International Journal of Sustainable Development and Planning
Vol. 21, No. 1, January, 2026, pp. 389-402
Journal homepage: http://iieta.org/journals/ijsdp

Sustainable Retail Strategies and Impulse Buying within Urban Commercial Ecosystems: Evidence from an Indonesian Shopping Mall with Hedonic Motivation Mediation and Positive Emotion Moderation

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https://doi.org/10.18280/ijsdp.210133

Received: 30 November 2025
Revised: 7 January 2026
Accepted: 13 January 2026
Available online: 31 January 2026

Keywords:
impulse buying, sustainable retail strategy, service quality, hedonic motivation, urban commercial development, consumer behavior, responsible consumption

ABSTRACT

This study examines the interrelationship between retail strategy and consumer behavioral responses within the broader context of sustainable urban commercial development. Specifically, it investigates how sales promotion and service quality influence impulse buying behavior at Lippo Plaza Kupang, East Nusa Tenggara, Indonesia, while incorporating hedonic shopping motivation as a mediating mechanism and positive emotions as a moderating condition. Positioned within the discourse of sustainable retail planning, the study considers how short-term purchasing stimuli interact with long-term retail ecosystem resilience and responsible consumption dynamics. Using a quantitative explanatory design based on survey data collected from 145 respondents, covariance-based structural equation modeling (SEM) was employed to test the proposed framework. The findings indicate that both sales promotion and service quality significantly increase impulse buying behavior. At the same time, these strategic instruments strengthen hedonic shopping motivation, which in turn exerts a substantial mediating effect on spontaneous purchasing. Positive emotions were found to reinforce the influence of promotional and service-related stimuli, although the magnitude of moderation differed across pathways. Among all predictors, service quality demonstrated the strongest total effect, followed by hedonic motivation and sales promotion. Beyond its behavioral contributions, the study situates impulse buying within contemporary urban retail systems characterized by increasing digital payment integration and financial accessibility. The inclusion of savings ownership and non-cash payment usage as behavioral indicators reflects structural changes in consumption practices within emerging urban economies. These findings offer insights into how retail planning strategies shape consumer decision environments and influence consumption intensity within rapidly developing commercial centers. From a sustainable development perspective, the study contributes to the ongoing discussion concerning the balance between retail competitiveness and responsible consumption. While impulse buying supports short-term retail growth, its implications for long-term sustainable consumption patterns require careful strategic alignment. The results therefore provide implications for urban retail planners and commercial developers seeking to design retail environments that maintain economic vitality while remaining attentive to evolving sustainability agendas.

1. INTRODUCTION

Retail systems occupy a strategic position within contemporary urban economies, functioning not only as distribution intermediaries but also as structural components of local development and spatial planning. Marketing strategies require producers to deliver products and services through both direct and indirect channels, with modern retail institutions operating as dominant interfaces between producers and consumers. Beyond transactional roles, retail environments shape consumption patterns, influence resource allocation, and affect the sustainability trajectory of urban commercial ecosystems. As cities expand and consumption intensifies, retail systems increasingly become embedded within broader discussions on economic resilience, responsible consumption, and long-term development planning.

The rapid growth of modern retail, driven by demographic expansion, evolving consumer preferences, and shifts toward manufactured goods, has stimulated spending while simultaneously intensifying competitive pressures. In emerging urban centers, retail infrastructure has become both an economic growth engine and a behavioral environment in which purchasing norms are constructed and reinforced. Within this context, understanding consumer behavior is no longer solely a matter of marketing efficiency; it is also central to evaluating how retail strategies influence consumption intensity and sustainability outcomes. One of the most

influential behavioral phenomena in this regard is impulse buying.

The concept of impulse buying has been documented since the mid-twentieth century. Early investigations by Du Pont de Nemours and Co. (1945–1965) were followed by Clover [1], who identified discrepancies between planned shopping lists and actual purchases. Stern [2] subsequently developed a foundational theoretical framework emphasizing the role of external stimuli in triggering spontaneous purchases. Stern's model challenged the classical assumption of fully rational consumer decision-making by demonstrating how environmental cues can override deliberative processes. This theoretical shift remains highly relevant in contemporary retail environments, where carefully engineered stimuli are embedded within store layouts, promotional campaigns, and digital interfaces.

Stern [2] classified impulse buying into pure emotional purchases, reminder-driven purchases, need-recognition purchases, and partially planned purchases. Later research expanded this conceptualization by highlighting its multidimensional character and its dependence on individual, social, economic, and psychological drivers [3, 4]. Behavioral indicators of impulse buying include unplanned decision-making, limited consideration of consequences, emotional responsiveness, and susceptibility to promotional cues. These characteristics indicate that impulse buying is not merely an isolated purchasing anomaly but rather a patterned response to structured retail environments.

Among the most visible retail stimuli are sales promotions. Through displays, banners, posters, digital screens, loyalty programs, and price reductions, promotional instruments attract attention and accelerate purchasing decisions. In competitive urban retail settings, such mechanisms are frequently deployed to stimulate traffic and maximize transaction volume. However, while promotional intensity may support short-term sales performance, sustainable consumer–retailer relationships require more durable foundations. Service quality therefore emerges as a complementary strategic dimension. Defined as the totality of attributes that fulfill consumer needs and integrate both technical and functional aspects of service delivery, service quality contributes to customer satisfaction, trust formation, and long-term loyalty. When aligned with consumer expectations, it reinforces the stability and resilience of retail ecosystems beyond immediate transactional gains.

Impulse buying is also closely linked to hedonic shopping motivations. Hedonic value reflects the experiential pleasure derived from shopping activities, where comfort, excitement, and entertainment heighten the likelihood of spontaneous purchasing. In modern commercial centers, shopping is frequently positioned as a leisure activity embedded within lifestyle identity and urban culture. Positive emotions further intensify this process. Feelings of joy, attraction, or enthusiasm have been shown to shorten decision cycles, stimulate unplanned purchases, and increase spending levels. Environmental factors, including aesthetic store design, lighting, spatial arrangement, and ambient conditions, reinforce positive affective states and indirectly influence impulse buying through emotional activation. In this way, retail spaces operate not only as transactional venues but also as behavioral architectures that shape consumption tendencies.

Despite substantial empirical evidence, findings regarding the drivers of impulse buying remain inconsistent. Sales promotions have been found to significantly influence impulse buying behavior [5, 6], yet other studies report non-significant effects [7]. Similarly, service quality demonstrates positive associations with impulse buying in physical retail contexts [8], while weaker or non-significant relationships have been observed in certain digital commerce environments. Inconsistencies also appear in the relationships between promotion, service quality, and hedonic motivation, suggesting contextual contingencies and the need for integrative modeling approaches. These contradictions are particularly relevant in rapidly developing urban regions, where retail formats, payment systems, and consumer lifestyles are simultaneously evolving.

Kupang, East Nusa Tenggara, Indonesia, represents one such emerging urban context. In 2023, the city recorded 126 modern retail outlets, dominated by national chains such as Alfamart and Indomaret. Within this competitive landscape, Lippo Plaza Kupang functions as a major commercial hub combining diverse retail formats, promotional intensity, and increasing adoption of non-cash payment systems. Such an environment provides a relevant setting for examining how retail strategies influence spontaneous consumption behavior. At the same time, the expansion of retail infrastructure raises broader questions regarding consumption patterns, financial accessibility, and the sustainability of urban commercial growth.

Research on impulse buying within this local context remains limited. Therefore, this study investigates the influence of sales promotion and service quality on impulse buying behavior at Lippo Plaza Kupang, incorporating hedonic shopping motivation as a mediating variable and positive emotion as a moderating factor. Beyond its behavioral focus, the study situates impulse buying within the structural transformation of retail systems characterized by digital payment integration and expanded financial access. By incorporating indicators such as savings ownership and non-cash payment instruments, the study reflects contemporary consumption conditions in emerging urban economies. In doing so, it contributes to a more comprehensive understanding of how retail planning strategies shape consumer behavior within evolving commercial ecosystems.

2. LITERATURE REVIEW

The study of consumer behavior in modern retail has evolved from a purely transactional perspective toward a broader understanding of retail systems as socio-economic infrastructures embedded within urban development processes. Marketing channels, competitive dynamics, spatial configurations, and experiential design collectively shape the behavioral environment in which consumption decisions occur. Retailers function as the final node in the distribution chain, mediating product–consumer interactions through physical outlets and increasingly integrated digital platforms. As modern retail expands alongside urbanization and income growth, it becomes both an economic driver and a structural determinant of consumption intensity. Within this broader urban-commercial ecosystem, impulse buying represents a behavioral mechanism through which retail strategies translate environmental stimuli into immediate purchasing outcomes.

