
Technological Innovations and Marketing Effectiveness: A Comparative Study of E-Commerce and FMCG Industries in India

Dr. Mridusmita Das
Assistant Professor
Department of Entrepreneurship and Management
Sibsagar University
Joysagar, Sivasagar, Assam

Abstract

The primary objective of this study was to evaluate the effectiveness of technology-driven marketing innovations in two significant Indian industries: E-commerce and Fast-Moving Consumer Goods (FMCG). The study further investigated whether these marketing innovations are universal in nature or if their effectiveness is proportional to specific sectoral characteristics. The sample consisted of 400 consumers from the Indian market, divided into 202 respondents from the e-commerce sector and 198 from the FMCG sector. To observe the direct and mediated effects of personalization, mobile convenience, trust, customer loyalty, customer satisfaction, social media engagement, and purchase intention, a multi-group structural equation model (SEM) was employed for primary data analysis. The results indicate strong sectoral differences among the variables. In the e-commerce industry, purchase intention was primarily influenced by personalization, mobile convenience, and customer satisfaction. Conversely, in the FMCG industry, purchase intent was principally motivated by trust and social media engagement, reflecting the habitual and trust-based factors consumers associate with FMCG products. Customer satisfaction emerged as a consistent factor facilitating the influence of technological innovations, while customer loyalty operated as a sequential mediator in the overall marketing innovation process.

Keywords: *E-commerce, FMCG Industry, Personalization, Mobile Usage, Convenience, Consumer Satisfaction*

1. Introduction

In the Indian market, technological advancements and innovations have become primary drivers of marketing and business success. The expansion of digital technologies has ushered in an era characterized by artificial intelligence (AI), mobile applications, and social media platforms. These innovations have enabled organizations to communicate and connect with customers through new mediums, adding value and building long-term relationships (Kumar et al., 2020; Chaffey & Ellis-Chadwick, 2019). Various literature sources indicate that digital transformation represents a paradigm shift, significantly reframing consumer behavior and marketing logic (Verhoef et al., 2021). While it is often assumed that technological advancements are universal across market sectors with minimal impact on consumer reactions or purchase intentions, this study challenges that assumption.

The Indian market presents a mature context for this analysis. With rapid digitization, a surging middle class, and one of the largest consumer bases globally, India has witnessed fast-paced acceptance of digital marketing innovations (Nambisan & Baron, 2017). The e-commerce sector has experienced exponential growth due to mobile internet penetration and AI-based personalization, becoming one of the fastest-growing digital economies (Statista, 2025). Meanwhile, the Fast-Moving Consumer Goods (FMCG) segment remains rooted in household consumption patterns where habituated purchasing, brand trust, and loyalty continue unabated (Kantar, 2022). These divergent trajectories raise a seminal question: Does the effectiveness of technological marketing innovations occur at the same pace across sectors, or is it inextricably intertwined with sector-specific consumer decision logics?

Previous research identifies several technological innovations that shape marketing effectiveness. AI-grounded personalization is documented as a foremost driver of consumer engagement and purchase intention, particularly in online retail markets where one-to-one recommendations minimize information overload and increase perceived salience (Bleier & Eisenbeiss, 2015; Arora et al., 2008). Mobile-centricity, defined by the suitability and ease of use of mobile platforms, has also emerged as a predictor of consumer satisfaction and behavioral intention, especially in regions where smartphones are the principal source of internet access (Wilson, Brown & Johnson, 2024). Furthermore, social networks have developed consumer-brand relationships through storytelling, word-of-mouth

communication, and collective identification, playing a significant role in fostering trust and loyalty in classic consumer goods sectors (Kaplan & Haenlein, 2010; Dwivedi et al., 2021).

Despite these findings, comparative studies across different sectors remain limited. The prevailing supposition that innovations are universally generalizable neglects variations in consumer participation levels, product intangibility, and purchase decision-making processes (Sheth & Parvatiyar, 1995). For instance, in high-involvement purchase experiences such as e-commerce, consumers may value personalization and user interface convenience as indicators of service quality. In contrast, in low-involvement, repetitive purchases typical of FMCG products, trust and loyalty may supersede the impact of personalization. Consequently, the effectiveness of technological innovations in marketing may depend on sectoral and cultural contexts rather than being universally applicable.

Research on digital commerce in India establishes that personalization and convenience are strong predictors of consumer satisfaction and repurchase intention (Dholakia & Pandya, 2023). Congruently, studies on FMCG consumption emphasize that under circumstances of low switching costs and habituated consumption, brand quality and positive social media narratives act as influential bases for purchase intention (Kalpana & Deepika, 2025). However, these literatures have not been systematically compared, leaving the question of how technological innovations differentially influence consumer behavior across sectors untouched.

