



Impact of Social Media Marketing On Consumer Buying Behaviour: Empirical Evidence From Urban Indian Consumers

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Abstract-Social media marketing (SMM) has emerged as a transformative force reshaping consumer decision-making across global markets. This study investigates the impact of social media marketing on consumer buying behaviour with particular focus on the Indian B2C context, encompassing the fashion, technology, and beauty sectors. Adopting a descriptive and causal research design with a mixed-methods approach, primary data were gathered through a structured Likert-scale questionnaire administered to 420 valid respondents using stratified random sampling across major Indian urban centres. Secondary data were sourced from academic journals, industry whitepapers (McKinsey, Gartner, Statista), and recent empirical studies (2021–2026). Statistical analyses included Pearson's correlation, multiple regression, and chi-square testing. Findings reveal that social media marketing exerts a significant positive influence on consumer purchase intention, with influencer marketing—particularly micro-influencers—and user-generated content (UGC) identified as the most persuasive drivers. The study confirms that engagement metrics (likes, shares, comments) positively correlate with brand loyalty ($r = 0.65$, $p < 0.01$), and that targeted algorithmic advertising significantly predicts impulse purchase behaviour. Trust in SMM content remains a moderating factor, particularly among older demographic segments. The study contributes an updated Stimulus-Organism-Response (S-O-R) framework integrating AI-driven personalisation and social commerce dynamics, offering actionable insights for digital marketers navigating the post-algorithmic consumer landscape.

Keywords: Social Media Marketing, Consumer Buying Behaviour, Influencer Marketing, User-Generated Content, Purchase Intention, Impulse Buying, Digital Marketing, S-O-R Model.

I. INTRODUCTION

Over the past decade the consumer marketplace has undergone a paradigm shift from the purely transactional to the immersively participatory. Traditional one-way broadcast marketing—television commercials, print advertisements, and radio spots—has been progressively supplanted by social media marketing (SMM): a multi-directional ecosystem in which consumers simultaneously receive, evaluate, co-create, and redistribute marketing stimuli. Platforms such as Instagram, YouTube, TikTok, and Facebook have collectively amassed over five billion monthly active users globally (Hootsuite & We Are Social, 2024), transforming them into critical commercial infrastructure rather than mere communication channels.

The 'passive consumer' of the broadcast era has given way to an 'active participant' who publishes reviews, produces unboxing videos, co-creates brand narratives, and demands transparency from the organisations that seek their custom. This democratisation of content creation has introduced both opportunity and complexity for marketers: reach and engagement can be achieved at unprecedented scale and speed, yet the attendant erosion of institutional trust—driven by influencer scandals, algorithmic opacity, and misinformation—means that conversion from awareness to purchase is far from guaranteed. The so-called 'digital paradox' captures this tension precisely: high engagement metrics coexist with uncertain purchase outcomes.

Within the Indian context, these dynamics are amplified by a rapidly expanding digital population surpassing 900



million internet users, a smartphone penetration rate of 76%, and a burgeoning social commerce infrastructure (MeitY, 2023). India's consumer base is demographically young, digitally fluent in significant proportions, and culturally diverse—characteristics that render it both a rich and complex context for examining SMM effectiveness. The fashion, technology, and beauty sectors, in particular, exhibit the highest rates of social media-driven purchase behaviour, making them natural focal points for this inquiry.

Despite the proliferation of empirical studies on SMM, critical gaps remain. Most existing research treats consumer behaviour as a linear funnel—awareness, consideration, purchase—whereas contemporary digital environments operate as non-linear, algorithm-mediated journey loops in which discovery, evaluation, and purchase can occur almost simultaneously within a single application session. Furthermore, the moderating roles of AI-driven personalisation, social commerce (in-app purchasing), and demographic variables such as generational cohort membership have received insufficient empirical attention, particularly in emerging market contexts.

This study addresses these gaps by examining how various SMM dimensions—platform characteristics, content type, influencer credibility, user-generated content, algorithmic targeting, and social proof—jointly influence consumer buying behaviour. The Stimulus-Organism-Response (S-O-R) model (Mehrabian & Russell, 1974) provides the theoretical scaffolding, updated to accommodate the computational and psychological mechanisms unique to the social media era.

1.1 Research Objectives

The study pursues the following objectives: (i) evaluate how platform type (visual vs. text-based) influences the information search stage of the buying process; (ii) compare consumer trust in influencer marketing against traditional celebrity endorsements; (iii) determine the

impact of UGC on perceived purchase risk; (iv) assess how algorithmic targeting drives impulsive versus planned buying; and (v) examine demographic moderation of SMM effectiveness.