The theoretical roots of impulse buying can be traced to mid-twentieth-century scholarship. Rook [9] connected early corporate investigations by Du Pont de Nemours and Co. (1945–1965) to subsequent academic inquiry, while Clover [1]

introduced the foundational observation that consumers frequently deviate from planned shopping lists. Stern's theory [2] of impulsive purchasing remains the most influential conceptual contribution, challenging classical assumptions of rational consumer behavior such as Maslow's hierarchy of needs and Engel et al.'s [10] structured decision-making model. Stern [2] emphasized the potency of in-store stimuli in redirecting purchasing behavior away from deliberative planning toward spontaneous action. This shift reframed impulse buying as a patterned response to environmental cues rather than an isolated deviation from rationality.

Subsequent research identified two broad categories of determinants: individual predispositions and environmental triggers. At the psychological level, consumers may respond to salient stimuli without systematically evaluating marginal utility, especially when stimuli are cognitively accessible or emotionally charged [4]. Behavioral manifestations include unplanned decisions, limited reflection on consequences, emotional susceptibility, and responsiveness to promotional cues. From a retail systems perspective, these characteristics suggest that impulse buying is structured by the configuration of commercial environments rather than solely by internal consumer traits.

Among environmental stimuli, sales promotion constitutes one of the most visible and strategically deployed instruments. Retailers activate promotions across multiple touchpoints, including external advertising, in-store displays, digital media, loyalty programs, and price discounts. Shelf visuals, promotional signage, basket messages, and audiovisual installations are designed to heighten attention and accelerate decision-making. These tools convert consumer presence into transaction volume. However, although promotions may stimulate short-term revenue growth, their effectiveness in sustaining long-term retail performance depends on complementary structural elements. Overreliance on promotional intensity may generate volatility rather than stability within retail ecosystems.

Service quality provides a more durable foundation for retail sustainability. Kotler and Keller [11] conceptualized service quality as the totality of attributes that fulfill explicit and implicit customer needs, while Grönroos [12] distinguished between technical quality (what is delivered) and functional quality (how it is delivered). Parasuraman et al. [13] further demonstrated that gaps between expectations and perceived performance determine satisfaction and loyalty. In urban commercial systems, service quality contributes to trust formation, repeat visitation, and long-term relational stability. From a planning perspective, consistent service quality supports commercial resilience and reinforces the economic viability of retail centers beyond immediate promotional cycles.

Hedonic value has emerged as a central explanatory construct linking retail environments and impulse buying. Silvera et al. [14] argued that impulsive behavior frequently reflects the pursuit of hedonic goals rather than functional necessity. Shopping experiences characterized by enjoyment, excitement, and aesthetic engagement activate affective pathways that shorten decision times and increase spontaneous purchases [15, 16]. Clean, visually appealing, and atmospherically engaging retail spaces amplify these effects [17]. Park and Lennon [18] further demonstrated that hedonic value indirectly influences impulse buying through positive emotions. These findings suggest that retail spaces operate as experiential environments in which affective architecture shapes consumption behavior.

Within broader sustainability discourse, hedonic consumption occupies an ambiguous position. On one hand, experiential retail contributes to urban vibrancy and commercial vitality. On the other hand, intensified spontaneous consumption may challenge long-term responsible consumption objectives. Understanding the mechanisms that convert hedonic motivation into purchasing action is therefore essential for evaluating how retail strategies interact with sustainable development agendas.

Despite theoretical alignment, empirical findings concerning the relationships among sales promotion, service quality, hedonic motivation, positive emotion, and impulse buying remain inconsistent. Some studies confirm significant promotional effects [5, 6], whereas others report non-significant outcomes [7]. Service quality demonstrates positive associations in physical retail contexts [8] but weaker relationships in certain digital commerce settings [19]. Mixed findings also characterize the links between promotional strategies and hedonic motivation, as well as between service quality and hedonic motivation [6, 20]. These inconsistencies indicate that contextual variables—such as store format, product category, demographic composition, and stimulus intensity—moderate observed effects.

Positive emotion plays a central role within the psychological architecture of impulse buying. Rook and Gardner [21] argued that joy and excitement can bypass cognitive deliberation, stimulating immediate purchasing behavior. Subsequent research confirmed that positive affect enhances receptivity to stimuli and accelerates the transformation of intention into action [22]. Watson and Tellegen [23] distinguished between positive and negative affect, highlighting their asymmetrical behavioral consequences, while Muruganantham and Bhakat [24] emphasized the salience of positive emotional states in impulsive consumption. Baron et al. [25] identified satisfaction, comfort, and enthusiasm as affective states easily activated by store atmospherics and persuasive messaging. Earlier evidence further indicated that impulsive buyers exhibit stronger emotional responses than non-impulsive consumers [26] and that retail environments reshape perceptions of quality and value through affective channels [15].

Financial capacity and payment infrastructure constitute enabling conditions that facilitate the translation of affective impulses into actual transactions. Hoch and Loewenstein [27] demonstrated that immediate stimuli combined with financial slack increase the likelihood of repetitive and higher-volume purchases. Bayley and Nancarrow [28] conceptualized perceived resource availability as flexible access to funds, including non-cash instruments. The expansion of digital payment systems has reduced transaction friction, making spontaneous purchases easier to execute. In emerging urban economies, savings ownership and non-cash payment adoption reflect structural shifts in financial accessibility. These developments reshape the operational context in which impulse buying occurs and integrate consumer behavior into broader financial and technological infrastructures.

Collectively, the literature outlines an integrated relational framework. Sales promotion activates attention and arousal; service quality structures experiential reliability; hedonic motivation heightens affective sensitivity; positive emotion converts stimulus perception into behavioral action; and financial infrastructure enables execution. However,

inconsistencies across empirical studies underscore the need for models that explicitly test mediation and moderation effects. The interaction between functional retail strategies and affective processes remains insufficiently specified, particularly within rapidly transforming urban retail environments.

Kupang provides a relevant empirical context. In 2023, the city recorded 126 modern retail outlets dominated by national chains [29]. Lippo Plaza Kupang functions as a central commercial node integrating diverse retail formats, promotional intensity, and increasing cashless payment adoption. Such conditions create a retail ecosystem conducive to impulse buying while simultaneously raising questions regarding consumption patterns and long-term commercial sustainability. Empirical research within this local context remains limited.

This study therefore tests an integrated structural model examining the influence of sales promotion and service quality on impulse buying, incorporating hedonic shopping motivation as a mediator and positive emotion as a moderator (Figure 1). By incorporating contemporary indicators such as savings ownership and non-cash payment instruments, the study reflects evolving consumption practices within digitally mediated urban retail systems. In doing so, it contributes to a more nuanced understanding of how retail strategy, emotional processes, and financial accessibility interact within expanding commercial infrastructures.

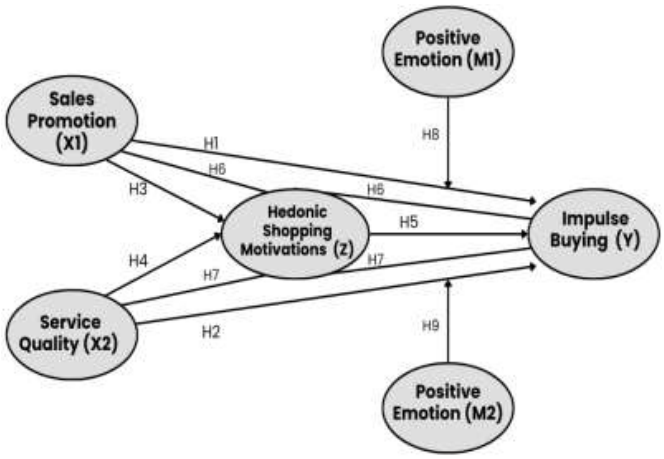

Figure 1. Conceptual framework

3. METHODS

This study adopted a quantitative research design using a cross-sectional survey approach to examine the structural relationships among retail strategy variables and impulse buying behavior within an emerging urban commercial ecosystem. Quantitative inquiry enables systematic examination of relationships among theoretically specified constructs through the collection of numerical data and statistical testing procedures. The explanatory nature of the design allows for hypothesis-driven testing of causal pathways among sales promotion, service quality, hedonic shopping motivation, positive emotion, and impulse buying.

Given the study's objective of evaluating interrelated behavioral mechanisms within a structured retail environment, the research framework incorporated explicit model specification, operational definitions of constructs, sampling procedures, and analytical techniques based on structural equation modeling. The methodological design was structured to ensure internal consistency, construct validity, and empirical robustness.

3.1 Population and sample

The target population comprised visitors to Lippo Plaza Kupang who engaged in unplanned purchasing activities within the shopping center. Because the total number of impulse buyers could not be precisely determined and daily visitor flows fluctuate, the population was treated as theoretically infinite for sampling purposes.

A purposive non-probability sampling technique was employed. Respondents were limited to working women. This sampling decision was theoretically grounded rather than arbitrary. Prior literature suggests that women, particularly those with independent income, exhibit stronger emotional engagement in shopping contexts and demonstrate higher responsiveness to experiential retail stimuli [30, 31]. From a structural perspective, working women constitute an economically active consumer segment with purchasing autonomy and discretionary spending capacity. In emerging urban retail systems, this segment plays a significant role in shaping consumption patterns, making it analytically relevant for investigating impulse buying dynamics.