Addressing this gap, the current research performs a comparative analysis of the Indian e-commerce and FMCG industries to explore the direct and indirect effects of personalization, mobile convenience, trust, consumer loyalty, customer satisfaction, and social media consumption on purchase intention. Using survey data and multi-group structural equation modeling, this study delivers theoretical contributions regarding how technological effectiveness is mediated by consumer reactions and traces sectoral delineations. It contributes to marketing knowledge in three significant ways: First, it challenges the universalistic assumption of technological adoption by providing evidence of its contextual and sectoral nature. Second, it simplifies mediation models by analyzing how satisfaction acts as a prominent yet differentially caused mediator in different sectors. Finally,

it provides actionable recommendations for commercial managers by confirming the need for industry-specialized strategies and investments in digital marketing.

This study positions itself at the intersection of technological innovation, consumer behavior, and industry progression in the fast-paced Indian market. By comparing two critical sectors, it offers fine-grained insights into the contextual effectiveness of technological acceptance in marketing, contributing to both research discourse and management practice.

2. Methodology

2.1. Research Design

This study employs a comparative cross-sectional research design to examine sectoral differences in the effect of technological innovations on marketing effectiveness in India. It focuses specifically on the e-commerce and FMCG sectors, which vary in terms of consumer involvement levels and purchase decision logics. A quantitative survey-based approach was adopted to facilitate the collection of standardized responses for testing the postulated relationships between personalization, mobile convenience, trust, loyalty, satisfaction, social media use, and purchase intention.

To construct robust models, the study employs multi-group structural equation modeling (SEM), a statistical technique appropriate for testing mediation and moderation effects and for making comparisons across sectors. This aligns with prior marketing research exploring intricate multi-variable consumer behavior models (Hair et al., 2018).

2.2. Sampling Plan

The survey targeted Indian consumers engaged in either e-commerce transactions or FMCG purchases. To account for diversity in consumption occasions, a stratified sampling design was used, dividing respondents into two groups:

- Purchasers who had bought at least once during the prior quarter.
- Purchasers who bought FMCG products (e.g., packaged food, beverages, or personal care products) during the last month.

A minimum of 400 survey respondents were targeted. Ultimately, 202 respondents from the e-commerce sector and 198 from the FMCG sector were selected, as suggested by SEM

guidelines for model robustness (Kline, 2015). Respondents were targeted online and through canvassing in metropolitan and semi-urban areas to capture a diversified consumer profile of India.

2.3. Instrument Development

A standardized questionnaire was developed using previously tested measures from existing studies, adapted for the Indian context. All items were scaled on a five-point Likert scale (1 = Strong Disagreement; 5 = Strong Agreement). The constructs and measurement sources were as follows:

- *Personalization*: Based on Bleier & Eisenbeiss (2015) and Arora et al. (2008).
- *Mobile Convenience*: Based on indicators by Wilson, Brown & Johnson (2024).
- *Trust*: Scales adapted from brand trust research (Chaudhuri and Holbrook, 2001).
- *Loyalty*: Adapted from Oliver (1999).
- *Satisfaction*: Scales by Anderson & Srinivasan (2003).
- *Social Media Use*: Based on Kaplan & Haenlein (2010) and Dwivedi et al. (2021).
- *Purchase Intention*: Adapted from Dodds et al. (1991) and subsequent consumer behavior studies.

The survey was pre-tested with 30 participants in a similar setting to verify clarity and cultural sensitivity, followed by slight refinements.

2.4. Data Collection Procedure

Data collection occurred over two months using a mixed-mode survey administration. Online distribution via email lists and social network platforms was prioritized for e-commerce consumers. For FMCG consumers, both online forms and face-to-face surveys were administered in retail outlets and residential communities. Participation was voluntary, and anonymity was ensured to reduce response bias.

2.5. Data Analysis Strategy

The data analysis proceeded in several steps:

- *Data Screening*: Questionnaires were checked for missing values, outliers, and response bias. Normality assumptions were tested.
- *Measurement Model Assessment*: Reliability was assessed using Cronbach's alpha and composite reliability. Convergent validity was checked using Average Variance

Extracted (AVE). Discriminant validity was tested using the Fornell–Larcker criterion.

- *Structural Model Testing*: Path analyses were conducted using AMOS/SmartPLS to test the direct and indirect impacts of independent variables on purchase intention.
- *Multi-Group SEM*: To confirm sectoral variations, multi-group tests were undertaken across the e-commerce and FMCG samples. Measurement model invariance was tested first, followed by structural path tests to identify sectoral differences.
- *Mediation Analysis*: The mediational role of Satisfaction was tested using bootstrapping procedures to estimate indirect effects with confidence intervals.

