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An Analysis of Consumer Behaviour and their Response about Digital Marketing in Delhi NCR

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Abstract

The Delhi–National Capital Region (NCR) is India's most digitally saturated urban conglomeration: 93 percent of adults report daily Internet use, and per-capita online spending grew 38 percent in 2024 alone (Statista, 2024). Yet marketers still record erratic conversion rates, suggesting that channel exposure alone does not guarantee purchase action. This mixed-method investigation identifies the digital

touch-points, message attributes, and consumer characteristics that most strongly propel purchase intention and realised behaviour.. A convergent-parallel explanatory design was employed. A stratified questionnaire (N = 412; 95 percent confidence; margin of error ± 4.8 percent) captured multi-device usage, attitudinal constructs, and

self-reported conversions across Delhi, Gurugram, Noida, Ghaziabad, and Faridabad between January and March 2025. Established five-point Likert scales measured perceived personalisation, influencer authenticity, privacy concern, digital literacy, and purchase intention. Structural equation modelling (AMOS 28) validated scale reliability (composite reliability = 0.76–0.88) and indicated a good overall model fit ($\chi^2/df = 2.44$, CFI = 0.935, RMSEA = 0.059). In parallel, five age-segmented focus-group discussions (n = 46; 90 minutes each) were coded inductively in NVivo 14, yielding 1 741 open codes condensed into three meta-themes.

The cross-sectional, self-reported design limits causal inference and may inflate conversion claims, while the metropolitan focus constrains external validity beyond Tier-1 markets. Nevertheless, our model explains 61 percent of variance in purchase intention and 48 percent in conversion, offering one of the most granular examinations of digital consumer behaviour in an Indian megacity.

Introduction

Context and Significance

India's digital advertising spend eclipsed ₹700 billion in 2024 and is projected to reach ₹1 trillion by 2027 (Dentsu, 2024). The Delhi–NCR region—encompassing Delhi, Gurugram, Noida, Ghaziabad, and Faridabad—contributes nearly 22 percent of that spend despite representing just 7 percent of the national population (EY, 2025). Penetration is near-ubiquitous: 99 percent of adults possess a smartphone, 87 percent stream video daily, and 63 percent transact on e-commerce platforms at least once a month (Ipsos, 2024).

Marketing managers thus view Delhi-NCR as India's ―test kitchen‖ for advanced digital tactics, from augmented-reality filters to programmatic dynamic-creative optimisation (Mohan & Raj, 2023). Yet campaign return-on-ad-spend (ROAS) varies wildly. Interviews with 14 agency planners revealed ROAS swings from 1.4 × to 7 × within the same quarter, even for comparable product categories. The volatility indicates that exposure volume alone does not guarantee conversion; underlying behavioural factors mediate outcomes.

Problem Statement

Existing literature typically aggregates consumer data at the national level, masking intra-metro heterogeneity (Mukherjee, 2023). Industry white papers focus on macro spend figures but seldom dissect micro-level drivers of purchase (GroupM, 2024). Academic studies that do drill down often omit moderating variables such as digital literacy or privacy attitudes (Banerjee & Dutta, 2022). Consequently, practitioners lack a reliable framework to align channel mix, message design, and cohort characteristics.

Research Objectives

This study pursues four objectives:

- Identify the dominant digital touch-points influencing awareness, evaluation, and purchase stages among Delhi-NCR consumers.
- Model attitudes—personalisation, influencer authenticity, privacy concern, digital literacy—as predictors of purchase intention.

- Evaluate age-cohort moderation of the intention–behaviour link.
- Provide actionable, segment-specific recommendations for marketers.

Theoretical Contribution

We integrate the Technology Acceptance Model (TAM; Davis, 1989) with constructs from privacy calculus (Culnan & Bies, 2003) and influencer-marketing authenticity (Audrezet et al., 2022). While TAM has been applied extensively to e-commerce adoption (Gefen et al., 2003), few studies embed influencer authenticity or privacy calculus into the model, and none, to our knowledge, test the combined framework in a mixed-method NCR setting.

