflectively with multi-item scales adapted from prior instruments, and every item was rated on a ten-point interval scale anchored at 1 (strongly disagree) and 10 (strongly agree). Customer relationship management was measured through indicators covering food-and-beverage quality, technology, employee behaviour, service quality (responsiveness), and complaint handling, drawing on Moudud-Ul-Huq et al. (2021), Tifliyah et al. (2021), and Al-Fitri and Nirmala (2025). Customer engagement was measured through passion, emotional closeness, social interaction, information seeking, and participation, following Elgarhy (2023). Café atmosphere was measured through ambience, aesthetics, lighting, aroma, temperature, and layout, following Rancati and Gordini (2023). Customer retention was measured through revisit intention, willingness to recommend, priority choice, resistance to switching, and continuity of purchase, synthesised from Arora et al. (2021), Tifliyah et al. (2021), and Moudud-Ul-Huq et al. (2021).

The instrument was pilot-tested on 30 respondents outside the main sample to screen indicator quality before full deployment. In the final estimation, items were retained on the basis of indicator reliability, leaving a purified reflective model of seventeen indicators four for customer relationship management, five for customer engagement, four for café atmosphere, and four for customer retention. These retained items carry the codes reported in the Results ($CRM1$ – $CRM4$, $CE1$ – $CE5$, $CA1$ – $CA4$, $CR1$ – $CR4$); the full administered instrument and its sources are listed in the Appendix. The interaction term for the moderation test ($CA \times CRM$) was generated using the two-stage approach.

3.4 Analytical approach

The model was estimated with partial least squares structural equation modelling (PLS-SEM) in SmartPLS 4, the variance-based estimator suited to predictive, theory-extending models with a moderate sample and a moderating term (Hair et al., 2022). Analysis followed the standard two-step protocol. The measurement (outer) model was assessed for indicator reliability (outer loadings, with 0.70 the benchmark and lower values retained only where average variance extracted remained adequate), convergent validity (AVE ≥ 0.50), internal-consistency reliability (Cronbach's alpha and composite reliability ≥ 0.70), and discriminant validity via the heterotrait–monotrait ratio (HTMT < 0.90 , or < 0.85 under the conservative criterion), complemented by the Fornell–Larcker criterion. The structural (inner) model was assessed for lateral collinearity (inner VIF, ideally below 3 and not exceeding 5), explanatory power (R^2 , interpreted as weak below 0.50, moderate between 0.50 and 0.75, and substantial at or above 0.75), effect size (f^2 , with 0.02, 0.15, and 0.35 marking small, medium, and large effects), and the significance of path coefficients through bootstrapping, with a path treated as significant when the t-statistic exceeded 1.96 or the p-value fell below 0.05. Mediation was tested through the bootstrapped specific indirect effect and classified using the typology of Hair et al. (2022) complementary, indirect-only (full), direct-only (no mediation), or no effect by reading the significance of the indirect effect against that of the direct effect. Moderation was evaluated through the interaction-term coefficient, its effect size, and a simple-slope inspection.

3.5 Common method bias

Because the constructs were measured from a single source at one point in time, common method bias was assessed using the full-collinearity approach (Hair et al., 2022): a model is considered free of substantial common method bias when all inner-model VIFs fall below 3.3. As reported in Section 4.2, every inner VIF lies below this threshold, providing evidence that common method variance does not materially distort the estimates.

RESULTS AND DISCUSSION

4. RESULTS

4.1 Measurement model

All outer loadings exceeded the 0.70 benchmark, ranging from 0.785 (CRM1) to 0.914 (CR4), confirming indicator reliability. Internal-consistency reliability was satisfactory for every construct, with Cronbach's alpha from 0.843 to 0.894 and composite reliability (ρ_c) from 0.895 to 0.927, all within the recommended range and below the 0.95 ceiling that would signal redundancy. Convergent validity held throughout: AVE values ranged from 0.680 (customer relationship management) to 0.760 (customer retention), at or above 0.50, indicating that each construct explained the majority of its indicators' variance. Table 4.1 reports the measurement-model results.

