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Article

Online Reviews as Antecedents of Purchase Intention in Omnichannel Environments: A Canonical Correlation and Information-Systems Perspective

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Abstract: Online reviews constitute a pivotal component of the contemporary consumer decision-making process, particularly within omnichannel retail ecosystems that increasingly rely on interconnected computer information systems, big data analytics, and Internet of Things (IoT) infrastructure to capture, transmit, and act upon user-generated content (UGC). As consumers increasingly navigate purchases across multiple touchpoints – physical stores, e-commerce platforms, and mobile applications UGC functions as a critical information intermediary that shapes attitudes, moderates perceived risk, and stimulates purchase intention. The present study investigates how online reviews influence consumer behaviour in an omnichannel environment, drawing on the Stimulus–Organism–Response (SOR) theoretical framework and the Cognition–Affect–Conation (CAC) model. Employing a descriptive cross-sectional survey design with a valid sample of 506 respondents, canonical correlation analysis was used to examine the relationship between review-related attitudinal–perceptual dimensions and two dependent variables: purchase intention and customer shopping experience. Findings confirm that omnichannel marketing strategy (showrooming/webrooming) and perceived risk significantly influence purchase intention, while online reviews alone do not independently enhance the overall customer experience, a construct mediated by numerous post-purchase and operational factors. These results extend the theoretical understanding of eWOM dynamics in multi-touchpoint retail settings, connect this behavioural evidence to the growing computer-information-systems literature on big-data-driven review analytics and IoT-enabled omnichannel data integration, and carry practical implications for retail managers and information-systems architects seeking to optimise review integration strategies.
Keywords: online reviews, purchase intention, shopping experience, omnichannel marketing, channel integration; e-WOM (Word of Mouth), consumer behaviour, big data analytics, business intelligence, Internet of Things (IoT), information systems

1. Introduction

The proliferation of internet technologies has fundamentally reconfigured both marketplace dynamics and consumer behaviour. The emergence of digital channels, online platforms, mobile applications, and social commerce has compelled retailers to rethink conventional marketing approaches and develop strategies that integrate multiple consumer touchpoints into coherent purchase journeys (Verhoef, Kannan, & Inman, 2015). This multi-touchpoint reality defines omnichannel retailing: a distribution paradigm in which consumers simultaneously and interchangeably engage with physical stores, websites, mobile applications, and social media to complete a single transaction (Massi, Lavorato, & Di Gregorio, 2023).


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Contemporary retail data underscore the scale of this shift. Omnichannel consumers shop approximately 70% more frequently than single-channel shoppers, and brands deploying three or more channels register consumer engagement rates 250% higher than single-channel competitors (Capital One Shopping Research, 2024). In the United States alone, e-commerce sales reached USD 1.119 trillion in 2023, representing 22% of total retail turnover (Fit Small Business, 2024). Among the top 1,000 retail chains, 77.2% offered Buy Online, Pick Up In-Store (BOPIS) services in 2024, a statistic that illustrates how channel integration has moved from competitive advantage to baseline customer expectation (Capital One Shopping Research, 2024).

Within this landscape, online reviews, a canonical form of electronic word-of-mouth (e-WOM), occupy a particularly influential position. Research consistently indicates that 95% of consumers consult online reviews before making a purchase (Hu & Yang, 2021), and empirical meta-analyses confirm that review quality, source credibility, and information quantity each exert significant effects on purchase intention (Verma et al., 2023). For omnichannel consumers, reviews bridge the online–offline divide: they inform pre-purchase consideration, influence in-store decisions through mobile devices, and shape post-purchase evaluations that feed back into future purchase cycles.

The academic literature has, however, treated online reviews and omnichannel strategy as largely separate research streams. Studies examining online reviews tend to focus on single-platform contexts (e.g., Amazon, TripAdvisor), while omnichannel research often subordinates the role of UGC to broader questions of channel integration and logistics (Cai & Lo, 2020; Yang et al., 2019). The present study addresses this gap by empirically examining how online reviews shape consumer attitudes and repurchase intention within an explicitly omnichannel shopping environment, using the SOR framework to situate user-generated review content as an environmental stimulus.