2.6. Ethical Considerations

Ethical integrity was maintained through informed consent obtained from all participants. The study adhered to guidelines regarding confidentiality and the voluntary nature of survey research.

2.7. Hypothesis Development

Construct	Definition (based on prior literature)	Hypothesis	Statement
Personalization	The extent to which marketing communications and product assortments are individualized for consumer needs.	H1a	Personalization positively influences consumer satisfaction.
		H1b	Personalization positively influences purchase intention.
Mobile Convenience	The degree to which consumers find mobile platforms accessible, user-friendly, and efficient for transactions.	H2a	Mobile convenience positively influences consumer satisfaction.
		H2b	Mobile convenience positively

Construct	Definition (based on prior literature)	Hypothesis	Statement
			influences purchase intention.
Trust	Consumers' confidence in the brand/platform's integrity, reliability, and security.	H3a	Trust positively influences consumer satisfaction.
		H3b	Trust positively influences purchase intention.
Social Media Engagement	The extent of consumer interaction with brand-related content on social platforms.	H4a	Social media engagement positively influences consumer satisfaction.
		H4b	Social media engagement positively influences purchase intention.
Satisfaction	The overall consumer evaluation of post-purchase experiences relative to expectations.	H5a	Satisfaction positively influences loyalty.
		H5b	Satisfaction positively influences purchase intention.
Loyalty	The degree of consumer commitment to repeat purchases and recommend the brand.	H6	Loyalty positively influences purchase intention.
Serial Mediation	The process by which personalization, trust, and other technological factors shape purchase intention	H7	Satisfaction and loyalty sequentially mediate the effects of personalization, trust, mobile convenience, and social

Construct	Definition (based on prior literature)	Hypothesis	Statement
	through satisfaction and loyalty.		media engagement on purchase intention.
Multi-Group Comparison	Examines whether the strengths of relationships differ across industries.	H8	The mediation pathways differ significantly between the E-commerce and FMCG sectors.

Source: Self-Generated from previous literature

3. Data Analysis

Table 1
Measurement Model: Reliability and Validity (N = 400)

Construct	Items	Cronbach's α	CR	AVE
Personalization	4	.86	.89	.59
Mobile Convenience	3	.82	.86	.58
Trust	4	.88	.90	.61
Social Media Engagement	3	.80	.84	.55
Satisfaction	3	.87	.89	.62
Loyalty	3	.84	.87	.56
Purchase Intention	3	.85	.88	.60

Source: Self-Generated through primary data collection

Note. CR = Composite Reliability; AVE = Average Variance Extracted. All factor loadings $\geq .60$ and significant at $p < .001$.

Table 1 shows results of validity and reliability testing of custom-made measures of this research. The measures of each of the constructs exhibit great internal consistency, as indicated by estimates of Cronbach's alpha of .80 to .88, each of which exceeds conventionally established .70. Similarly, estimates of Composite Reliability (CR) of each of

the constructs range from .83 to .90, indicating that there is great consistency of items in capturing their respective latent variables.

Convergent validity is also established. The Average Variance Extracted (AVE) of each of the constructs is between .55 and .62, that is more than the .50 threshold that is recommended (Fornell & Larcker, 1981). This indicates that more than half of the observed indicator's variance is being accounted for by its respective latent construct.

Overall, these findings substantiate that the measure of the model has good reliability and convergent validity. The individual construct of personalization, mobile convenience, trust, social media use, satisfaction, loyalty, and purchase intention was gauged appropriately and with proper precision, warranting their use in the following structural model testing.

Table 2

Structural Model Results (Pooled Sample, N = 400)

Path	β	SE	p
Personalization → Satisfaction	.32	.05	<.001
Mobile Convenience → Satisfaction	.28	.06	<.001
Trust → Satisfaction	.21	.05	.002
Social Media Engagement → Satisfaction	.14	.05	.015
Satisfaction → Loyalty	.49	.04	<.001
Satisfaction → Purchase Intention	.37	.06	<.001
Loyalty → Purchase Intention	.23	.05	<.001
Personalization → Purchase Intention	.15	.06	.007
Mobile Convenience → Purchase Intention	.12	.05	.018
Trust → Purchase Intention	.17	.05	.001
Social Media Engagement → Purchase Intention	.11	.05	.023

Source: Self-Generated through primary data collection

Note. $R^2(\text{Satisfaction}) = .54$; $R^2(\text{Loyalty}) = .46$; $R^2(\text{Purchase Intention}) = .61$.