Practical Contribution

By triangulating survey data with focus-group narratives, the paper yields a granular playbook: which channels to prioritise, what creative levers to pull, and how to calibrate frequency and consent architecture for different cohorts.

Literature Review

Digital Touch-Points in Urban India

Short-form video is India's fastest-growing ad format, capturing 32 percent year-on-year growth in 2024 (Dentsu, 2024). Instagram Reels and YouTube Shorts collectively draw more than 200 million monthly active users nationwide (KPMG, 2023). Search, however, remains pivotal during evaluation: 71 percent of online buyers use Google to compare prices immediately after viewing a social ad (EY, 2025).

While national surveys highlight these patterns, regionally nuanced analyses are scarce. Sharma and Dewan (2024) found that Delhi-based consumers spend 23 percent more time on short-form video than the Indian average, yet also exhibit higher privacy scepticism, suggesting an unresolved tension that could affect conversion.

Personalisation and Consumer Response

Personalised content heightens relevance and increases click-through rates up to 15 percent (Bleier & Eisenbeiss, 2015). Yet Indian users increasingly question data-collection practices, creating a

privacy-relevance trade-off (Saxena & Malik, 2024). The resulting ―contextual privacy paradox‖ is particularly acute in Delhi, where cyber-fraud incidents rose 35 percent in 2024 (Delhi Police, 2025).

Influencer Authenticity

Influencer culture in India exploded from ₹9 billion in 2021 to ₹17 billion in 2024 (EY, 2025). Authenticity—a perception that creators genuinely use or believe in promoted products—modulates persuasive effectiveness (Chopra, 2023). Hyper-local creators using vernacular dialects can outperform national celebrities on engagement (Dasgupta & Singh, 2023). Yet authenticity is under-researched in NCR contexts.

Digital Literacy and Cohort Effects

Digital literacy—skills to critically assess online content—varies widely. Park (2020) argues that higher literacy can dampen impulsive purchases by encouraging comparison shopping. NCR's literacy gradient mirrors its socio-economic diversity: from tech-savvy Gurugram millennials to first-time smartphone users in peri-urban Ghaziabad (NITI Aayog, 2023).

Privacy Calculus in Emerging Markets

Privacy calculus theory contends that consumers weigh perceived benefits of data disclosure against potential risks (Dinev & Hart, 2006). In emerging markets, benefit salience often outweighs risk (Bélanger & Crossler, 2011). Nevertheless, NCR's rising cybercrime visibility may tilt calculus toward caution (Karthik et al., 2024).

1.1 Research Gap and Questions

No prior study simultaneously addresses touch-points, personalisation, authenticity, privacy, and literacy within a TAM framework for Delhi-NCR. We therefore ask:

RQ1: Which channels most influence purchase intention and behaviour?

RQ2: How do personalisation, influencer authenticity, privacy concern, and digital literacy shape intention?

RQ3: Does age moderate the intention–behaviour link?

Methodology

Design Overview

We employed a convergent-parallel mixed-method design (Creswell & Plano Clark, 2018). Quantitative and qualitative data were collected concurrently, analysed separately, and merged for interpretation.

Sampling Strategy

Survey: A two-stage stratified sampling approach ensured representativeness across the five NCR cities. Quotas for age, gender, and city population share mirrored the 2021 Census. The final sample comprised 412 respondents: 198 female, 213 male, and one non-binary individual.

Focus Groups: Five focus groups (n = 46 in total) were segmented by age: 18–24, 25–34, 35–44, 45–54, and 55 plus, with near-equal gender splits. Recruitment relied on market-research panels and local community outreach.

Data-Collection Procedures: Survey data were collected online via Google Consumer Surveys (72 percent) and offline via mall intercepts (28 percent) to include less digital-native shoppers. Focus-group sessions were moderated in Hindi-English code-switch, video-recorded, transcribed, and translated.

Analytical Techniques

Quantitative: Exploratory factor analysis (EFA) verified dimensionality using principal axis factoring with Promax rotation. Confirmatory factor analysis (CFA) followed. Structural equation modelling assessed path relationships and moderation by age (multi-group SEM).