Table 4.1. Measurement model: loadings, reliability, and convergent validity.

Construct	Item	Loading	α	ρ_a	ρ_c	AVE
CRM	CRM1	0.785	0.843	0.845	0.895	0.680
	CRM2	0.816				
	CRM3	0.872				
	CRM4	0.823				
CE	CE1	0.794	0.883	0.889	0.914	0.681
	CE2	0.824				
	CE3	0.866				
	CE4	0.786				
	CE5	0.854				
CA	CA1	0.870	0.876	0.878	0.915	0.729
	CA2	0.881				
	CA3	0.840				
	CA4	0.823				
CR	CR1	0.866	0.894	0.896	0.927	0.760

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Construct	Item	Loading	α	rho_a	rho_c	AVE
	CR2	0.868				
	CR3	0.838				
	CR4	0.914				

Source : Author (2026)

Discriminant validity was assessed by two criteria. Under the Fornell–Larcker criterion (Table 2), the square root of each construct's AVE exceeded its correlation with every other construct, satisfying the requirement. Under the HTMT criterion (Table 3), all six construct pairs fell below the conservative 0.85 threshold, with the highest ratio observed for the café atmosphere–retention pair (HTMT = 0.844). This represents an improvement over the near-boundary value obtained with the smaller sample, a pattern consistent with the increased precision that comes with a larger bootstrap sample; discriminant validity between the two constructs is now unambiguous by both criteria.

Table 2. Discriminant validity: Fornell–Larcker criterion.

	CA	CE	CR	CRM
CA	0.854			
CE	0.594	0.825		
CR	0.750	0.721	0.872	
CRM	0.580	0.616	0.622	0.825

Source : Author (2026)

Table 3. HTMT criterion

	CA	CE	CR	CRM
CA	—			
CE	0.666	—		
CR	0.844	0.803	—	
CRM	0.677	0.703	0.714	—

Source : Author (2026)

4.2 Structural model

Lateral collinearity in the structural model was within acceptable bounds: all inner-model VIFs ranged from 1.000 to 2.057, below the preferred ceiling of 3 and well under the upper limit of 5. This simultaneously rules out problematic collinearity among predictors and, following the full-collinearity logic (Hair et al., 2022), indicates that common method bias does not materially threaten the findings. The model accounted for a moderate portion of the variance in customer retention ($R^2 = 0.691$; adjusted $R^2 = 0.685$) and a weak portion of the variance in customer engagement ($R^2 = 0.379$; adjusted $R^2 = 0.376$).

The bootstrapped path estimates (Table 4) tell a somewhat different story from the earlier, smaller sample. The direct effect of CRM on retention is now significant, though modest (H1: $\beta = 0.152$, $t = 2.214$, $p = 0.027$), with a small effect size ($f^2 = 0.036$). CRM continues to strongly predict engagement (H2: $\beta = 0.616$, $t = 13.860$, $p < 0.001$) with a very large effect size ($f^2 = 0.610$), and engagement in turn significantly predicts retention with a medium effect (H3: $\beta = 0.365$, $t = 5.130$, $p < 0.001$; $f^2 = 0.229$). Café atmosphere remains the strongest single determinant of retention (H4: $\beta = 0.468$, $t = 5.396$, $p < 0.001$) with a large effect size ($f^2 = 0.387$). The interaction of atmosphere and CRM did not significantly moderate the CRM–retention relationship (H5: $\beta = 0.043$, $t = 0.741$, $p = 0.459$), and its effect size is negligible ($f^2 = 0.007$).

Table 4. Structural model: direct effects, effect sizes, and hypothesis decisions.