Table 2 reports the structural model estimates for the pooled sample of 400 respondents. The model demonstrates substantial explanatory power, accounting for 54% of

the variance in satisfaction, 46% of the variance in loyalty, and 61% of the variance in purchase intention.

Regarding predictors of satisfaction, the strongest effects are exerted by personalization ($\beta = .32$, $p < .001$) and mobile convenience ($\beta = .28$, $p < .001$), followed by trust ($\beta = .21$, $p < .01$).

From Table 2, it can be interpreted that social media engagement by the consumers' have a positive contribution but with a feebleness effect ($\beta = .14$, $p < .05$). This result proposes that technological features like convenience with mobile usage and tailored as well as personalized offers act as striking factors leading to customer satisfaction. Relational factors like customers' trust and engagement through social media remain as pertinent but inferior and secondary in nature.

Table 2 shows that $\beta = .49$ and $p < .001$, which indicates that satisfaction act as an influential factor for customer loyalty. This result emphasizes how the significance of consumer experiences in an optimistic manner triggers or influences the consumers' in committing towards repurchasing or recommending a brand on a repetitive basis.

Table 2 depicts three distinct paths in relation to purchase intention of the consumers. At first, satisfaction can be considered as a critical mediator as it directly envisages purchase intention ($\beta = .37$, $p < .001$). Additionally, as $\beta = .23$, $p < .001$, customer loyalty can be considered having an independent direct effect highlighting the underpinning role of habitual assurance. At last, even though the magnitudes are modest; independent variables like personalization ($\beta = .15$, $p < .01$), mobile convenience ($\beta = .12$, $p < .05$), trust ($\beta = .17$, $p < .01$), and social media engagement ($\beta = .11$, $p < .05$), exerts noteworthy direct effects on purchase intention of the consumers.

Inclusively, the findings from Table 2 recommends satisfaction as the central driver of consumer behavioural outcomes through the loyalty variable; both in a direct and indirect way. Among the antecedents, personalization and mobile convenience emerge as the most influential predictors of satisfaction, while trust exerts the strongest direct effect on purchase intention among the independent variables.

Table 3*Mediation Analysis*

Indirect Path	Indirect Effect	95% CI (LL, UL)
Personalization → Satisfaction → PI	.12	[.07, .18]
Mobile Convenience → Satisfaction → PI	.10	[.05, .16]
Trust → Satisfaction → PI	.08	[.03, .14]
SME → Satisfaction → PI	.05	[.01, .09]
PERS → SAT → LOY → PI (serial)	.04	[.01, .07]
TRUST → SAT → LOY → PI (serial)	.05	[.02, .09]

Source: Self-Generated through primary data collection

SME = Social Media Engagement; PI = Purchase Intention; LL = lower limit; UL = upper limit. All confidence intervals exclude 0.

Table 3 shows mediation results by employing indirect effects that are bootstrapped based on 5,000 resamples. The results yield substantial support that satisfaction plays a key mediator role in linking technological innovations and purchase intention, and that loyalty also serves as a sequential secondary mediator.

In particular, satisfaction strongly mediates personalization (indirect effect = .12, 95% CI [.07, .18]), convenience of using a mobile (.10, 95% CI [.05, .16]), trust (.08, 95% CI [.03, .14]), and activity in social media (.05, 95% CI [.01, .09]) in impacting purchase intention. In all instances, confidence intervals of the bootstrapped estimates exclude zero, establishing the stability of such mediating relations. Here, it follows that consumers' positive experiences (satisfaction) as judged by them represent a significant psychological route along which technological and relational marketing variables impact purchase intentions.

In addition to this single-mediator path, the serial mediation results also show that loyalty serves a reinforcing role. It has been observed that both personalization (−.04, 95% CI [−.01, −.07]) and trust (−.05, 95% CI [−.02, −.09]) influences purchase intention indirectly, through a chain of satisfaction to customer loyalty, and reinforcing purchase intention. Compared to the direct path of satisfaction to purchase intention, even though, the

sequential indirect effects are smaller in size, they are statistically significant and establishes that, satisfaction raises immediate purchase intention and leads to long run consumer loyalty.

Altogether, mediation results further highlights that satisfaction is the final intervening construct, translating technological innovation into purchased driven results. Similarly, loyalty encompasses this influence further, by becoming a downstream process, interpreting satisfaction into long term behavioural intentions. The trend authenticates the hypothesized model of mediation (H7) by establishing that technological efficiency in marketing operates mainly in terms of evaluative and relationship based responses of the consumers.