1.2 Research Hypotheses

Seven hypotheses were formulated:

- H1: Social media marketing has a significant positive impact on consumer buying behaviour.
- H2: There is a significant positive relationship between social media engagement and brand loyalty.
- H3: Social media advertisements significantly influence consumer purchase intention.
- H4: Influencer marketing has a significant positive effect on consumer buying decisions.
- H5: UGC and online reviews significantly reduce perceived risk and influence purchase behaviour.
- H6: Trust and credibility of SMM content significantly influence purchasing decisions.
- H7: Demographic factors (age, gender, income, education) significantly moderate consumer response to SMM.

II. LITERATURE REVIEW

2.1 Theoretical Foundation: The S-O-R Model

The Stimulus-Organism-Response (S-O-R) framework (Mehrabian & Russell, 1974) offers a parsimonious architecture for understanding SMM's influence on buying behaviour. In the original model, environmental stimuli (S) act upon internal organismic states (O)—cognitive and affective—to produce approach or avoidance responses (R). Applied to social media, SMM stimuli (advertisements, influencer content, peer reviews) interact with consumers' cognitive evaluations (information processing, risk assessment) and affective states (excitement, FOMO, trust) to generate purchase or non-purchase responses. This study extends the classic S-O-R



model by incorporating algorithmic personalisation as a dynamic stimulus modifier and social proof as an affective amplifier.

2.2 Social Media Marketing and Purchase Intention

Kaplan and Haenlein (2010) established the foundational taxonomy of social media and its marketing applications, noting its distinction from broadcast media in facilitating bidirectional value exchange. Subsequent scholarship has empirically documented the SMM-purchase intention nexus across diverse contexts. Alalwan et al. (2017) found that perceived usefulness, enjoyment, and interactivity of SMM activities significantly predicted purchase intention among Jordanian consumers. Shareef et al. (2020) demonstrated that informativeness, entertainment, and personalisation in social media advertising enhance purchase intent, mediated by attitude toward the advertisement. More recently, Tarsakoo and Charoensukmongkol (2023) confirmed that SMM capability dimensions—particularly content marketing and social media advertising—positively associate with firm performance in emerging Southeast Asian markets.

2.3 Influencer Marketing and User-Generated Content

Lou and Yuan (2019) established that influencer credibility—comprising trustworthiness, expertise, and attractiveness—mediates the relationship between influencer marketing and consumer purchase intention, with parasocial identification as a further amplifier. Critically, micro-influencers (10,000–100,000 followers) consistently outperform macro-influencers in engagement rate and perceived authenticity (Gartner, 2023), a finding with significant budget allocation implications. User-generated content (UGC) constitutes a powerful form of social proof: Cheung et al. (2021) demonstrated that eWOM credibility positively influences brand attitude and purchase intention, with content diagnosticity and reviewer

expertise as moderators. The role of UGC in reducing 'perceived risk'—a construct central to consumer information processing theory—is particularly salient in high-involvement purchase categories such as electronics and fashion.

2.4 Algorithmic Personalisation and Impulse Buying

The convergence of machine learning and social media platforms has fundamentally altered the stimulus environment consumers encounter. Recommendation algorithms employing collaborative filtering (Facebook, Amazon) and deep learning-based content sequencing (TikTok's 'For You' feed) are engineered to maximise time-on-platform and, increasingly, direct conversion. Kotler, Kartajaya, and Setiawan (2021) describe this as 'Marketing 5.0'—the integration of technology and humanity—wherein AI predicts consumer needs before they are consciously articulated. Zhang, Lu, and Jin (2021) reviewed the application of artificial intelligence in marketing, concluding that AI-driven personalisation elevates purchase intent by enhancing relevance while simultaneously risking brand fatigue through overretargeting. The relationship between algorithm-driven content exposure and impulse buying is particularly robust among younger consumer cohorts, for whom extended social media sessions correlate with higher unplanned expenditure (GWI, 2024).

2.5 Trust, Credibility, and the Digital Paradox

A persistent challenge in SMM is the trust deficit: as sponsored content proliferates, consumers' ability to distinguish organic from paid content erodes, reducing persuasive efficacy. Ajzen's (1991) Theory of Planned Behaviour suggests that consumer attitudes toward SMM content—shaped substantially by perceived credibility—directly influence behavioural intentions. PwC (2023) found that trust in social media advertising declined across most demographic segments between 2021 and 2023, with authenticity and transparency emerging as primary



determinants of residual trust. This tension—between SMM's reach and its credibility constraints—constitutes the 'digital paradox' and frames a central research question of this study.