H	Path	β	t	p	f^2	Decision
H1	CRM → CR	0.152	2.214	0.027	0.036	Supported
H2	CRM → CE	0.616	13.860	0.000	0.610	Supported
H3	CE → CR	0.365	5.130	0.000	0.229	Supported
H4	CA → CR	0.468	5.396	0.000	0.387	Supported
H5	CA × CRM → CR	0.043	0.741	0.459	0.007	Not supported

The mediation test clarifies how CRM reaches retention now that both the direct and indirect paths are estimated with a larger sample. The specific indirect effect of CRM on retention through engagement was significant (H6: $\beta = 0.224$, $t = 4.731$, $p < 0.001$), and the total effect of CRM on retention was likewise significant ($\beta = 0.376$, $t = 5.273$, $p < 0.001$). Because both the indirect effect and the direct effect (H1) are significant and share the same sign, this is a complementary (partial) mediation rather than the indirect-only pattern observed in the smaller sample (Hair et al., 2022). Engagement remains the dominant channel — the indirect effect accounts for approximately 60 per cent of CRM's total influence on retention (0.224 of 0.376) — but CRM also retains customers through a direct, non-engagement route that the earlier, less-powered sample could not detect. Table 5 summarises the indirect and total effects.

Table 5. Mediation analysis: specific indirect and total effects.

H	Effect	β	t	p	Conclusion
H6	CRM → CE → CR (indirect)	0.224	4.731	0.000	Significant
	CRM → CR (total)	0.376	5.273	0.000	Significant

Source : Author (2026)

Although the moderation hypothesis was not supported, a simple-slope inspection remains informative. The conditional direct effect of CRM on retention rises monotonically with atmosphere — from 0.109 ($t = 1.274$, $p = 0.203$, not significant) at one standard deviation below the mean, to 0.152 ($t = 2.214$, $p = 0.027$) at the mean, to 0.195 ($t = 2.071$, $p = 0.038$) at one standard deviation above a pattern directionally consistent with synergy, in which the CRM–retention path only crosses into significance once atmosphere is average or better. The interaction coefficient itself, however, did not reach significance (H5: $p = 0.459$), so this gradient cannot be treated as statistical evidence of moderation; it indicates only that the direct CRM effect is more reliably detected in more favourable settings, not that atmosphere amplifies it. Read together with the dominant main effect of atmosphere, the evidence still favours a parallel-routes account over a synergistic one: atmosphere and the relational route contribute to retention largely additively rather than by amplifying each other.

A post-hoc power analysis qualifies the remaining non-significant finding and contextualises the newly significant CRM–retention path. At the 5% level, statistical power was effectively complete for CA → CR, CRM → CE, and CE → CR (all at 1.000). Power for the CRM → CR path rose to 0.693 with the larger sample sufficient to support the observed significance, though still short of the 80 per cent convention while power for the CA × CRM interaction remained low, at 0.150, and in fact declined relative to the smaller sample because the point estimate of the interaction itself shrank (from $\beta = 0.105$ to $\beta = 0.043$). The required-sample-size analysis reinforces this reading: detecting the interaction effect at its current magnitude at the 5 per cent significance level would require approximately 3,339 respondents for 80 per cent power and 4,624 for 90 per cent power, well beyond the scope of a single-site study. The null result for H5 therefore reflects a genuinely small effect rather than an underpowered test. Regarding overall fit, the standardised root mean square residual was 0.068 for the saturated model (within the 0.08 guideline) and improved to 0.094 for the estimated model (from 0.103); given the ongoing debate over fit indices in

PLS-SEM, this is reported transparently and revisited as a limitation. The final structural model is presented in Figure 1