A further gap concerns the computer-information-systems infrastructure that increasingly underpins omnichannel review ecosystems. While marketing research has examined the behavioural effects of reviews, and computing research has separately advanced big-data and IoT techniques for capturing, storing, and analysing UGC at scale (Salehan & Kim, 2016; Caro & Sadr, 2019), comparatively few studies connect these computational and information-systems advances back to validated behavioural constructs such as purchase intention and shopping experience. This study contributes to that intersection by situating a rigorously operationalised, multi-construct behavioural model within a broader information-systems context, in which online reviews function simultaneously as psychological stimuli and as large-scale digital data assets that require systematic analytics infrastructure to be of managerial value.

The study proposes three core research questions:

RQ1: Do online reviews influence consumer repurchase intention across the full purchase journey in an omnichannel context?

RQ2: Does multichannel integration strengthen the relationship between online reviews and purchase intention?

RQ3: Do online reviews independently enhance the overall customer shopping experience?

2. Literature Review and Hypothesis Development

Omnichannel Retailing and Consumer Behaviour

Omnichannel retailing represents the integration of all retail channels to deliver a seamless, consistent consumer experience (Verhoef et al., 2015). The conceptual architecture of omnichannel strategy encompasses four forms of channel integration: the addition of online channels to offline retailers; the development of physical showrooms by online-first retailers; mobile commerce through apps and responsive websites; and cross-channel fulfilment enabling transactions such as online purchase with in-store returns (Gallino & Moreno, 2019).

Consumer journeys in omnichannel environments are typically segmented into three phases: pre-purchase (search, information gathering, and product evaluation); purchase (transaction completion); and post-purchase (review writing, product returns, and repeat buying). Digital technologies play distinct roles at each stage: during pre-purchase, consumers use digital channels for product research, price comparison, and store discovery; during the purchase phase for payment; and in post-purchase for troubleshooting, posting reviews, and accessing customer service (Gugnani & Choudhary, 2017). A seamless omnichannel experience requires that these stages are connected and consistent across all touchpoints.

Empirical evidence confirms that seamless multichannel experiences positively influence purchase intention and strengthen brand authenticity perceptions (Massi et al., 2023). Omnichannel consumers demonstrate significantly higher repurchase rates and brand advocacy than single-channel counterparts (Sopadjieva, Dholakia, & Benjamin, 2017). Moreover, shoppers who engage with three or more channels demonstrate lifetime values 30% higher than single-channel shoppers (Embryo, 2024).

Online Reviews as e-WOM: Nature and Influence

An online review is a publicly accessible, positive, neutral, or negative statement created by a past, present, or prospective consumer about a product or company, disseminated via the internet (Zhang, Xu, Zhao, & Yu, 2018). Online reviews constitute a canonical form of electronic word-of-mouth, and represent the predominant channel through which consumers share and consume experiential information about products and brands in digital environments (Erkan & Evans, 2018).

Four primary typologies of online review platforms have been identified: retail websites (e.g., Amazon, Flipkart), independent review platforms (e.g., Trustpilot, Yelp), video-sharing platforms (e.g., YouTube), and personal blogs (Constantinides & Holleschovsky, 2016). These platforms present reviews in varying formats textual ratings, numeric scores, upvote systems, and multimedia content, with each format eliciting distinct cognitive responses.

Review characteristics exert substantial influence on consumer decision-making. Argument quality and perceived informativeness are the primary systematic determinants of purchase intention (Zhang, Zhao, Cheung, & Lee, 2014), while source credibility, reviewer expertise, and review quantity serve as heuristic cues that simplify decision-making under uncertainty (Verma, Dewani, Behl, Pereira, Dwivedi, & Del Giudice, 2023). A rigorous meta-analysis across cultural and contextual factors confirms that source trustworthiness exerts a stronger effect on purchase intention in collectivistic cultures, a finding of particular relevance for the Indian consumer context (Hu & Yang, 2021).