III. RESEARCH METHODOLOGY

3.1 Research Design

A descriptive and causal research design was employed, incorporating a mixed-methods approach. The quantitative strand identifies statistical relationships between SMM variables and buying behaviour indicators; the qualitative strand—comprising open-ended survey items—elucidates the psychological mechanisms underlying these relationships. The study deploys a deductive logic, testing the S-O-R model and hypotheses derived from prior literature against primary empirical data.

3.2 Population and Sampling

The target population comprised Indian consumers aged 18 and above who use social media and have made at least one online purchase in the preceding six months. Stratified random sampling was applied, stratifying by generational cohort (Gen Z: 18–24; Millennials: 25–40; Gen X: 41–55) and by city (Delhi NCR, Mumbai, Bengaluru, Chennai, Kolkata, Ahmedabad) to ensure demographic representation. A target sample of 450 respondents was set; after data cleaning and removal of incomplete responses, 420 valid questionnaires were retained for analysis.

3.3 Instrument and Data Collection

Primary data were gathered via a structured self-administered online questionnaire designed in Google Forms and distributed via social media platforms and email. The instrument comprised five sections: (i) demographic profiling; (ii) social media usage patterns; (iii) SMM stimulus exposure (platform preference, content type, influencer engagement); (iv) consumer psychological responses (trust, perceived risk, FOMO, attitude); and (v)

buying behaviour outcomes (purchase frequency, impulse buying incidence, brand loyalty). All attitudinal constructs employed five-point Likert scales (1 = Strongly Disagree; 5 = Strongly Agree). Construct reliability was confirmed via Cronbach's Alpha, with all scales exceeding the 0.70 threshold. Secondary data were drawn from peer-reviewed articles (2019–2026), Statista, McKinsey, Gartner, and HubSpot industry reports.

3.4 Analytical Framework

Quantitative analysis employed IBM SPSS v26. Descriptive statistics (mean, standard deviation) characterised the sample and variable distributions. Pearson's correlation assessed bivariate relationships; multiple regression identified predictors of purchase intention; chi-square tests examined group-level differences by demographic subgroup. Qualitative responses were thematically coded using NVivo 12.

IV. RESULTS AND DATA ANALYSIS

4.1 Sample Profile

Table 1: Demographic Profile of Respondents (N = 420)

Characteristic	Category	n	% of Sample
Age (Generation)	Gen Z (18–24)	168	40.0
	Millennials (25–40)	189	45.0
	Gen X (41–55)	63	15.0
Gender	Male	231	55.0
	Female	181	43.1
	Non-binary / Prefer not to say	8	1.9
Education	Undergraduate	130	31.0
	Graduate	189	45.0
	Postgraduate	84	20.0
	Others	17	4.0



Monthly Income	Below ₹25,000	147	35.0
	₹25,001–₹60,000	168	40.0
	Above ₹60,000	105	25.0

4.2 Social Media Usage and Platform Preferences

An overwhelming 78% of respondents reported daily social media usage, with 43% spending more than three hours per day on platforms. Cross-tabulation revealed a significant association between daily usage exceeding three hours and self-reported impulse purchase incidence ($\chi^2 = 24.73$, $df = 4$, $p < 0.001$), confirming the algorithmic exposure–impulsivity link hypothesised in the literature.

Table 2: Platform Usage, Brand Discovery, and Impulse Purchase Attribution

Platform	Primary Users (%)	Brand Discovery (%)	Impulse Purchase Rate (%)
Instagram	42	47	38
YouTube	24	22	21
Facebook	18	19	16
TikTok / Reels	11	9	19
Twitter / LinkedIn	5	3	6

Instagram dominated both primary usage (42%) and brand discovery (47%), driven by its visually oriented interface, Stories, and Reels features. Notably, TikTok/Reels accounted for a disproportionately high impulse purchase rate (19%) relative to its user share (11%), consistent with deep learning–driven 'flow state' engagement reported by Kotler et al. (2021).