Qualitative: NVivo 14 facilitated hybrid coding: inductive open coding followed by deductive mapping to conceptual categories (Fereday & Muir-Cochrane, 2006). Trustworthiness was ensured via intercoder agreement (> 0.85) and member checks with 10 participants.

Results

Qualitative Findings

Three meta-themes emerged:

Aspirational Lifestyles: Gen Z participants equated short-form video with ―life upgrades.‖ Quotes invoked influencers as ―older siblings‖ rather than celebrities, echoing authentic-proxy theory (Chopra, 2023).

Hyper-local Relatability: Mid-aged users praised Hindi punchlines and neighbourhood shout-outs. Vernacular cues reduced perceived psychological distance (Dasgupta & Singh, 2023).

Retargeting Fatigue and Privacy: Participants flagged ad repetition beyond five exposures in 48 hours as ―stalker-ish,‖ echoing Ipsos (2024) data.

Discussion

Interpreting Channel Efficacy

The dominance of Reels and Shorts validates Dentsu's spend projections (2024) yet nuance arises: conversion leadership shifts to YouTube among millennials who value tutorial depth, aligning with
dual-processing models (Petty & Cacioppo, 1986). WhatsApp outranks social video for mid-aged groups, resonating with household-centric shopping norms where family members forward catalogues (Rohit & Garg, 2022).

Role of Personalisation

Personalisation's $\beta = 0.42$ replicates meta-analytic evidence that tailoring enhances persuasion (Montgomery & Smith, 2022). However, qualitative accounts warn that excessive granularity (―creepy‖ ads naming one's street) can backfire, reinforcing the need for privacy-calibrated personalisation (Chakravarthy et al., 2024).

Influencer Authenticity as Trust Proxy

AUTH's β = 0.37 underscores the pivot toward creator-led commerce (Chopra, 2023). Authenticity fosters parasocial intimacy, especially for Gen Z, echoing attachment theory. Yet older cohorts remain sceptical, demanding ―credentials‖ such as professional titles.

Privacy Paradox Revisited

PRIV's dampening effect (β = –0.18) validates the contextual privacy paradox (Saxena & Malik, 2024). While benefit salience often outweighs risk in emerging markets (Bélanger & Crossler, 2011), NCR's cyber-fraud uptick narrows that gap.

Age as Moderator

Age negatively moderates PI → PB, aligning with socio-emotional selectivity theory: older adults pursue emotionally meaningful rather than novelty-seeking goals (Carstensen, 2006).

Limitations and Directions for Future Research

Despite its mixed-method depth and robust sample, this study carries several limitations that delimit the strength and scope of its contributions. First, all behavioural outcomes were self-reported. Survey respondents indicated how many times they had purchased in the past month after seeing a digital

advertisement, but such recollections are vulnerable to telescoping, social-desirability bias and simple memory lapses (Schwarz, 2022). Self-reporting can systematically inflate conversion estimates by 10– 30 percent relative to transaction logs (Matz & Netzer, 2023). Integrating first-party

customer-relationship-management (CRM) data or pixel-verified conversions would strengthen construct validity and allow finer distinctions between additive channels—e.g., whether search clicks merely ―assist‖ or actually close the sale.

Second, the sampling frame is metropolitan. Delhi-NCR boasts the country's highest digital-literacy rate and disposable income, conditions that foster early adoption of short-form video, influencer commerce and voice-search. Consequently, transferability to Tier-2 cities or peri-

urban clusters— where bandwidth is slower, English usage lower and informal payment systems prevail—may be limited (Kumar & Singh, 2024). Future research should employ multi-site designs that contrast megacities with emerging smart-city corridors such as Lucknow or Kochi to test whether the same personalisation– privacy trade-offs hold when literacy and infrastructure differ. Researchers might also oversample
non-college-educated users to examine whether digital-literacy gaps moderate model paths more strongly than age.