Recent work highlights the growing importance of visual e- WOM. Studies employing the SOR framework indicate that visual review quality and credibility significantly enhance perceived information usefulness, while information quantity primarily shapes attitudes but does not directly drive review adoption (PLOS One, 2025). For Generation Z consumers, e- WOM information quality, credibility, and quantity collectively influence purchase intention, mediated by attitudes towards information (Nguyen & Nguyen, 2024).

Online Reviews, Perceived Value, and Perceived Risk

Perceived value is the consumer's overall evaluation of the net benefits of a product relative to its costs and is positively influenced by informative, credible online reviews (Chakraborty, 2019). Conversely, perceived risk is the subjective probability of a negative purchase outcome and is moderated by the volume and quality of reviews. A growing body of literature confirms that objective, easily comprehensible reviews are more effective in reducing perceived risk than subjective, emotionally laden content (Petty, Cacioppo, & Schumann, 1983; Thomas, Wirtz, & Weyerer, 2019).

The relationship between review timeliness and purchase intention is particularly salient for high-involvement product categories, where recency of reviews signals product currency and reduces information asymmetry (Cheong, Muthaly, Kuppusamy, & Han, 2020). Repeat purchase information embedded within e- WOM further enhances perceived value and consumer confidence, especially for utilitarian products (Li, 2023).

Online Reviews and Customer Experience in Omnichannel Contexts

Customer experience is a multidimensional construct encompassing cognitive, affective, and sensory responses across the full consumer journey (Lemon & Verhoef, 2016). While online reviews demonstrably influence attitudinal and intentional components of behaviour (purchase intention, brand attitude), their relationship with post-purchase experience is more complex. Research suggests that customer experience is conditioned by the alignment between pre-purchase expectations, established partly through online reviews, and post-purchase product realisations (Nasermoadeli, Ling, & Maghnati, 2013). Service quality, channel integration quality, and fulfilment reliability are equally, if not more, determinative of experience quality (Yang et al., 2019).

Studies on omnichannel review helpfulness confirm that review ratings and elaborateness positively affect review usefulness, while readability and hedonic enjoyment of review content further enhance its contribution to the shopping experience (Liu & Park, 2015). The practical implication is that platforms which curate reviews for informativeness rather than merely volume will better serve the experiential dimension of omnichannel shopping.

Online review integration strategies (OCR strategies), in which retailers systematically embed curated customer reviews into product pages and marketing communications, have been shown to improve customer engagement for online retailers, though offline retailers often lack the infrastructure to replicate this effect equitably (Li, Li, Tayi, & Cheng, 2019).

Information Systems, Big Data Analytics, and IoT Perspectives on Online Reviews

The proliferation of user-generated review content has increasingly reframed online reviews as a data-management and information-systems problem, and not merely a marketing or behavioural one. Retailers now generate exceptionally high volumes of unstructured textual, numeric, and multimedia review data across channels, a phenomenon that aligns with the volume, variety, velocity, and veracity characterisation commonly used to define big data (Salehan & Kim, 2016). Applying sentiment-mining and text-analytics techniques to large review corpora enables firms to move beyond simple star-rating aggregation towards systematic identification of the specific product or service attributes driving satisfaction and dissatisfaction (Xu, Wang, Li, & Haghighi, 2017). Such business-intelligence-driven analysis of UGC constitutes an emerging sub-stream of computer information systems research that intersects directly with the marketing-oriented e-WOM literature reviewed above.

Parallel developments in the Internet of Things (IoT) have extended the technological infrastructure through which reviews and other UGC are captured, transmitted, and acted upon within omnichannel retail systems. IoT-enabled sensors, smart shelving, RFID tagging, and connected point-of-sale systems allow retailers to link real-time inventory and in-store behavioural data with online review streams, closing the information loop between the supply side (inventory visibility, fulfilment) and the demand side (consumer sentiment, purchase intention) of the omnichannel value chain (Caro & Sadr, 2019). From an information-systems-architecture perspective, this convergence of IoT-generated operational data and big-data-driven review analytics represents an increasingly important design requirement for omnichannel information systems capable of triggering automated re-stocking, dynamic pricing, or targeted review-response workflows.