The final sample consisted of 145 valid respondents. Although modest in size, the sample is considered adequate for covariance-based structural equation modeling (CB-SEM) when model complexity remains within acceptable thresholds and measurement reliability is established. The sample size meets recommended minimum criteria for SEM estimation, particularly given the confirmatory nature of the research design and the use of validated measurement scales.

3.2 Variables and measurement

The dependent variable in this study was impulse buying, defined as spontaneous and unplanned purchasing behavior occurring without prior deliberative intention [32]. In line with Engel et al. [33], impulse buying was operationalized using indicators that capture spontaneous purchases, hurried decision-making, difficulty resisting desire, and limited consideration of consequences. Reflecting structural shifts in contemporary retail systems, additional indicators were included to account for ownership of savings and access to non-cash payment facilities, recognizing the enabling role of financial infrastructure in facilitating immediate purchasing behavior.

The independent variables consisted of sales promotion and service quality.

Sales promotion was conceptualized as a strategic instrument aimed at strengthening customer relationships and stimulating purchasing behavior [34]. Operational indicators included loyalty cards, price discounts, cashback offers, and availability of discount-related information [11]. These instruments represent tangible promotional mechanisms commonly deployed in competitive retail environments.

Service quality was defined as the degree to which service delivery meets or exceeds customer expectations [35]. Measurement followed the SERVQUAL framework, encompassing reliability, responsiveness, assurance, empathy, and tangibles [36]. These dimensions capture both functional and experiential aspects of service performance within retail spaces.

Hedonic shopping motivation was treated as a mediating variable. Consistent with Holbrook and Hirschman [37], hedonic motivation reflects the emotional and experiential benefits derived from shopping. Measurement indicators included pleasure, social interaction, stress relief, curiosity, entertainment, and value shopping [38]. These elements represent intrinsic motivational drivers that may translate retail stimuli into affective engagement.

Positive emotion was specified as a moderating variable. Positive emotions encompass feelings of joy, satisfaction, and happiness [39]. Operationalization followed the pleasure–arousal–dominance framework proposed by Mehrabian and Russell [40], capturing affective activation states that may amplify or attenuate the relationship between retail stimuli and impulse buying behavior.

All constructs were measured using previously validated scales adapted to the local retail context to ensure conceptual alignment while preserving theoretical integrity.

3.3 Data collection and sources

Data were collected from both primary and secondary sources. Primary data were obtained through structured questionnaires administered to visitors at Lippo Plaza Kupang. Supplementary qualitative insights were gathered through brief interviews to clarify contextual interpretations of survey responses. Secondary data were obtained from relevant institutional sources to contextualize retail development within the region.

The questionnaire was designed in alignment with the defined research indicators and structured to ensure clarity and consistency. A five-point Likert scale was employed to capture respondents' perceptions, ranging from strong disagreement to strong agreement. Higher scores indicated stronger agreement with the stated items and more favorable evaluations of the corresponding constructs.

Prior to full deployment, the instrument was reviewed to ensure content clarity and contextual relevance. Data screening procedures were conducted before statistical analysis to verify completeness and suitability for structural equation modeling.

4. RESULTS

4.1 Respondent characteristics

The respondents in this study comprised 145 individuals with diverse demographic and socioeconomic backgrounds. Based on age, the majority were between 21 and 50 years old, dominated by those aged 21–30 (33.10%) and 41–50 (30.35%), while smaller proportions were in the 31–40 (26.20%) and 51–60 (10.35%) age groups. In terms of occupation, most respondents were civil servants, military personnel, police officers, or employees of state-owned enterprises (59.31%), followed by entrepreneurs (22.76%) and private employees (17.93%). Educational attainment was largely at the undergraduate level (53.79%), with smaller shares at the senior high/vocational (20.69%), postgraduate (17.93%), and diploma (7.59%) levels (see Table 1).

Regarding income, Table 1 shows that the largest group earned between 2,000,001–3,500,000 (41.38%) and 3,500,001–5,000,000 (31.03), with 17.93% earning above 5,000,000 and 9.66% earning 2,000,000 or less. Almost all respondents (96.55%) owned bank savings, while only 3.45% used cooperatives for savings. In terms of non-cash payment facilities, the majority used ATMs (82.76%) and mobile banking (17.24%), with no respondents reporting credit card use. Finally, the shopping frequency per month was relatively high, with 55.17% visiting Lippo Plaza Kupang once or less, 40% visiting two to four times, and 4.83% visiting more than five times per month. This profile indicates that the respondents represent active, educated, and financially independent consumers with a strong reliance on banking services and a growing adoption of digital payment systems.

Table 1. Respondent characteristics

No.	Category	Number of Respondents	Percentage
1	Age 21-30	48	33.1
2	Age 31-40	38	26.2
3	Age 41-50	44	30.35
4	Age 51-60	15	10.35
1	Occupation - Private Employee	26	17.93
2	Occupation - Entrepreneur	33	22.76
3	Occupation - Civil Servant/Military/Police/State-Owned Enterprise	86	59.31
1	Education - Senior High School/Vocational	30	20.69
2	Education - Diploma	11	7.59
3	Education - Bachelor	78	53.79
4	Education - Postgraduate	26	17.93
1	Income â‰ < 2,000,000	14	9.66
2	Income 2,000,001-3,500,000	60	41.38
3	Income 3,500,001-5,000,000	45	31.03
4	Income > 5,000,000	26	17.93
1	Savings Ownership - Bank	140	96.55
2	Savings Ownership - Cooperative	5	3.45
1	Non-Cash Payment Method - ATM	120	82.76
2	Non-Cash Payment Method - Mobile Banking	25	17.24
3	Non-Cash Payment Method - Credit Card	0	0
1	Visit Frequency once/month	80	55.17
2	Visit Frequency 2-4 times/month	58	40
3	Visit Frequency > 4 times/month	7	4.83

4.2 Descriptive analysis

A descriptive analysis was employed to illustrate respondents' perceptions of each research variable. Responses were statistically described using interval calculations and index values derived from the scale's range. The index values served as the basis for interpreting the mean scores of each indicator. The categories were classified as follows: very low (1.00–1.80), low (1.81–2.60), moderate (2.61–3.40), high (3.41–4.20), and very high (4.21–5.00). Accordingly, the interpretation of variables was based on the mean value of each indicator, providing a systematic overview of the respondents' perceptions.

Table 2. Descriptive statistics of variables

Indicator	Item	Very Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Very Agree (%)	Mean Item Score	Mean Indicator Score
X1.1	X1.1.1	0	0	4.8	37.9	57.2	4.52	4.47
X1.2	X1.2.1	0.7	1.4	2.1	38.6	57.2	4.5	4.51
X2.1	X2.1.1	0	0.7	7.6	33.1	58.6	4.5	4.46
X2.2	X2.2.1	1.4	2.1	3.4	33.1	60	4.48	4.49
Z.1	M.1.1	0.7	3.4	4.1	35.2	56.6	4.43	4.41
Z.2	M.2.1	2.1	4.1	1.4	29.7	62.8	4.47	4.48
M.1	M.1.1	0	0.7	6.2	29	64.1	4.57	4.5
M.2	M.2.1	1.4	2.1	3.4	33.1	60	4.48	4.48
Y.1	Y.1.1	0.7	3.4	8.3	29.7	57.9	4.41	4.48
Y.3	Y.3.1	1.4	2.1	4.8	18.6	73.1	4.6	4.61

The descriptive analysis (Table 2) indicates that all variables were rated very highly by the respondents. Sales promotion (X1) scored 4.50, supported by high values for membership cards, discounts, cashback, and discount information, confirming effective promotional strategies. The service quality (X2) averaged 4.47, reflecting services that meet or exceed customer expectations. Hedonic shopping motivation (Z) scored 4.47, suggesting that consumers are emotionally driven by pleasure, entertainment, and social interaction. Positive emotion (M) recorded 4.49, showing that consumers experience high enjoyment and enthusiasm while shopping. Impulse buying (Y) obtained the highest score at 4.53, demonstrating that unplanned purchases are prevalent. Overall, the findings highlight the strong interplay of promotion, service, hedonic motives, and positive emotions in fostering impulse buying, positioning Lippo Plaza Kupang to maintain consumer appeal and retail competitiveness in the future.

4.3 Validity and reliability test

The measurement model estimated using the Maximum Likelihood method in AMOS, as summarized in Table 3, demonstrates an overall good model fit. Except chi-square, all indices, including RMSEA, CMIN/DF, TLI, GFI, AGFI, CFI, and NFI, fell within the recommended thresholds, indicating that the proposed endogenous constructs met the goodness-of-fit criteria. Eight indices confirmed model adequacy, and no indicator elimination was required for the confirmatory factor analysis of exogenous variables.