4.3 Influence of SMM on Consumer Decision-Making Stages

Respondents were asked to identify the primary source of influence at each stage of the buying process. Social media dominated the Information Search stage (68% of respondents), displacing traditional search engines, particularly among Gen Z. At the Evaluation of Alternatives stage, 74% of respondents reported that comments sections and peer reviews on social platforms influenced their brand comparisons. Instagram Shop and Facebook Marketplace were cited by 61% as enablers of zero-friction, single-session purchase completion, substantially compressing the traditional decision-making timeline.

4.4 Consumer Perception and Trust: Likert-Scale Analysis

Table 3: Consumer Perception Items — Descriptive Statistics

Statement	Mean	SD	% Agree / Strongly Agree
SMM has improved my awareness of new products	4.31	0.68	89
Social media ads influence my purchase decisions	3.94	0.84	76
I trust micro-influencer recommendations	3.88	0.91	74
I trust macro-celebrity endorsements	3.12	1.04	52
UGC (reviews/comments) reduces my purchase risk	4.11	0.77	83
Personalised ads help me find relevant products	3.76	0.96	70



I have made impulse purchases via social media	3.68	1.02	65
I trust brand content on social media generally	3.29	1.09	55

The highest mean scores were recorded for product discovery (4.31) and UGC's risk-reduction function (4.11), reinforcing the primacy of social proof in purchase facilitation. Trust in general brand content attracted the lowest mean (3.29), illustrating the trust deficit described in the literature. The micro-influencer vs. macro-celebrity divergence (3.88 vs. 3.12) corroborates Lou and Yuan's (2019) authenticity-credibility model.

4.5 Inferential Statistics and Hypothesis Testing

Table 4: Hypothesis Testing Summary

Hypothesis	Statistical Test	Result	Decision
H1: SMM → Purchase Behaviour	Regression (β = 0.58)	p < 0.001	Supported
H2: Engagement → Brand Loyalty	Pearson r = 0.65	p < 0.001	Supported
H3: SMM Ads → Purchase Intention	Regression (β = 0.47)	p < 0.001	Supported
H4: Influencer Mktg → Buying Decision	Regression (β = 0.52)	p < 0.001	Supported
H5: UGC → Perceived Risk Reduction	Regression (β = 0.61)	p < 0.001	Supported
H6: Trust → Purchase Decision	Regression (β = 0.44)	p < 0.001	Supported

H7: Demographics moderate SMM response	Chi-square tests	p < 0.05	Supported
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All seven hypotheses were supported at conventional significance levels. The strongest predictor of purchase behaviour was UGC exposure (β = 0.61), followed by SMM engagement broadly (β = 0.58) and influencer marketing (β = 0.52). Trust in SMM content, while significant, exhibited the weakest regression coefficient (β = 0.44), consistent with its role as a boundary condition rather than a primary driver. Demographic moderation was confirmed: Gen Z respondents showed significantly higher impulse purchase rates and influencer sensitivity than Gen X (χ² = 19.84, df = 6, p < 0.01).

4.6 Impulse Buying and Algorithmic Triggers

65% of respondents confirmed having made at least one unplanned social media-driven purchase in the preceding three months. FOMO-inducing stimuli—Instagram Stories countdowns, limited-time offers, and flash sales—were cited by 58% as the primary trigger. Regression analysis confirmed that daily usage time, exposure to personalized recommendations, and FOMO susceptibility jointly explained 49% of variance in impulse buying frequency (R² = 0.49, F = 67.3, p < 0.001). This finding has important implications for ethical marketing practice.

V. DISCUSSION

The empirical results of this study substantiate and extend several strands of the SMM–consumer behaviour literature. The confirmation that UGC is the strongest predictor of purchase behaviour (H5; β = 0.61) represents perhaps the most actionable finding for practitioners. This result aligns with Cheung et al. (2021) and underscores a fundamental shift in persuasive authority: the informal testimonial of an anonymous consumer reviewer has eclipsed the



professionally crafted brand advertisement as the most influential stimulus at the point of purchase evaluation. Organisations that continue to allocate disproportionate budgets to production-heavy paid media—at the expense of community management and UGC amplification—are likely misallocating resources.

The micro-influencer advantage (mean trust: 3.88 vs. 3.12 for macro-celebrities) supports the parasocial relationship theory applied to digital contexts. Consumers perceive micro-influencers as 'people like them'—relatable, approachable, and potentially honest—whereas macro-celebrities are perceived as commercially motivated, reducing message credibility. For budget-constrained marketers, this finding is doubly significant: micro-influencer campaigns deliver higher engagement and trust at substantially lower cost-per-post than celebrity partnerships.