A further information-systems concern is the integrity of the review data itself. As decision-support systems increasingly rely on online reviews as an input, the proliferation of fabricated or artificially generated reviews threatens the validity of downstream analytics and managerial decision-making (Salminen, Kandpal, Kamel, Jung, & Jansen, 2022). Machine-learning and deep-learning classifiers ranging from Naïve Bayes and support vector machines to transformer-based language models are increasingly deployed to detect linguistic and behavioural markers of deception, an application area of growing relevance to computer information systems research on trust, security, and data quality in retail platforms.

Taken together, this literature suggests that online reviews are simultaneously (a) an e-WOM/behavioural stimulus, as established in previous section, and (b) a large-scale, IoT-augmented data asset whose management raises information-systems questions of architecture, analytics, and data integrity. The present study's use of a structured, multivariate statistical technique (canonical correlation analysis) to model review-derived attitudinal constructs can therefore be read as a methodological process that complement to the computational and textual approaches that dominate the big-data and business-intelligence literature: while the latter extracts signal from unstructured review text at scale, the present study models how consumers' processed perceptions of that signal shape behavioural outcomes.

3. Theoretical Framework

The study is anchored in three complementary theoretical frameworks. First, the Stimulus–Organism–Response (SOR) framework (Mehrabian & Russell, 1974) provides the structural logic for the conceptual model. In this application, online reviews function as external stimuli (S) that trigger cognitive and affective internal states in the consumer (O) specifically, attitudes towards online shopping and assessments of shopping experience which in turn generate behavioural responses (R) in the form of repurchase intention. The SOR framework has been widely validated in physical and digital retail contexts (Zhu, Li, Wang, He, & Tian, 2020; Eroglu, Machleit, & Davis, 2001) and is well-suited to the omnichannel setting, where multiple stimuli including, increasingly, IoT-captured in-store signals operate simultaneously across channels.

Second, the Cognition–Affect–Conation (CAC) model (Lavidge & Steiner, 1961) traces the consumer's psychological journey from awareness and knowledge (cognition), to liking and preference (affect), to purchase intention (conation). Online reviews directly shape the cognitive stage by supplying information about product attributes and other consumers' experiences, and the affective stage by generating trust, satisfaction, or scepticism.

The CAC model predicts that reviews with high information quality will exert stronger effects on both cognitive and affective dimensions of the purchase journey.

Third, the Engel–Kollat–Blackwell (EKB) model of consumer behaviour (Darley, Blankson, & Luethge, 2010) offers a decision-process perspective, recognising that individual characteristics involvement level, prior experience, and channel preference moderate the impact of review inputs on purchase outcomes. In omnichannel environments, consumer familiarity with specific channels conditions the degree to which reviews are sought and acted upon.

Integrating these frameworks, the present study proposes that online reviews (S) shape consumer attitudes towards online shopping and perceived shopping experience quality (O), culminating in repurchase intention (R), moderated by the omnichannel marketing strategy pursued by the retailer. This conceptual model is visually depicted in Figure 1.

Figure 1: Conceptual Framework – SOR-Based Model of Online Reviews in Omnichannel Environments

[Online Reviews (S)] → [Consumer Attitude & Shopping Experience (O)] → [Repurchase Intention (R)] ↑ Omnichannel Marketing Strategy (Moderator)

Note: S = Stimulus; O = Organism; R = Response

4. Materials and Methods

Research Design

A descriptive cross-sectional research design was employed. The survey instrument was a structured, close-ended questionnaire developed through an iterative multi-stage process. Following an extensive literature review, four in-depth interviews (DIs) and four focus group discussions (FGDs) were conducted with retail industry practitioners and consumers. Their insights were incorporated into an initial questionnaire, which was subsequently validated through a pilot survey with 40 respondents, and items refined accordingly.