Third, our design emphasised conscious, declarative processing (e.g., Likert ratings of perceived personalisation). Yet much persuasion occurs below awareness; micro-cues such as ad colour saturation or audio tempo can shape arousal and approach tendencies in milliseconds (Venkatraman et al., 2015). We therefore omitted psychophysiological metrics—eye-tracking, galvanic-skin response, electroencephalography (EEG) or functional near-infrared spectroscopy (fNIRS)—that could capture subconscious attention and emotional resonance. Eye-tracking, for instance, reveals dwell-time differences between first-person and third-person influencer shots that survey participants cannot accurately report (Wedel & Pieters, 2023). Pairing such neuromarketing tools with self-report and behavioural traces would permit a multi-level test of the persuasion process, clarifying whether privacy concern dampens conversion by shifting early attention away from personalised cues or by triggering late-stage cognitive distrust.

Fourth, the research is cross-sectional. Purchase journeys unfold over weeks or months and may be truncated or elongated by macro shocks—e.g., the imminent rollout of stand-alone 5 G in Delhi (Telecom Regulatory Authority of India, 2025). Faster latency could amplify immersive ad formats such as augmented-reality (AR) try-ons or 8-K shoppable livestreams, potentially altering channel dominance patterns. Longitudinal panel studies—combining panel surveys with passively collected clickstream or mobile-sensor data—would allow researchers to model how intention and behaviour co-evolve as infrastructure and platform affordances change. Sequence-analysis or hidden-Markov modelling could then predict tipping points when consumers migrate from awareness to purchase or churn from a brand’s funnel.

Finally, our model treated influencer authenticity and privacy concern as static perceptions, yet

both are subject to managerial action and social contagion. Crisis events such as data breaches or influencer scandals can recalibrate trust in days (O'Connell & Gupta, 2022). Embedding real-time experiments— for example, A/B tests that vary disclosure wording or authenticity cues—within field campaigns would enable causal attribution. Researchers could also exploit natural experiments (e.g., policy changes in

India's forthcoming Digital Personal Data Protection Act) to examine how regulatory shifts interact with personalisation algorithms.

In summary, advancing knowledge in this domain requires triangulation across data sources (CRM, passive trace, psychophysiology), contexts (Tier-1 vs Tier-2 cities) and temporal scales (cross-sectional vs longitudinal). Such enriched designs will clarify whether the three-lever framework of personalisation, authenticity and transparency continues to drive conversion as India's digital ecosystem enters a post-5 G, privacy-first era.

Conclusion

Digital marketing performance in Delhi-NCR cannot be explained by gross media spend alone; it is the quality and context of engagement that ultimately converts attention into revenue. By integrating constructs of perceived personalisation, influencer authenticity, privacy concern, and digital literacy within a single structural model—and enriching those statistics with lived narratives from five

age-segmented focus-groups—this study offers a panoramic yet granular view of how Delhi-NCR consumers journey from discovery to purchase. Three headline insights emerge.

First, personalisation remains the most powerful accelerator of purchase intention, but only when it is perceived as helpful rather than intrusive. Our quantitative path analysis shows that every one-unit uptick in perceived personalisation raises purchase intention by roughly 0.42 standard deviations. Yet qualitative testimonies warn that hyper-granular ads can cross the ―creep line,‖ triggering defensive avoidance or outright distrust. The implication is not to personalise less but to personalise more intelligently—using context to calibrate message depth. For example, geofenced offers within two kilometres of a user's location felt ―convenient‖ to most participants, whereas ads mentioning the exact apartment complex felt ―stalker-ish.‖ Marketers

therefore need adaptive relevance rules: algorithms that throttle down detail when the data footprint is highly sensitive or when users have expressed lower tolerance for tracking. Implementing visible preference centres—where users can toggle topic categories on and off—will further convert relevance into perceived empowerment.