Table 3. Validity and reliability test results

Variable	Cronbach's Alpha	Items (Corrected Item–Total Correlation, p)	Decision
Sales Promotion (X1)	0.952	X1.1 (0.930, 0.000); X1.2 (0.941, 0.000); X1.3 (0.942, 0.000); X1.4 (0.927, 0.000)	Valid & Reliable
Service Quality (X2)	0.96	X2.1 (0.933, 0.000); X2.2 (0.940, 0.000); X2.3 (0.919, 0.000); X2.4 (0.914, 0.000); X2.5 (0.931, 0.000)	
Hedonic Shopping Motivation (Z)	0.96	Z1 (0.910, 0.000); Z2 (0.907, 0.000); Z3 (0.941, 0.000); Z4 (0.901, 0.000); Z5 (0.921, 0.000); Z6 (0.891, 0.000)	
Positive Emotion (M)	0.928	M1 (0.930, 0.000); M2 (0.936, 0.000); M3 (0.939, 0.000)	
Impulse Buying (Y)	0.958	Y1 (0.941, 0.000); Y2 (0.907, 0.000); Y3 (0.883, 0.000); Y4 (0.932, 0.000); Y5 (0.919, 0.000); Y6 (0.877, 0.000)	

Table 4. Measurement model results

Criteria / Indicator	Exogenous Constructs (Promotion, Service Quality)	Endogenous Constructs (Hedonic Shopping, Positive Emotion, Impulse Buying)
Goodness of Fit	χ^2 = 38.891 (df = 26), p = 0.079, RMSEA = 0.050, CMIN/DF = 1.496, GFI = 0.945, AGFI = 0.902, TLI = 0.979, CFI = 0.985, NFI = 0.956 → Good fit	χ^2 = 163.429 (df = 84), p = 0.000, RMSEA = 0.081, CMIN/DF = 1.946, GFI = 0.866, AGFI = 0.809, TLI = 0.925, CFI = 0.940, NFI = 0.886 → Partially fit
Construct Validity	All indicators significant (CR > 2, p < 0.001).	All indicators significant (CR > 2, p < 0.001).
Factor Loadings (Standardized)	Promotion: 0.910–0.976 (Mean ≈ 0.93) Service Quality: 0.888–0.996 (Mean ≈ 0.91)	Hedonic Shopping: 0.774–0.973 (Mean ≈ 0.86) Positive Emotion: 0.779–0.977 (Mean ≈ 0.84) Impulse Buying: 0.854–0.990 (Mean ≈ 0.89)
Discriminant Validity	Corr. Promotion–Service Quality = 0.805 (< 0.90). √AVE Promotion = 0.912, Service Quality = 0.881 → Valid.	√AVE values higher than inter-construct correlations → Valid.

Construct validity was further confirmed through Table 3, which shows that all indicators across exogenous variables achieved critical ratio values greater than twice the standard error and probabilities of less than 0.05. This finding validates that all observed indicators are significant measures for their respective constructs. The factor loadings presented in Table 3

reinforce these results, as all values exceed 0.50, and most are greater than 0.90. This indicates that the indicators for sales promotion (X1) and service quality (X2) operate as coherent measures within their latent variables.

4.4 Measurement model evaluation

The measurement model demonstrated acceptable levels of fit across both exogenous and endogenous constructs (Table 4).

For the exogenous constructs (Promotion and Service Quality), the model yielded a good fit (χ^2 = 38.891, df = 26, p = 0.079, RMSEA = 0.050, CMIN/DF = 1.496, GFI = 0.945, AGFI = 0.902, TLI = 0.979, CFI = 0.985, NFI = 0.956) (Figure 2).

In contrast, the endogenous construct model (Hedonic Shopping, Positive Emotion, and Impulse Buying) achieved only a partial fit (χ^2 = 163.429, df = 84, p = 0.000, RMSEA = 0.081, CMIN/DF = 1.946, GFI = 0.866, AGFI = 0.809, TLI = 0.925, CFI = 0.940, NFI = 0.886), although the indices remained within an acceptable threshold for continued structural testing (Figure 3).

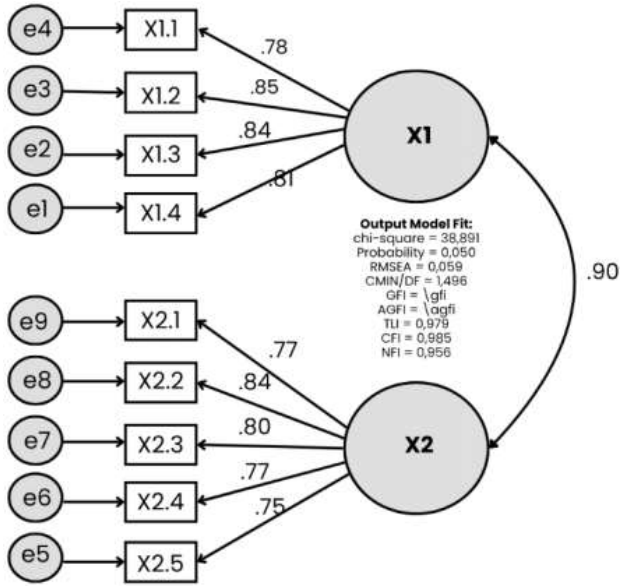

Figure 2. Exogenous variable measurement model with CB-SEM

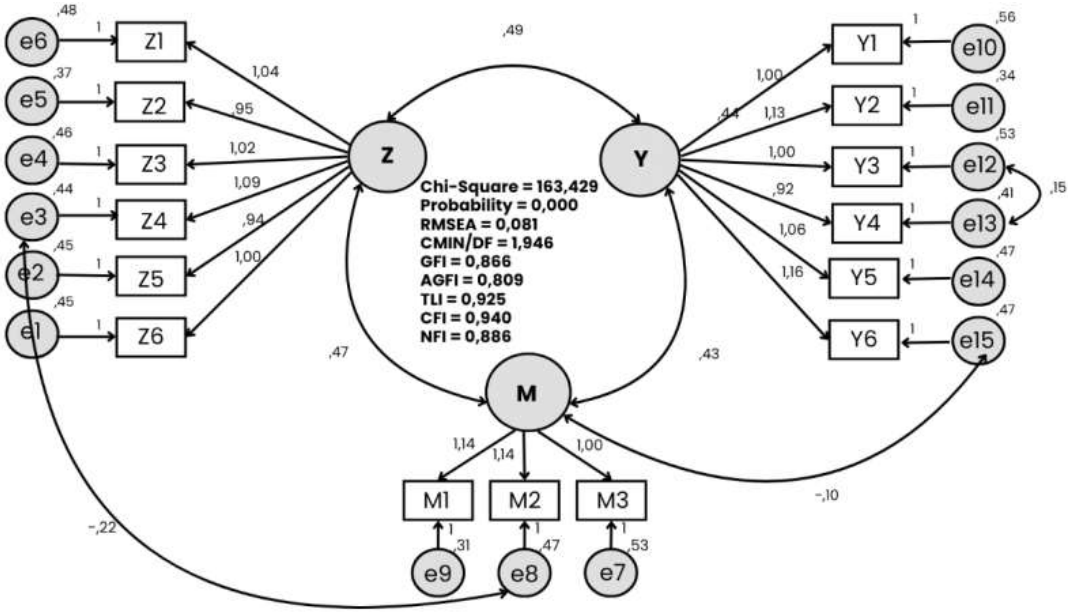

Figure 3. Endogenous variable measurement model with CB-SEM

Table 5 shows that all factor loadings were significant (CR > 2, p < 0.001), confirming convergent validity. For exogenous constructs, Promotion exhibited factor loadings ranging from 0.910 to 0.976 (M ≈ 0.93), while Service Quality ranged from 0.888 to 0.996 (M ≈ 0.91). For endogenous constructs, Hedonic Shopping showed factor loadings between 0.774 and 0.973 (M ≈ 0.86), Positive Emotion ranged from 0.779 to 0.977 (M ≈ 0.84), and Impulse Buying ranged from 0.854 to 0.990 (M ≈ 0.89). These results indicate that the observed items strongly represent their respective latent variables.

Discriminant validity was also confirmed. The correlation between Promotion and Service Quality (0.805) remained below the 0.90 threshold, with the square root of the AVE values (Promotion = 0.912; Service Quality = 0.881) exceeding the inter-construct correlations. Similarly, for the endogenous constructs, the square roots of the AVE values were greater than their corresponding inter-construct correlations, supporting discriminant validity.

The revised measurement model (Figure 4 and Table 5) demonstrated satisfactory convergent validity, with all standardized loadings above 0.50, critical ratio values exceeding twice the standard error, and significance at p < 0.05. The model assumptions of normality and the absence of outliers were also met. The revised overall model achieved an acceptable fit, allowing further assessment of construct reliability and validity. The composite reliability values for Sales Promotion (0.952), Service Quality (0.946), Hedonic Shopping Motivation (0.946), Positive Emotion (0.927), and Impulse Buying (0.939) exceeded the recommended threshold of 0.70, indicating very high reliability. Likewise, the AVE values (0.832, 0.776, 0.746, 0.808, and 0.721) were above the minimum requirement of 0.50, confirming that each construct was well represented by its indicators. Collectively, these results support the reliability and convergent validity of the constructs in the model.