Sampling and Data Collection

Judgmental (purposive) sampling was employed to target respondents with demonstrable online shopping experience. Survey links were distributed via personal email and a WhatsApp broadcast channel to facilitate follow-up. After eliminating incomplete responses, a valid sample of 506 respondents was obtained. Demographic and psychographic profiles are presented in Table 1.

Table 1: Demographic and Psychographic Profile of Respondents (n = 506)

Variable	Category	n	%
Age	20–30 years	290	57.3
	30–40 years	143	28.3
	40–50 years	28	5.5
	>50 years	45	8.9
Gender	Female	221	43.7
	Male	285	56.3
Occupation	Student	83	16.4
	Employed	319	63.0
	Business Owner	33	6.5
	Others	71	14.1

Read Reviews	Yes	350	69.2
	No	86	17.0
	Sometimes	70	13.8
Prefer Online Reviews	Yes	419	82.8
	No	20	4.0
	Sometimes	67	13.2
Total		**506**	**100**

Construct Operationalisation and Analytical Strategy

Four independent constructs were operationalised: (1) online reviews and brand awareness (OR_BA); (2) online reviews and perceived value (OR_PV); (3) online reviews and perceived risk reduction (OR_PR); and (4) online reviews in the context of omnichannel strategy called showrooming and webrooming (OR_O2O). Two dependent constructs were specified: online reviews and purchase intention (OR_PI); and online reviews and customer shopping experience (OR_SX).

Canonical correlation analysis (CCA) was selected as the primary analytical technique, as it enables simultaneous examination of the multivariate relationship between two sets of constructs. CCA was executed using MANOVA commands in SPSS, with standardised canonical coefficients and univariate F-tests used to assess the relative contributions of individual dimensions to the canonical variates.

5. Results

Multivariate Tests of Significance

Table 2 reports the multivariate tests of significance for the canonical correlation model (S = 2, M = 2½, N = 247).

Table 2: Multivariate Tests of Significance

Test	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillai's Trace	0.063	2.021	16.00	994.00	0.010
Hotelling's Trace	0.066	2.039	16.00	990.00	0.009
Wilks' Lambda	0.938	2.030	16.00	992.00	0.009
Roy's Largest Root	0.051	—	—	—	—

All three multivariate tests – Pillai's Trace (sig. = 0.010), Hotelling's Trace (sig. = 0.009), and Wilks' Lambda (sig. = 0.009) – attained statistical significance ($p < 0.05$), confirming that a significant relationship exists between the two construct sets. The canonical correlation coefficient (0.225) and squared canonical correlation (0.051) indicate a weak-to-moderate effect size, consistent with the complexity and multidimensionality of consumer behaviour in omnichannel environments.

The dimension reduction analysis (Table 3) confirmed that Root 1 (Wilks' Lambda = 0.938, F = 2.030, p = 0.009) was statistically significant, establishing unidimensionality among the dependent construct dimensions. Root 2 (p = 0.525) was non-significant, indicating that a single canonical dimension adequately captures the relationship.

Tests of Unidimensionality

Univariate F-tests examined the individual contributions of the two dependent dimensions. OR_PI (purchase intention) was statistically significant (Adj. $R^2 = 0.036$, F = 3.325, p = 0.001), indicating a meaningful relationship

with the independent construct set. OR_SX (shopping experience) was non-significant (F = 0.817, p = 0.588), suggesting that online reviews do not independently explain variance in customer shopping experience. This finding implies that the experiential dimension of omnichannel shopping is conditioned by numerous factors beyond review content, including service quality, channel integration smoothness, and post-purchase fulfilment.

Regression Analysis: Within-Cells Error Term

Table 3 (Panel A) presents the regression coefficients for the dependent variable: Customer Shopping Experience (OR_SX). Table 3 (Panel B) presents results for Purchase Intention (OR_PI).