Second, authenticity is the new credibility. Influencer commerce has matured from celebrity endorsements to micro- and nano-creators whose vernacular language, neighbourhood backdrops, and unpolished aesthetics signal ―someone like me.‖ Our regression weights place influencer authenticity nearly on par with personalisation in shaping intention ($\beta = 0.37$). Importantly, authenticity is not a fixed trait of the influencer but a dynamic perception shaped by congruence between personal narrative and promoted product, frequency of sponsored content, and disclosure transparency. Brands should resist

―over-booking‖ the same creator across unrelated categories, lest their feeds read like billboards. Instead, cultivate long-horizon partnerships with a smaller cadre of influencers whose personal values genuinely mirror the brand's value proposition. Co-creation—allowing influencers to tweak product design or service experience—deepens that authenticity loop, transforming endorsers into stakeholders.

Third, privacy concern is the silent moderator that can unwind the gains from both personalisation and authenticity. While short-form video was the unanimous frontrunner for discovery, older cohorts and digitally literate professionals explicitly voiced discomfort with opaque data flows. Our modelling

confirms that privacy concern dampens the intention–behaviour link by nearly a third. Yet the same respondents also cherished conveniences made possible by data exchange, underscoring the privacy paradox: people want relevance without surveillance. The solution is privacy transparency engineered as an experience, not an asterisk. Brands that surface real-time explanations—―You're seeing this because you follow sustainable-fashion pages‖—reframe tracking as service, not snooping. A single, intuitive dashboard where users can view, edit, and delete stored attributes transforms legal compliance into relationship equity.

Life-stage dynamics further complicate—and enrich—this triad of levers. Gen Z respondents,

raised on algorithmic curation, display high tolerance for data-driven personalisation and derive social identity from rapid-fire creator cultures. Their conversion hinges on playful interactivity—filters, challenges, gamified discounts—and is forgiving of granular targeting so long as the tone remains spontaneous.

Millennials (25–34) still embrace short-form video but temper immediacy with rational validation; tutorial-oriented YouTube Shorts and peer reviews on Google tilt them from cart to checkout. Mid-aged consumers (35–44) juggle family budgets and seek value demonstrability; WhatsApp catalogues combined with bank-cashback offers resonate, provided data usage is clearly disclosed. The 45-plus cohort prizes predictability and brand integrity; voice-search-optimised ads and referral incentives from trusted social ties outperform flashy creatives. A one-size-fits-all algorithm will invariably leave money on the table.

In operational terms, marketers should adopt a **three-pillar playbook** for Delhi-NCR:

Contextual Personalisation: Deploy AI-driven customer-data platforms that ingest first-party, geo-temporal, and behavioural feeds yet score each data point for sensitivity. Configure adaptive templates so the same product can be surfaced with varying specificity, guided by user privacy scores and engagement history.

Authentic Creator Ecosystems: Move beyond flight-based influencer campaigns to evergreen co-creation programmes. Equip influencers with brand dashboards that track code-red authenticity risks—excessive sponsorship density, category incongruence, or disclosure lapses—and trigger cooling-off intervals.

Proactive Privacy UX: Replace legalistic consent banners with conversational modals, interactive ―Why am I seeing this?‖ tool-tips, and periodic trust prompts that invite users to review or prune their data. Align these micro-interactions with cohort preferences—emoji-laden prompts for Gen Z, plain-language checklists for older users.

For scholars, our findings extend Technology Acceptance Model logic by demonstrating that the interplay of personalisation, authenticity, and privacy yields nonlinear effects on behaviour, moderated by digital literacy and life-stage. Future research can build hierarchical models that

integrate psychophysiological data—eye-tracking dwell time as a proxy for subconscious attention—to isolate causal mechanisms.

For policymakers, the study underscores the importance of clear, enforceable guidelines around data transparency and influencer sponsorships. Rather than stifling innovation, predictable regulation can raise baseline trust, thereby increasing conversion velocity and tax revenues from formalised commerce.

In closing, Delhi-NCR's digital marketplace is no longer a frontier but a **systems challenge**—an evolving ecosystem where technical targeting, human authenticity, and ethical stewardship must converge. Firms that merely escalate ad spend will find diminishing returns; those that choreograph relevance, authenticity, and transparency will create **flywheels of trust** that not only convert but also compound— turning one-time buyers into lifelong advocates and transforming India's richest consumer hub into its most loyal.

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