Table 5. Measurement model results after modification

Construct	Indicators	Std. Loadings	CR	AVE	√AVE
Sales Promotion (X1)	X1.1 = 0.894, X1.2 = 0.922, X1.3 = 0.928, X1.4 = 0.905	0.894–0.928 (M ≈ 0.91)	0.95	0.91	0.95
Service Quality (X2)	X2.1 = 0.876, X2.2 = 0.899, X2.3 = 0.885, X2.4 = 0.849, X2.5 = 0.896	0.849–0.899 (M ≈ 0.88)	0.95	0.88	0.94
Hedonic Shopping Motivation (Z)	Z1 = 0.862, Z2 = 0.854, Z3 = 0.923, Z4 = 0.851, Z5 = 0.849, Z6 = 0.841	0.841–0.923 (M ≈ 0.87)	0.95	0.86	0.95
Positive Emotion (M)	M1 = 0.887, M2 = 0.918, M3 = 0.891	0.887–0.918 (M ≈ 0.90)	0.93	0.9	0.93
Impulse Buying (Y)	Y1 = 0.900, Y2 = 0.845, Y3 = 0.800, Y4 = 0.874, Y5 = 0.865, Y6 = 0.805	0.800–0.900 (M ≈ 0.85)	0.94	0.85	0.92

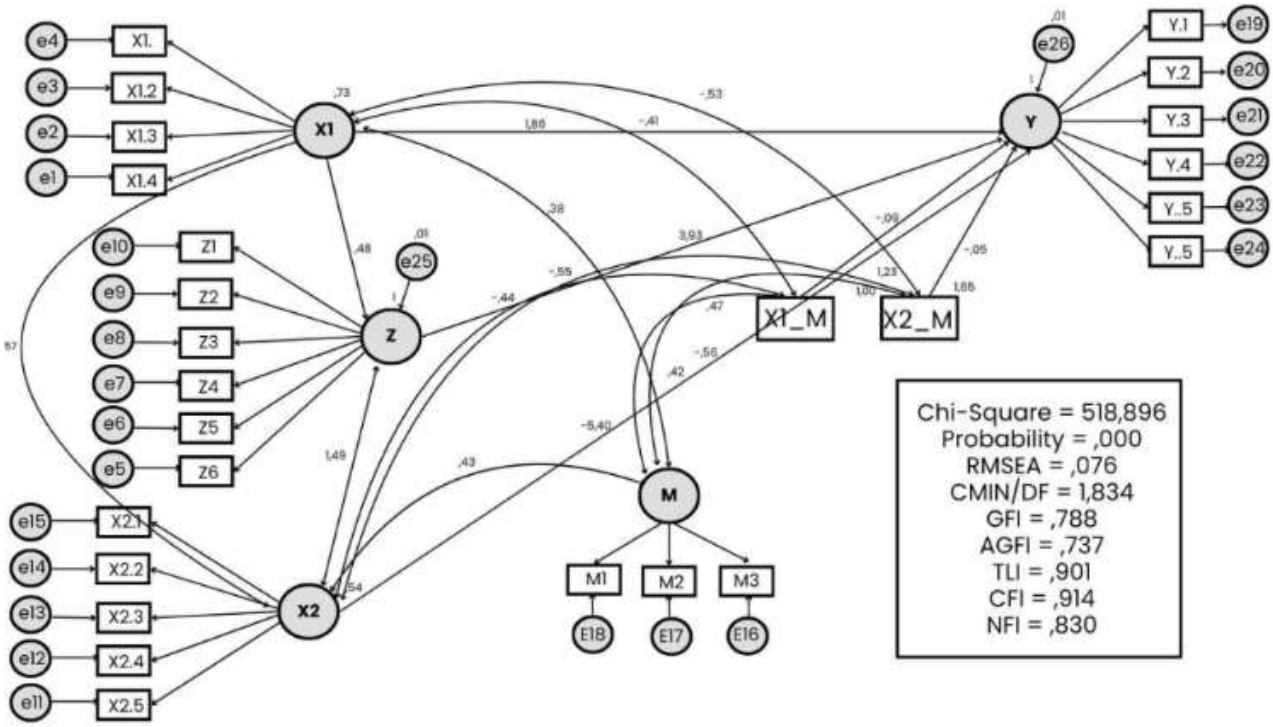

Figure 4. Measurement model after modification

Table 6. Measurement model diagnostics

Test	Results	Conclusion
Univariate Outliers	Z-scores for all indicators ranged between -3.06 and + 3.82 (within ± 3 threshold).	No univariate outliers detected.
Multivariate Outliers	Maximum Mahalanobis distance = 44.181, below critical χ^2 (59.703, df = 30, p < 0.001).	No multivariate outliers detected.
Normality	Skewness and kurtosis CR values < ± 2.58 (univariate); multivariate normality CR = 2.543 (< 2.58).	Data normally distributed.
Multicollinearity (Exogenous Correlation)	Correlation between Sales Promotion (X1) and Service Quality (X2) = 0.805 (< 0.90).	No multicollinearity.
Model Fit (Modified Overall Model)	GFI = 0.781 (marginal); other indices acceptable.	Model fit adequate for analysis.
Convergent Validity (Factor Loadings)	All standardized loadings > 0.77, significant at p < 0.001.	Convergent validity supported.

4.5 Model diagnostics

Data analysis using CB-SEM with AMOS confirmed that the measurement model met the required assumptions (Table 6). No univariate or multivariate outliers were detected, with Z-scores below ± 3 and the maximum Mahalanobis distance (44.181) below the chi-square threshold. Normality was satisfied at both the univariate and multivariate levels, as the skewness and kurtosis values remained within ±2.58. Multicollinearity was not an issue, with exogenous construct correlations below 0.90, while the determinant value, although small, was acceptable under SEM assumptions.

The modified overall model achieved an adequate level of fit, with a GFI of 0.781, which is considered marginal but supported by other fit indices. Convergent validity was established as all standardized loadings exceeded 0.50, critical ratios were greater than twice the standard error, and p-values were significant at < 0.05. These results confirm that all constructs are reliable and valid, providing a sound basis for further testing of the structural model.

4.6 Results of CB-SEM with AMOS

Data analysis was conducted using CB-SEM in AMOS. After tabulating the questionnaire data and ensuring the absence of univariate and multivariate outliers, normality, and multicollinearity issues, the model was estimated using Maximum Likelihood. The initial model showed a marginal fit, with only three indices approaching the recommended cutoff values, while the chi-square, RMSEA, GFI, and AGFI indicated a poor fit (Figure 5). The model includes exogenous constructs X1 and X2 and latent constructs Z and M, which mediate their effects on the endogenous construct Y. Each latent variable is measured through multiple observed indicators (e.g., X1 by x1.1–x1.3, X2 by x2.1–x2.4, Y by y1–y5). The diagram also depicts the standardized regression weights between constructs, with several significant paths (e.g., from Z → Y = 0.36, M → Y = 0.25, X2 → Z = 0.83), while other paths appear weaker or non-significant.