Table 3 (Panel A): Regression Analysis – Dependent Variable: Customer Shopping Experience (OR_SX)

Covariate	B	Beta (β)	Std. Error	t-Value	Sig.
OR_BA	0.011	0.020	0.057	0.196	0.845
OR_PV	-0.014	-0.029	0.046	-0.295	0.768
OR_PR	-0.012	-0.019	0.030	-0.392	0.695
OR_O2O	-0.019	-0.028	0.032	-0.582	0.561
Gender (Female)	0.028	0.024	0.053	0.525	0.600
Age Group 1	0.122	0.106	0.094	1.295	0.196
Age Group 2	0.180	0.143	0.099	1.825	0.069
Age Group 3	0.018	0.007	0.139	0.128	0.899

Table 3 (Panel B): Regression Analysis – Dependent Variable: Purchase Intention (OR_PI)

Covariate	B	Beta (β)	Std. Error	t-Value	Sig.
OR_BA	-0.060	-0.094	0.062	-0.956	0.340
OR_PV	0.077	0.150	0.051	1.531	0.126
OR_PR	-0.079	-0.116	0.032	-2.438	0.015*
OR_O2O	0.118	0.158	0.036	3.335	0.001**
Gender (Female)	0.080	0.062	0.058	1.372	0.171
Age Group 1	-0.016	-0.012	0.103	-0.155	0.877
Age Group 2	-0.104	-0.074	0.108	-0.965	0.335
Age Group 3	0.078	0.028	0.152	0.511	0.609

*Note: * $p < 0.05$; ** $p < 0.001$*

For OR_PI (purchase intention), two independent dimensions attained statistical significance. OR_O2O, the omnichannel marketing strategy (showrooming and webrooming) registered the highest beta coefficient (β = 0.158, p = 0.001), indicating its primacy as a driver of purchase intention in the omnichannel context. OR_PR, perceived risk, was also significant (β = -0.116, p = 0.015), confirming that online reviews which reduce perceived risk are more likely to convert into purchases. OR_PV (perceived value, β = 0.150) approached but did not achieve conventional significance, suggesting a directionally positive but statistically unconfirmed association.

For OR_SX (shopping experience), no independent dimension attained significance (all p > 0.05), corroborating the finding from the unidimensionality tests. This confirms that while online reviews shape the attitudinal and

intentional dimensions of consumer behaviour, the holistic customer experience is conditioned by a broader set of service, channel, and operational factors.

6. Discussion

The findings of this study advance understanding of the role of online reviews in omnichannel marketing in four substantive respects. First, they confirm that online reviews, operating through perceived risk reduction and omnichannel strategy integration, positively influence purchase intention – consistent with canonical eWOM literature (Zhang et al., 2014; Verma et al., 2023) and with meta-analytic evidence that source trustworthiness and perceived usefulness are the primary mediating mechanisms (Hu & Yang, 2021). The significant effect of OR_O2O on purchase intention is theoretically important: it establishes that the effectiveness of online reviews is not context-invariant but is modulated by the degree to which consumers are engaged in multi-channel shopping behaviours such as showrooming and webrooming.

Second, the non-significance of OR_SX (shopping experience) has important theoretical and practical implications. Customer experience is a post-purchase, multi-dimensional construct that is shaped by the full arc of service delivery, channel integration quality, and the congruence between pre-purchase expectations and post-purchase outcomes (Lemon & Verhoef, 2016). Online reviews influence expectations and, therefore, the cognitive basis against which experience is evaluated but t, they do not determine the experiential outcome itself. This finding is consistent with the view that customer experience management requires a more comprehensive operational strategy that extends beyond User Generated Content(UGC).

Third, the weak-to-moderate effect size of the canonical correlation ($R^2 = 0.051$) reflects the genuine complexity of consumer behaviour in omnichannel environments. The significant but modest predictive accuracy of the model suggests that multiple additional factors including trust, brand equity, service quality, and channel convenience collectively moderate the review behaviour relationship. These findings align with the e-WOM meta-analysis literature, which consistently identifies the multivariate, context-dependent nature of review effects (Hu & Yang, 2021).

