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OPTIMAL PRICING AND GREEN BRAND EXPERIENCE INVESTMENT UNDER CONSUMER LOYALTY

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Abstract

This study develops joint pricing – investment models to examine how green brand experience (GBE) influences consumer loyalty across three regimes: (i) no GBE investment, (ii) serial mediation, and (iii) serial mediation moderated by dynamic emotional attachment. In the first regime, the price – loyalty trade-off constrains both optimal price and expected profit. When GBE exceeds the perception threshold of 0.38, the marginal loyalty gains rises from 0.18 to 0.46; optimal green investment equals 0.42 and profit increases by 5.9 %. In the full specification, emotional attachment drifts at 0.027 per quarter; each one-percentage-point increase in Post-95 high-interaction consumers raises the marginal effect by 0.0047, yielding an optimal investment of 0.51 and an expected profit of CNY 2,118.7. By embedding nonlinear thresholds, serial mediation and dynamically heterogeneous moderation, the paper delivers a testable framework for optimising green-investment and pricing decisions in a competitive marketplace, offering actionable guidance for managers seeking to balance profitability with sustainability objectives.

Key words: dynamic heterogeneity, consumer loyalty, green investment, pricing optimization, serial mediation

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