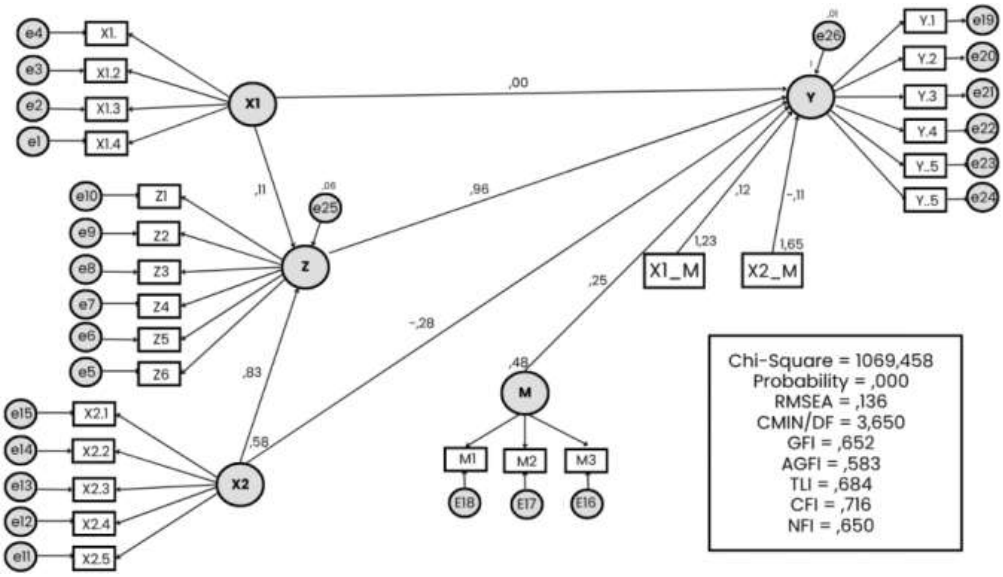

Figure 4. Initial measurement model

Table 7. Causality test result of the overall model fit after modification

Relationship/Construct	Std. Estimate	Estimate	S.E.	C.R.	p	Conclusion
Structural Paths						
Hedonic Shopping Motivation ← Sales Promotion	0.477	0.547	0.176	2.7	0.007	Significant
Hedonic Shopping Motivation ← Service Quality	1.493	1.47	0.245	6.08	***	
Impulse Buying ← Hedonic Shopping Motivation	3.927	4.462	0.983	3.99	0.001	
Impulse Buying ← Service Quality	5.401	6.042	1.07	5	***	
Impulse Buying ← Sales Promotion	1.86	2.418	0.507	3.67	0.001	
Impulse Buying ← Positive Emotion	0.475	0.492	0.101	4.57	0.001	
Impulse Buying ← Sales Promotion × Positive Emotion	0.086	0.145	0.015	5.15	***	
Impulse Buying ← Service Quality × Positive Emotion	0.051	0.101	0.012	4.21	0.002	
Measurement Loadings (Summary)						
Sales Promotion (X1)	0.769–0.846	–	–	–	***	Valid
Service Quality (X2)	0.741–0.811	–	–	–	***	
Hedonic Shopping Motivation (Z)	0.733–0.770	–	–	–	***	
Positive Emotion (M)	0.690–0.800	–	–	–	***	
Impulse Buying (Y)	0.654–0.801	–	–	–	***	

The model fit indices showed that the initial model did not meet the recommended thresholds. The Chi-Square value is 1069.458 with p = 0.000, indicating a poor fit. The RMSEA value of 0.136 is above the acceptable cutoff (< 0.08), suggesting a model misfit. Other indices, such as GFI = 0.652, AGFI = 0.583, TLI = 0.684, CFI = 0.716, and NFI = 0.650, all fall below the conventional cut-off of 0.90. The CMIN/DF ratio was 3.650, which is higher than the ideal threshold (< 3). Collectively, these results indicate that the initial model requires re-specification and modification to achieve a better overall fit for the data.

After evaluating the initial model (Figure 5), several modifications were made to improve the overall fit of the structural equation model. The modified model (Figure 4) incorporates additional paths and covariance relations between the error terms to address areas of misfit identified in the

modification indices. This refinement resulted in a more parsimonious and theoretically consistent measurement.

The modified model demonstrated substantial improvements in the goodness-of-fit indices. The Chi-Square value decreased to 518.896 with a ratio of CMIN/DF = 1.834, which is within the acceptable threshold (< 3). The RMSEA = 0.076 is below the 0.08 cutoff, indicating an adequate fit. The incremental fit indices also improved significantly, with GFI = 0.788, AGFI = 0.737, TLI = 0.901, CFI = 0.914, and NFI = 0.830, many of which exceed the recommended 0.90 standard or approach it closely. These improvements suggest that the modified model provides a more accurate representation of the underlying theoretical framework than the initial model.

The structural paths remained consistent with theoretical expectations, with notable significant effects observed from exogenous constructs (X1, X2) toward mediating constructs (Z, M) and subsequently to the endogenous construct (Y). The inclusion of correlated error terms also reflects the recognition of shared variance among the observed indicators, enhancing model reliability without distorting theoretical integrity.

The modified structural model demonstrated significant relationships among the constructs (Table 7). Sales Promotion had a strong and positive effect on Impulse Buying ($\beta = 1.86$, $p < 0.001$) and also significantly influenced Hedonic Shopping Motivation ($\beta = 0.48$, $p < 0.05$). Service Quality showed the highest impact on Impulse Buying ($\beta = 5.40$, $p < 0.001$) and also contributed significantly to Hedonic Shopping Motivation ($\beta = 1.49$, $p < 0.001$). In turn, Hedonic Shopping Motivation had a direct positive effect on Impulse Buying ($\beta = 3.30$, $p < 0.001$), confirming its role as a mediator between exogenous and endogenous constructs (Table 7).

Moderation testing further revealed that Positive Emotion strengthened the effects of both Sales Promotion and Service Quality on Impulse Buying. Although the coefficients were relatively small ($\beta = 0.09$ and $\beta = 0.05$, $p < 0.05$), their significance demonstrates that emotional factors play a reinforcing role in consumers' impulse-buying decisions. This suggests that while service quality and hedonic motives are the primary drivers, the presence of positive emotions amplifies consumer responsiveness to sales promotions and service experiences.

In terms of indirect and total effects, both Sales Promotion and Service Quality were found to influence Impulse Buying indirectly through Hedonic Shopping Motivation (Table 8). The total effects indicated that Service Quality exerted the greatest overall impact on Impulse Buying, followed by Hedonic Shopping Motivation and Sales Promotion. This hierarchy highlights the dominant role of service quality in shaping consumer behavior, with hedonic motives acting as the key psychological mechanism through which these effects are transmitted.

The model's explanatory power was substantial. The squared multiple correlation (R^2) for Hedonic Shopping Motivation was 0.986, meaning that Sales Promotion and Service Quality together explained 98.6% of its variance, leaving only 1.4% unexplained by other factors. For Impulse Buying, the R^2 was 0.751, indicating that 75.1% of the variance was explained by Sales Promotion, Service Quality, Hedonic Shopping Motivation, and Positive Emotion as a moderator. The remaining 24.9% of the variance was attributable to other unmeasured factors.

Overall, the revised model demonstrated strong validity, reliability, and robustness. Service Quality emerged as the most influential factor in driving Impulse Buying, both directly and indirectly, followed by Hedonic Shopping Motivation and Sales Promotion. Although weaker in magnitude, positive Emotion contributed as a meaningful moderator, reinforcing the pathways from exogenous to endogenous constructs. These findings support the robustness of the structural model and provide empirical evidence that both functional (service quality) and emotional-hedonic factors jointly shape impulse-buying behavior.

Table 8. Standardized direct, indirect, and total effects (modified model)

Endogenous Variable	Predictor	Direct Effect	Indirect Effect	Total Effect
Hedonic Shopping Motivation (Z)	Service Quality (X2)	1.47	0	0.35
	Sales Promotion (X1)	0.55	0	0.3
	Positive Emotion (M)	0	0	0.22
	Sales Promotion × M	0	0	0.18
	Service Quality × M	0	0	0.2
Impulse Buying (Y)	Service Quality (X2)	6.04	6.56	6
	Sales Promotion (X1)	2.42	2.44	2.8
	Hedonic Shopping Motivation (Z)	4.46	0.3	3.6
	Positive Emotion (M)	0.49	0.25	0.52
	Sales Promotion × M	0.15	0.2	0.48
	Service Quality × M	0.1	0.15	0.5

5. DISCUSSION

Sales promotions function as socio-physical stimuli embedded within the architecture of retail environments, shaping consumers' cognitive evaluations and affective reactions [41]. Within modern shopping centers, promotional instruments—including loyalty cards, discounts, cash-back programs, and targeted communication of special offers—operate not merely as informational tools but as structured behavioral triggers. Loyalty programs expand perceived purchasing flexibility and simplify transaction processes; price discounts compress decision time and increase basket breadth; cash-back incentives reduce perceived economic sacrifice; and visible promotional messaging enhances perceived value. Collectively, these mechanisms reconfigure the decision environment, increasing the probability of spontaneous purchasing. From a structural perspective, promotional intensity alters the consumption tempo within retail ecosystems, reinforcing short-term transaction cycles.

Service quality performs a complementary but structurally distinct function. Defined as a dynamic interaction among personnel, processes, physical settings, and service delivery mechanisms [35], service quality influences how consumers

interpret and emotionally experience retail space. The SERVQUAL dimensions—reliability, responsiveness, assurance, empathy, and tangibility—operate as friction-reducing mechanisms within commercial environments. Reliability ensures procedural consistency; responsiveness conveys attentiveness; assurance fosters institutional trust; empathy reflects personalized engagement; and tangibles communicate professionalism through spatial and physical presentation. These attributes collectively generate experiential stability. In contrast to promotional stimuli that accelerate decision-making, service quality stabilizes consumer confidence and reinforces relational continuity. Within urban retail systems, this balance between stimulation and stability contributes to commercial resilience.

Hedonic shopping motivation explains why consumers exceed purely utilitarian purchasing boundaries. As described by Utami [42], hedonic consumption reflects intrinsic motives associated with pleasure, prestige, social interaction, and aesthetic experience. Indicators such as enjoyment, curiosity, entertainment, stress relief, and value-seeking position shopping as a recreational and emotional practice rather than a functional task. Research has demonstrated that mood states significantly shape enjoyment [43], and distinctions between utilitarian and hedonic orientations highlight the experiential dimension of consumption [44, 45]. In contemporary urban commercial centers, shopping environments are deliberately designed to amplify experiential engagement, thereby increasing affective activation.