Fourth, from an information-systems perspective, these findings carry an additional implication: because online reviews function as one data stream among many within a broader omnichannel information architecture, firms seeking to strengthen the review–behaviour relationship should invest not only in review solicitation but in the IoT-enabled and big-data analytics infrastructure that integrates review data with inventory, fulfilment, and in-store behavioural signals (Caro & Sadr, 2019; Xu et al., 2017). Likewise, as automated systems increasingly consume review data as an input to recommendation, pricing, or inventory decisions, ensuring the integrity of that data through machine-learning-based fake-review detection becomes a precondition for reliable decision support (Salminen et al., 2022).

The study also reveals a notable demographic finding: age group membership exerts a directionally positive relationship with shopping experience (Age Group 2: $\beta = 0.143$, $p = 0.069$), approaching significance. This suggests that middle-aged consumers (30–40 years) may have higher and more differentiated experiential expectations, consistent with research on how generational cohorts process review information differently (von Helversen, Abramczuk, Kopec, & Nielek, 2018).

7. Conclusions, Implications, and Future Research

Conclusions

This study set out to examine how online reviews shape consumer purchase intention within an omnichannel retail environment, and the findings offer a nuanced picture of that relationship. The results confirm that reviews exert a significant influence on purchase intention, but this influence operates through two specific mechanisms rather than as a direct, undifferentiated effect: perceived risk reduction and omnichannel channel integration behaviours (showrooming and webrooming).

On the risk dimension, the findings suggest that reviews function primarily as a trust-building and uncertainty-reducing device. Consumers navigating omnichannel journeys by moving between physical and digital touchpoints face compounded uncertainty about product fit, quality, and channel reliability at each transition point. Reviews appear to address this uncertainty directly, which explains why their effect is strongest where perceived risk is highest.

On the channel-integration dimension, the moderating role of showrooming and webrooming indicates that review effectiveness is not uniform across the purchase journey. A consumer who showrooms (examines products in-

store before buying online) engages with reviews differently than one who webrooms (researches online before purchasing in-store), meaning the same review content can have different weights depending on where in the channel journey it is encountered. This positions channel strategy as a boundary condition rather than a background variable a structural factor that determines when and how strongly reviews matter.

The study also draws an important distinction between affective and cognitive consumer responses. Reviews were found to meaningfully shift emotions, feelings, and attitudes, but had comparatively limited power to reshape deeper, more stable cognitive structures such as beliefs. This suggests that reviews operate more as an affective nudge at the point of decision rather than as a tool for long-term belief revision, a distinction with implications for how marketers should calibrate their expectations of review-driven campaigns.

Finally, the finding that customer shopping experience is insufficiently explained by online reviews alone signals a boundary on what reviews can realistically deliver. Experience is a broader, more operationally rooted construct shaped by logistics, service quality, and integrated systems performance , rather than something reviews alone can produce. This positions online reviews as one input among several needed to drive holistic customer experience outcomes, reinforcing the study's broader argument that review-driven strategies must be embedded within, rather than substituted for, comprehensive omnichannel infrastructure.

Theoretical Implications

The study contributes to the e-WOM and omnichannel literature by empirically demonstrating that the SOR framework provides a valid structural basis for modelling review effects in multi-touchpoint retail contexts. The finding that omnichannel marketing strategy moderates the review–purchase intention relationship extends extant models by positioning channel behaviour (showrooming/webrooming) as a critical boundary condition for review effectiveness. This has implications for Information Adoption Model (IAM) applications: review information adoption is not purely a function of content quality but is mediated by the consumer's channel strategy. The study further contributes to computer information systems research by explicitly connecting a validated behavioural model to the big-data, business-intelligence, and IoT literatures that describe how review data is technically captured and processed.