The non-linear consumer journey finding—where 61% of respondents completed purchases within a single social media session—challenges the prevailing linear funnel frameworks still dominant in marketing strategy textbooks. The S-O-R model, as applied and extended in this study, better captures the stimulus-saturated, algorithm-mediated decision environment: stimuli (SMM content) act upon organismic states (trust, FOMO, perceived value) to generate compressed, often impulsive responses. The managerial implication is that brands must optimise for zero-friction, in-app commerce rather than driving users to external websites, where each additional click statistically reduces conversion probability by approximately 20% (HubSpot, 2023).

The trust deficit—evidenced by the lowest Likert mean (3.29) for general brand trust—is a structural challenge rather than a tactical one. As SMM content volume increases and algorithmic curation intensifies, consumers face epistemic difficulties in distinguishing genuine endorsements from paid promotion. Regulatory

frameworks in India remain nascent relative to GDPR standards, and industry self-regulation of influencer disclosure is inconsistent. Brands that invest in radical transparency—clear sponsorship disclosures, authentic storytelling, and verifiable social proof—are positioned to capture the trust premium that competitors sacrificed for reach.

The demographic moderation findings (H7 supported) reinforce the need for generation-specific strategies. Gen Z consumers, raised in the social media era, exhibit both higher SMM sensitivity and higher FOMO-driven impulsivity, but paradoxically also higher scepticism toward overt advertising—a 'sophistication paradox' that demands nuanced content strategies prioritising authenticity over polish. Millennial consumers exhibit the highest brand loyalty scores following positive SMM experiences, suggesting this cohort represents the highest long-term value target for relationship-marketing investment.

VI. CONCLUSIONS AND RECOMMENDATIONS

This study provides comprehensive empirical evidence that social media marketing exerts a significant, multi-dimensional influence on consumer buying behaviour in the Indian urban market. All seven hypotheses were supported, establishing that SMM engagement, UGC, influencer marketing, personalised advertising, and trust collectively and individually shape purchase intentions and outcomes. The study contributes an updated S-O-R framework integrating AI-driven personalisation mechanisms and social commerce dynamics—two constructs underrepresented in prior Indian marketing literature.

6.1 Theoretical Contributions

The study advances the S-O-R model by empirically demonstrating that algorithmic personalisation functions as



a dynamic stimulus amplifier, intensifying the relationship between SMM exposure and impulsive response. It also establishes UGC—rather than branded advertising—as the dominant persuasive stimulus in the contemporary digital purchase environment, a finding with implications for information processing theory and risk-reduction research.

6.2 Managerial Recommendations

Practitioners should: (i) prioritise UGC amplification and community management over production-intensive branded content; (ii) build micro-influencer portfolios calibrated to niche audience segments for authenticity and cost efficiency; (iii) optimise product discovery and checkout flows for single-session, in-app completion to capture algorithm-driven impulse intent; (iv) invest in social SEO—keyword optimisation in captions, alt-text, and hashtag strategy—as Gen Z increasingly uses Instagram and TikTok as primary search engines; (v) deploy FOMO-inducing formats (countdown Stories, flash offers) judiciously, balancing conversion uplift against consumer trust erosion; and (vi) implement transparent influencer disclosure practices proactively, ahead of regulatory enforcement, to build durable trust equity.

6.3 Limitations and Future Research Directions

This study is bounded by its cross-sectional design, urban sampling frame, and self-reported behavioural measures. Response bias—particularly the under-reporting of impulse purchase frequency due to social desirability—is acknowledged as a limitation. Future research should employ longitudinal designs tracking the same cohort over 12–24 months to assess whether SMM-induced trial purchases convert to durable brand loyalty. Biometric methodologies—eye-tracking and EEG—would eliminate the memory gap inherent in survey self-reporting and provide direct measures of consumer attentional and emotional responses to SMM stimuli. Comparative cross-country studies would clarify the extent to which cultural variables (collectivism, uncertainty avoidance) moderate

the SMM–buying behaviour relationship. Finally, as generative AI produces increasingly human-indistinguishable synthetic influencers and advertisement copy, research investigating consumer detection of AI-generated content and its effect on brand sincerity constitutes an urgent emerging agenda.

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23. Declaration of Competing Interests & Ethical Compliance
24. The author declares no competing financial interests. Informed consent was obtained from all survey participants prior to data collection. Respondent anonymity was strictly preserved; no personally identifiable information was stored. This study received no external funding. The research protocol conforms to institutional ethical guidelines.