Positive emotions operate as catalytic mechanisms within this process. As conceptualized by Laros and Steenkamp [46], positive emotional states encompass peace, cheerfulness, joy, and happiness. The pleasure–arousal–dominance framework [40] further specifies how emotional activation influences behavioral readiness. Rather than representing passive mood conditions, positive emotions constitute energized states that heighten responsiveness to environmental cues. Elevated affective arousal reduces deliberative processing and increases the likelihood of immediate consumption responses.

Impulse buying itself is characterized by urgency, spontaneity, and limited evaluation of consequences [47]. Financial accessibility and electronic payment systems facilitate the conversion of impulse into a transaction. Self-Completion Theory suggests that diminished self-control enhances impulsivity, whereas contextual pressures such as time constraints, unfamiliar spatial arrangements, and high stimulus intensity increase susceptibility [48]. Within digitally integrated retail environments, payment convenience reduces transactional friction, making spontaneous decisions easier to execute.

The empirical findings of this study confirm several structural relationships. Sales promotions exert a significant positive effect on impulse buying, reinforcing established evidence that promotional mechanisms stimulate short-term purchasing behavior [11]. Similar patterns have been observed in both offline and online contexts [6, 8]. At the same time, prior research indicates that hedonic motives do not uniformly amplify promotional effects in all environments [49], underscoring contextual variability.

Service quality also significantly influences impulse buying. Reliable and empathetic service fosters comfort and trust, increasing consumers' willingness to engage in spontaneous purchases [8, 42]. In this respect, service quality enhances affective readiness rather than merely transactional efficiency. Both sales promotion and service quality positively influence hedonic shopping motivation. Promotional incentives generate excitement and perceived opportunity [11, 35], while discounts may enhance enjoyment and curiosity [50], though empirical findings are not universally consistent [6]. Service quality similarly elevates experiential value, contributing to emotional engagement within retail spaces.

Hedonic motivation exerts a significant direct effect on impulse buying, consistent with prior findings positioning hedonic value as a key internal driver of spontaneous consumption [19]. Digital retail features such as flash sales and live streaming amplify these dynamics [51]. The mediating role of hedonic motivation observed in this study indicates that retail strategies influence impulse buying partly by shaping experiential satisfaction and emotional engagement. Promotional campaigns increase enjoyment, curiosity, and value-seeking tendencies [38], while quality service reinforces relaxation and social interaction [43]. These affective pathways translate structural retail stimuli into behavioral outcomes.

Positive emotions further moderate these relationships. Promotional effectiveness increases when consumers are in elevated emotional states, consistent with evidence linking pleasant affect to impulsive action [15]. Positive emotions also moderate the relationship between service quality and impulse buying, although the effect is comparatively nuanced. The moderation strength varies across consumer segments, particularly among digitally engaged cohorts who prioritize autonomy and low-intensity interaction. For such consumers, subtle service cues combined with positive emotional states may be sufficient to trigger spontaneous purchases without overt stimulation.

Taken together, the findings demonstrate that impulse buying within urban retail systems operates through two interrelated pathways: stimulus acceleration through promotional mechanisms and experiential stabilization through service quality. Both converge within the affective domain, where hedonic motivation and positive emotion function as psychological transmission channels. From a broader planning perspective, these mechanisms reveal how retail environments shape consumption intensity. While promotional and experiential strategies enhance commercial performance and urban economic vitality, they also contribute to heightened spontaneous consumption.

Within the discourse of sustainable urban development, this duality warrants careful consideration. Retail centers such as Lippo Plaza Kupang act as economic anchors in expanding urban regions, contributing to employment generation and commercial dynamism. However, the structural amplification of impulse buying raises questions concerning consumption patterns and long-term resource implications. The empirical evidence presented here illustrates how retail strategy, emotional activation, and financial accessibility interact within emerging commercial ecosystems. Understanding these interactions is essential for balancing retail competitiveness with evolving sustainability considerations.

6. CONCLUSIONS AND FUTURE RESEARCH

This study examined the structural relationships among sales promotion, service quality, hedonic shopping motivation, positive emotion, and impulse buying within the context of an emerging urban retail center. Using Lippo Plaza Kupang as the empirical setting, the findings confirm that both sales

promotion and service quality exert significant direct effects on impulsive purchasing behavior. Promotional instruments such as discounts, loyalty cards, and cash-back programs increase the immediacy of decision-making, while the SERVQUAL dimensions—reliability, responsiveness, assurance, empathy, and tangibles—create an experiential environment that enhances affective readiness to purchase.

Beyond these direct influences, the study demonstrates the importance of indirect psychological mechanisms. Sales promotion and service quality both strengthen hedonic shopping motivation, which in turn significantly increases impulse buying. Hedonic motivation therefore operates as a mediating pathway translating retail strategy into behavioral outcomes. Positive emotion further moderates these relationships, indicating that consumers in elevated affective states are more responsive to promotional cues and service encounters. However, the moderating strength varies across relational pathways, particularly in the link between service quality and impulse buying, suggesting heterogeneity in consumer responsiveness within evolving urban retail environments.

From a broader perspective, these findings illuminate how retail systems shape consumption dynamics within expanding commercial infrastructures. Promotional intensity accelerates purchasing cycles, while service quality stabilizes experiential trust and reinforces repeat visitation. Together, these mechanisms contribute to retail competitiveness and economic vitality in emerging urban centers. Shopping malls such as Lippo Plaza Kupang serve not only as transactional spaces but also as economic anchors that stimulate local commercial activity and employment. In this respect, impulse buying supports short-term revenue growth and contributes to the financial sustainability of retail operations.

At the same time, the amplification of spontaneous consumption raises important considerations within the discourse of sustainable development. While commercial vitality is essential for urban economic resilience, increasing reliance on impulse-driven purchasing may influence broader consumption patterns. The integration of digital payment systems and expanded financial accessibility further lowers transactional barriers, facilitating immediate spending decisions. Consequently, retail planning strategies must balance competitiveness with long-term considerations related to consumption intensity and financial behavior. Aligning retail growth with responsible consumption principles remains a strategic challenge for urban commercial development.

Practically, the results suggest that retail managers and commercial planners should consider both structural and experiential dimensions of retail environments. Innovative but measured promotional strategies, consistent service delivery, and atmospherically engaging retail spaces can enhance consumer engagement while maintaining operational stability. Rather than focusing solely on transactional acceleration, retail strategies may benefit from integrating experiential quality with broader objectives of customer retention and relational sustainability.

Several limitations warrant acknowledgment. First, the study was conducted within a single shopping center in Kupang, which limits the generalizability of the findings to other retail formats or geographic regions. Second, although the sampling design was theoretically justified, the focus on working women represents a specific consumer segment and may not capture broader demographic diversity. Third, the relatively modest sample size and restricted set of variables—sales promotion, service quality, hedonic motivation, and positive emotion—do not encompass all structural, social, or cultural determinants of impulse buying behavior. Additional contextual factors such as spatial layout, income stratification, lifestyle segmentation, and macroeconomic conditions may further influence purchasing dynamics.

Future research should therefore extend analysis across multiple retail centers and urban regions to enhance external validity. Longitudinal designs could also provide insight into how impulse buying behavior evolves over time within changing economic and technological conditions. Incorporating additional variables related to financial literacy, consumption awareness, or sustainable consumption attitudes may offer a more comprehensive understanding of how retail strategies interact with broader development objectives. Such investigations would contribute to a deeper evaluation of the relationship between retail competitiveness, consumer behavior, and long-term urban sustainability.

DECLARATION OF USE OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES

The authors declare that they have not used/ or used generative AI (a type of artificial intelligence technology that can produce various types of content, including text, imagery, audio and synthetic data. Examples include ChatGPT, NovelAI, Jasper AI, Rytr AI, DALL-E, etc) and AI-assisted technologies in the writing process before submission, but only to improve the language and readability of their paper and with the appropriate disclosure.

REFERENCES

[1] Clover, V.T. (1950). Relative importance of impulse-buying in retail stores. Journal of Marketing, 15(1): 66-70. https://doi.org/10.1177/002224295001500110

[2] Stern, H. (1962). The significance of impulse buying today. Journal of Marketing, 26(2): 59-62. https://doi.org/10.1177/00222429620260021

[3] Tremblay, A.J. (2005). Impulse buying behavior: Impulse buying behavior among college students in the borderlands. https://www.researchgate.net/publication/28659658_Impulse_buying_behavior_Impulse_buying_behavior_among_college_students_in_the_borderlands.

[4] Lawson, R., Todd, S. (2002). Consumer lifestyles: A social stratification perspective. Marketing Theory, 2(3): 295-307. https://doi.org/10.1177/1470593102002003278

[5] Hadjali, H.R., Salimi, M., Ardestanis, M.S. (2012). Exploring main factors affecting on impulse buying behaviours. Journal of American Science, 8(1): 245-251.