Managerial Implications

For retail practitioners, the findings suggest four actionable priorities. First, online review integration strategies should be systematically deployed across all consumer touchpoints not only e-commerce platforms but also mobile applications, in-store kiosks, and point-of-sale digital displays to capture the omnichannel consumer at each phase of the purchase journey. Second, review management should prioritise content that directly addresses perceived risk: comparative product information, verified purchase indicators, and specification-level detail are more effective at driving conversion than high volumes of low-information reviews. Third, practitioners should not expect online reviews alone to deliver experiential outcomes; investment in service quality, logistics reliability, and channel integration infrastructure is equally necessary to deliver the post-purchase experience that drives long-term loyalty. Fourth, given the growing role of big data analytics and IoT in review-driven decision-making, practitioners should invest in text-mining and sentiment-analysis capabilities and in fake-review-detection safeguards, so that the information systems feeding managerial dashboards remain both comprehensive and trustworthy (Salehan & Kim, 2016; Salminen et al., 2022).

IS Architecture Implications

From an information-systems design standpoint, the findings point to a concrete architecture in which three heterogeneous input streams – online review data, in-store IoT signals (footfall sensors, kiosk and POS logs), and big-data/omnichannel analytics outputs – are fused within an integrated processing layer that performs data validation, fake-review detection, and sentiment/risk scoring before the results are surfaced on a managerial dashboard reporting channel KPIs, risk alerts, and customer-experience metrics in real time (Figure 2). Such an architecture operationalises the managerial-implications priorities above and gives IS researchers a testable reference model for future omnichannel implementations.

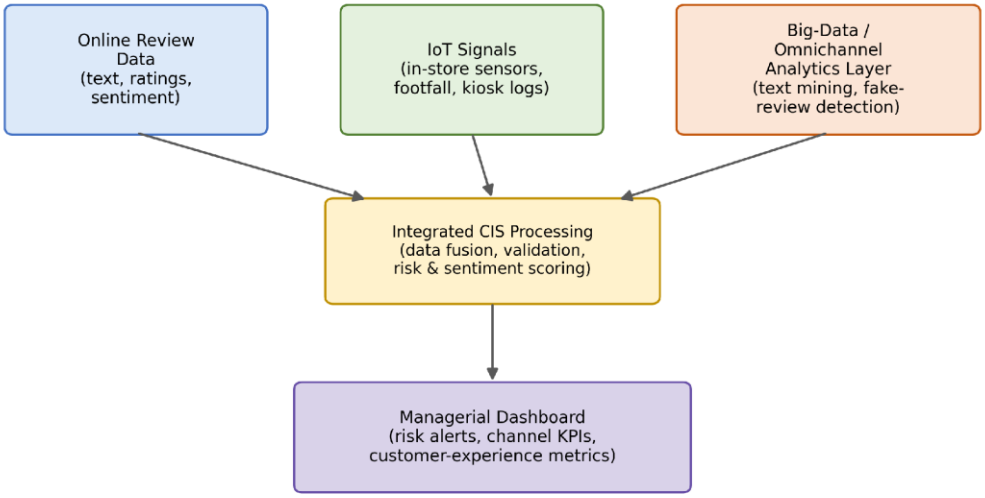

Figure 2. Proposed IS architecture linking review data, IoT signals, and big-data analytics to a managerial dashboard.

Limitations and Future Research Directions

The study is subject to several limitations. First, the cross-sectional design precludes causal inference; longitudinal designs tracking consumers across purchase journeys would strengthen causal claims. Second, the sample collected primarily from younger, employed consumers in urban India may not generalise to older or rural segments with different levels of digital literacy. Third, the canonical correlation methodology, while appropriate for multivariate construct analysis, yields limited insight into causal pathways; structural equation modelling (SEM) or partial least squares (PLS-SEM) approaches would provide superior path-level estimates.

Future research should examine: (1) the moderating role of review authenticity perceptions given emerging concerns about fake reviews and AI-generated content on purchase intention; (2) the impact of visual and video-format reviews compared with text-based e-WOM in omnichannel settings; (3) the differential effectiveness of review platform type (retail website vs. social media vs. independent review site) on consumer behaviour across the omnichannel purchase journey; and (4) the design and empirical evaluation of integrated, IoT-enabled information-systems architectures that combine review analytics with real-time operational data across omnichannel touchpoints.

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