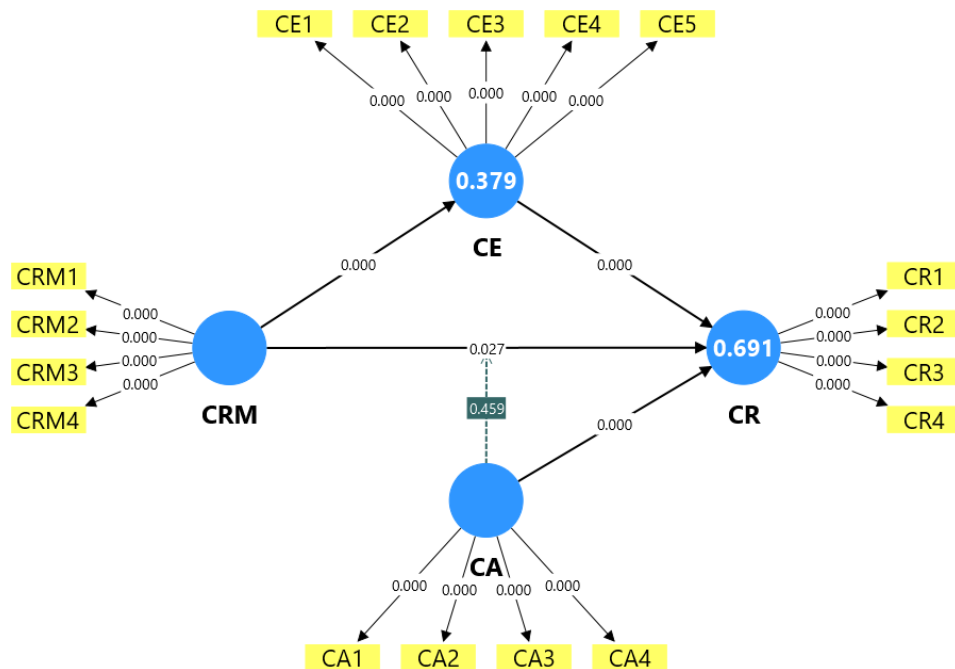


Figure. 1 Structural Model (Bootstrapping Results)

5. DISCUSSION

The study set out to determine why café customers return and to weigh a relational route against an experiential one. The results converge on a coherent answer: retention is driven by two largely independent pathways of unequal strength an experiential route that runs directly and powerfully through the café atmosphere, and a relational route that runs indirectly through engagement and only after CRM has been psychologically internalised.

5.1 Customer engagement is the primary pathway linking CRM to customer retention

That CRM's effect on retention is predominantly, but not exclusively, mediated by engagement is the study's central theoretical result, and it qualifies rather than overturns the common specification of CRM as a direct retention lever. Relationship investments personalisation, recognition, sustained communication retain customers chiefly by producing an engaged psychological state that then sustains return behaviour, but they also carry a smaller, direct payoff that this larger sample was able to detect where the earlier one could not. The pattern still aligns with the engagement literature's claim that engagement is the proximal mechanism linking relational treatment to loyalty outcomes (Adnan et al., 2021; Elgarhy, 2023) and with the premise that value, and the loyalty that follows from it, is co-created through interaction rather than delivered by relational apparatus alone (Setyono et al., 2021). The very large CRM → engagement effect ($f^2 = 0.610$) alongside the small but significant direct CRM → retention effect ($f^2 = 0.036$) makes the asymmetry concrete without erasing it: CRM's energy is still expended chiefly in generating engagement engagement carries roughly 60 per cent of CRM's total effect on retention but the residual direct path indicates that some retention value is delivered by relationship-management activity independent of the engagement it produces. This complementary pattern nuances recent hospitality evidence that CRM reaches retention primarily through customer engagement and involvement (Opoku et al., 2025): the present findings suggest that the engagement channel dominates without being the sole conduit. A managerially important implication follows nonetheless: relationship infrastructure that fails to move the customer's engagement forfeits the larger share of its retention payoff, even though it may retain some standalone value.

5.2 The experiential route dominates

Café atmosphere was the strongest determinant of retention in the model, exceeding even the engagement path that carries the larger share of the relational route. This is consistent with atmospherics and servicescape reasoning (Rancati & Gordini, 2023; Sartika & Keni, 2023): when the product is consumed on-premises and the visit is itself the experience, the designed environment is a primary, not ancillary, source of the value that motivates return. The discriminant-validity concern raised by the smaller sample is also worth revisiting here: with the larger sample, the HTMT ratio between atmosphere and retention falls to 0.844, comfortably below the conservative 0.85 threshold,

and the earlier near-boundary reading is no longer supported. The two constructs are now unambiguously distinct by both the Fornell–Larcker and HTMT criteria, which strengthens confidence that the atmosphere effect reported here reflects a genuine environmental driver of retention rather than measurement overlap between the two constructs. The dominance of the environmental route remains consistent with recent evidence from Indonesian and other café settings in which the servicescape is a leading determinant of loyalty and revisit intention (Hasibuan & Hidayat, 2022; Rusli & Pandjaitan, 2023).