[6] Isalman, Ilyas, Ramadhani, F., Ittaqullah, N. (2024). Sales promotion stimulus, marketplace display, and hedonic shopping motivation on impulse buying among millennial women. Jurnal Ilmu Manajemen, 12(2): 406-420. https://doi.org/10.26740/jim.v12n2.p406-420

[7] Lestari, S.K.B., Ernawati, M.T., Pranatasari, F.D. (2023). The effect of hedonic shopping motivation, shopping lifestyle, and sales promotion on impulse buying in Shopee e-commerce. Business Management Journal, 19(2): 163-172.

https://journal.ubm.ac.id/index.php/business-management/article/view/4657.
[8] Atmaja, D.R., Edison, A. (2022). Antecedents of impulse buying in modern retail markets: Learnings from Indonesia. Jurnal Lentera Bisnis, 11(2). https://doi.org/10.34127/jrlab.v11i2.553
[9] Rook, D.W. (1987). The buying impulse. Journal of Consumer Research, 14(2): 189-199. https://doi.org/10.1086/209105
[10] Engel, J.F., Kollat, D.T., Blackwell, R.D. (1973). Consumer Behavior. Holt, Rinehart and Winston.
[11] Kotler, P., Keller, K.L. (2016). Marketing Management. Pearson Education.
[12] Grönroos, C. (1984). A service quality model and its marketing implications. European Journal of Marketing, 18(4): 36-44. https://doi.org/10.1108/EUM0000000004784
[13] Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4): 41-50. https://doi.org/10.1177/002224298504900403
[14] Silvera, D.H., Lavack, A.M., Kropp, F. (2008). Impulse buying: The role of affect, social influence, and subjective wellbeing. Journal of Consumer Marketing, 25(1): 23-33. https://doi.org/10.1108/07363760810845381
[15] Donovan, R.J., Rossiter, J.R., Marcoolyn, G., Nesdale, A. (1994). Store atmosphere and purchasing behavior. Journal of Retailing, 70(3): 283-294. https://doi.org/10.1016/0022-4359(94)90037-X
[16] Isen, A.M. (1984). Toward understanding the role of affect in cognition. In Handbook of Social Cognition, pp. 179-236.
[17] Dunne, P.M., Lusch, R.F., Griffith, D.A. (2002). Retailing (4th ed.). South-Western College Pub.
[18] Park, J., Lennon, S.J. (2006). Psychological and environmental antecedents of impulse buying tendency in the multichannel shopping context. Journal of Consumer Marketing, 23(2): 56-66. https://doi.org/10.1108/07363760610654998
[19] Lim, S.H., Lee, S., Kim, D. (2017). Is online consumers' impulsive buying beneficial for e-commerce companies? An empirical investigation of online consumers' past impulsive buying behaviors. Information Systems Management, 34(1): 85-100. https://doi.org/10.1080/10580530.2017.1254458
[20] Han, H., Lee, M., Kim, W. (2018). Role of shopping quality, hedonic/utilitarian shopping experiences, trust, satisfaction and perceived barriers in triggering customer post-purchase intentions at airports. International Journal of Contemporary Hospitality Management, 30(10): 3059-3082. https://doi.org/10.1108/IJCHM-09-2017-0563
[21] Rook, D.W., Gardner, M.P. (1993). In the mood: Impulsive buying's antecedents. Research in Consumer Behavior, 6(7): 1-28.
[22] Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. Journal of Consumer Marketing, 17(5): 403-426. https://doi.org/10.1108/07363760010341045
[23] Watson, D., Tellegen, A. (1985). Toward a consensual structure of mood. Psychological Bulletin, 98(2): 219-235. https://doi.org/10.1037/0033-2909.98.2.219
[24] Muruganantham, G., Bhakat, R.S. (2013). A review of impulse buying behavior. International Journal of Marketing Studies, 5(3): 149-160. https://doi.org/10.5539/ijms.v5n3p149
[25] Baron, R.A., Byrne, D., Branscombe, N.R. (2006). Social Psychology (11th ed.). Pearson Education.
[26] Weinberg, P., Gottwald, W. (1982). Impulsive consumer buying as a result of emotions. Journal of Business Research, 10(1): 43-57. https://doi.org/10.1016/0148-2963(82)90016-9
[27] Hoch, S.J., Loewenstein, G.F. (1991). Time-inconsistent preferences and consumer self-control. Journal of Consumer Research, 17(4): 492-507. https://doi.org/10.1086/208573
[28] Bayley, G., Nancarrow, C. (1998). Impulse purchasing: A qualitative exploration of the phenomenon. Qualitative Market Research: An International Journal, 1(2): 99-114. https://doi.org/10.1108/13522759810214271
[29] Dinas Perindustrian dan Perdagangan Kota Kupang. (2023). Laporan statistik ritel modern kota Kupang 2023. https://kupangkota.bps.go.id.
[30] Kartajaya, H. (2005). Marketing in Venus. MarkPlus & Co.
[31] Hasan, A. (2008). Marketing. Media Utama.
[32] Mowen, J., Minor, M. (2002). Perilaku Konsumen. Erlangga. https://pustaka.lan.go.id/opac/detail/19064.
[33] Engel, J.F., Blackwell, R.D., Miniard, P.W. (1995). Consumer Behavior (8th ed.). Dryden Press.
[34] Cummins, J., Mullin, R. (2004). Sales Promotion: Menciptakan, Mengimplementasikan, dan Mengintegrasikan Program Promosi Penjualan. PPM.
[35] Tjiptono, F. (2007). Strategi Pemasaran. Andi Offset. https://www.researchgate.net/publication/316829743_Strategi_Pemasaran.
[36] Fitzsimmons, J.A., Fitzsimmons, M.J. (1994). Service Management for Competitive Advantage. McGraw-Hill.
[37] Holbrook, M.B., Hirschman, E.C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. Journal of Consumer Research, 9(2): 132-140. https://doi.org/10.1086/208906
[38] Arnold, J.M., Reynolds, K.E. (2003). Hedonic shopping motivations. Journal of Retailing, 79(2): 77-95. https://doi.org/10.1016/S0022-4359(03)00007-1
[39] Seligman, M.E.P. (2002). Authentic Happiness. Mizan Media Utama. https://www.perlego.com/book/780753/authentic-happiness-using-the-new-positive-psychology-to-realize-your-potential-for-lasting-fulfillment-pdf.
[40] Mehrabian, A., Russell, J.A. (1974). An Approach to Environmental Psychology. MIT Press.
[41] Peter, J.P., Olson, J.C. (2005). Consumer Behavior and Marketing Strategy. McGraw-Hill.
[42] Utami, C.W. (2010). Manajemen Ritel. Salemba Empat. https://www.tokopedia.com/penerbitsalembaempat/manajemen-ritel-edisi-3-christina-w-utami.
[43] Phang, T.C.H., Chen, C., Tiong, R.L.K. (2020). New model for identifying critical success factors influencing BIM adoption from precast concrete manufacturers' view. Journal of Construction Engineering and Management, 146(4): 04020014. https://doi.org/10.1061/(ASCE)CO.1943-7862.0001773
[44] Nicholls, J.A.F., Li, F., Kranendonk, C.J., Roslow, S. (2002). The seven year itch? Mall shoppers across time. Journal of Consumer Marketing, 19(2): 149-165. https://doi.org/10.1108/07363760210420568

[45] Park, H., Sullivan, P. (2009). Market segmentation with respect to university students' clothing benefits sought: Shopping orientation, clothing attribute evaluation, and brand repatronage. International Journal of Retail & Distribution Management, 37(2): 182-201. https://doi.org/10.1108/09590550910934308
[46] Laros, F.J.M., Steenkamp, J.B.E.M. (2005). Emotion in Consumer Behavior: A hierarchical approach. Journal of Business Research, 58: 1437-1445. https://doi.org/10.1016/j.jbusres.2003.09.013
[47] Kacen, J.J., Lee, J.A. (2002). The influence of culture on consumer impulsive buying behavior. Journal of Consumer Psychology, 12(2): 163-176. https://doi.org/10.1207/S15327663JCP1202_08
[48] Dittmar, H., Beattie, J., Friese, S. (1995). Gender identity and material symbols: Objects and decision considerations in impulse purchases. Journal of Economic Psychology, 16(3): 491-511. https://doi.org/10.1016/0167-4870(95)00023-H
[49] Zahra, N., Sanaji, S. (2021). The moderating role of hedonic motivation in the influence of sales promotion on the intention to reuse electronic wallet services among millennials. Jurnal Ilmu Manajemen, 9(1): 57-67. https://doi.org/10.26740/jim.v9n1.p57-67
[50] Devica, S. (2019). The influence of "purchase with purchase" sales promotion on consumer shopping motivation and purchasing decisions. Jurnal Bisnis Perspektif, 11(1): 1-12. https://repository.ubaya.ac.id/34341/.
[51] Septiyani, S., Hadi, E.D. (2024). The influence of flash sales, live streaming, and hedonic shopping motivation on impulse buying (A study of Berrybenka product purchases among Shopee App users). Jurnal Ekonomi & Ekonomi Syariah, 7(1): 970-980. https://doi.org/10.36778/jesya.v7i1.1505