5.3 Parallel routes, not synergy

The absence of a significant moderation effect is as informative as the significant main effects, and it is now observed on a larger and more precisely estimated sample. The intuitive expectation that a superior atmosphere amplifies the retention payoff of relationship building was not supported; the interaction coefficient nearly halved relative to the smaller sample (from $\beta = 0.105$ to $\beta = 0.043$) and moved further from significance (from $p = 0.183$ to $p = 0.459$). The weight of the evidence favours a parallel-routes model in which the relational and experiential drivers add to, rather than multiply, one another. For theory, this suggests that environmental and relational antecedents of retention may be more independent than integrative accounts often assume; the room and the relationship each recruit their own psychological process and need not pass through a common bottleneck. Unlike the earlier finding, this null result is no longer easily attributed to low power: detecting an interaction of this magnitude would require roughly 3,300 to 4,600 respondents at conventional power, a scale that places the question beyond what single-site survey research can practically resolve, and the shrinking point estimate itself obtained with a substantially larger sample makes a materially larger synergistic effect increasingly implausible.

LIMITATIONS AND FUTURE RESEARCH

Four considerations bound the findings and chart the agenda for extension, though the larger sample resolves two concerns that constrained the earlier study. First, the sample of 200 patrons affords adequate power to detect the model's structural paths, including the previously undetected direct CRM–retention effect; the CRM $\times$ atmosphere interaction remains the one path for which the study is underpowered by conventional standards, and given that detecting it would require several thousand respondents it is better characterised as a genuinely small effect than as an artefact of sample size, though a targeted, adequately powered replication would settle the question definitively. Second, the single-site design, while controlling extraneous variation, limits generalisability; multi-site replication across cafés that differ in servicescape quality and clientele would test the stability of the parallel-routes structure and the dominance of the experiential route. Third, the cross-sectional design precludes causal inference and cannot capture how engagement and retention evolve over a customer's tenure; longitudinal or experimental designs would strengthen causal claims and illuminate dynamics. Fourth, the discriminant validity between atmosphere and retention, which sat near the conservative HTMT boundary in the smaller sample, is now unambiguous, and the estimated-model SRMR improved alongside it; residual model-fit debate in PLS-SEM notwithstanding, this reduces, though does not eliminate, the case for further instrument refinement. Beyond addressing these considerations, future work could incorporate satisfaction, perceived value, or price fairness as additional mediators, and test whether the relational and experiential routes carry different weights across customer segments or visit occasions.

CONCLUSION

What keeps coffee customers coming back is, on this evidence, principally the room and secondarily the relationship mostly, though no longer only, once that relationship has become engagement. Café atmosphere is the strongest driver of retention, while customer relationship management retains customers chiefly through the engagement it generates and, to a smaller but now measurable extent, directly: a complementary mediation that recasts CRM as an antecedent whose value is substantially, but not entirely, conditional on engagement. The hypothesised synergy between the environmental and relational routes was not supported, and the interaction estimate weakened further in a larger sample, pointing to two largely parallel pathways that contribute to retention additively rather than multiplicatively. For theory, the study argues for modelling engagement as the dominant but not exclusive channel within CRM–retention relationships and for treating environmental and relational antecedents as distinct rather than interacting processes. For practice, it counsels independent cafés to invest in the servicescape as a primary retention asset while treating relationship management as a dual-purpose investment valuable in its own right, but most valuable when it converts into engagement. These conclusions are advanced within the bounds of a single-site, cross-sectional sample of 200 respondents, and are offered as a structured account to be confirmed and

extended by multi-site replication, particularly for the interaction effect, which would require a substantially larger sample than is feasible in a single-site design.

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