Table 4

Multi-Group SEM: E-commerce vs. FMCG Comparisons

Path	E-commerce β	FMCG β	$\Delta\beta$	p (group diff)
Personalization $\rightarrow$ Satisfaction	.42***	.18*	.24	<.001
Personalization $\rightarrow$ PI	.27**	.05	.22	.003
Mobile Convenience $\rightarrow$ Satisfaction	.35***	.10	.25	<.001
Mobile Convenience $\rightarrow$ PI	.20*	.04	.16	.012
Trust $\rightarrow$ Satisfaction	.12	.38***	-.26	.002
Trust $\rightarrow$ PI	.11	.33***	-.22	.004
SME $\rightarrow$ PI	.09	.29**	-.20	.006
Satisfaction $\rightarrow$ PI	.39***	.36***	.03	.240
Satisfaction $\rightarrow$ Loyalty	.51***	.45***	.06	.310

Source: Self-Generated through primary data collection

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. SME = Social Media Engagement; PI = Purchase Intention.

Table 4 shows the results from the multi-group structural equation modelling. This analysis compared the structural relationships between the e-commerce and FMCG groups, with 202 survey respondents from E-commerce and 198 from FMCG sector. The measurement invariance tests confirmed both configural and metric invariance. Partial scalar

invariance was reached by releasing two intercepts. This permitted for eloquent comparisons across the selected groups.

With respect to the factors affecting satisfaction and purchase intention, the analysis of Table 4 exposes a clear, sector specific patterns. In the e-commerce group, personalization ($\beta = .42, p < .001$) and mobile convenience ($\beta = .35, p < .001$) emerged as the strongest predictors of satisfaction. The effects of these variables were significantly higher as compared to the FMCG industry ($\beta = .18$ and $\beta = .10$, respectively). Likewise, personalization ($\beta = .27, p < .01$) and mobile convenience ($\beta = .20, p < .05$) had stronger direct impacts on purchase intention in e-commerce compared to FMCG ($\beta = .05$ and $\beta = .04$, respectively).

Alternatively in case of FMCG, consumer decision making was influenced and inclined towards trust and social media engagement. Trust had significant effects on both satisfaction ($\beta = .38, p < .001$) and purchase intention ($\beta = .33, p < .001$), with much stronger effects than in e-commerce ($\beta = .12$ and $\beta = .11$, respectively). Likewise, social media engagement meaningfully projected purchase intention in the FMCG sector ($\beta = .29, p < .01$). However, its impact was feeble and not statistically significant in case of the ecommerce sector ($\beta = .09$).

In spite of these variances, satisfaction continued to remain as a strong and reliable predictor of purchase intention for both the sectors ($\beta_E = .39, \beta_F = .36$, both $p < .001$).

Nevertheless, the base of the satisfaction variable showed a mixed result. In case of the ecommerce industry, personalization and mobile convenience acted as main factors. While in case of FMCG; trust and social media narratives were most significant. This is in line with hypothesis H8, which projected noteworthy differences in mediation paths across both the ecommerce and FMCG industries.

It can be interpreted that context, framework and background, influences the success of technology-based marketing tools adopted by the management of the selected industries. By putting forward personalized and mobile friendly experiences to the customers, accomplishment can be expected in the ecommerce sector. Additionally, the success of FMCG is inclined towards building trust, nurturing loyalty, and using social media experiences by the concerned marketers. By affecting how technological innovations lead to

marketing outcomes, these understandings reinforce the impression that, consumer decision-making differs across sectors.

4. Results & Interpretation:

The results of the sampled 400 respondents (202 no.s for ecommerce, 198 no.s for FMCG) established the forte of the measurement model. All constructs showed good reliability (α and CR > .80) and convergent validity (AVE > .50) (Table 1). The combined structural model explained significant variance in satisfaction (54%), loyalty (46%), and purchase intention (61%). Satisfaction acted as the strongest forecaster of both loyalty and purchase intention (as per Table 2). Amongst the factors, personalization and mobile convenience were the major drivers of satisfaction, whereas trust factor had a direct impact on purchase intention. Mediation analyses directed that satisfaction influences the effects of all technological and relational factors on purchase intention, by additionally supporting sequential mediation through loyalty (as per Table 3). Multigroup SEM disclosed strong differences between sectors (as per Table 4). In ecommerce, personalization and mobile convenience had an immense impact on satisfaction and purchase intention. Conversely, trust and social media engagement were the key drivers in FMCG sector. Satisfaction continued to remain as the vital component in both sectors, but its drivers showed a variation, where it presented, how technology incorporation in marketing is dependent on the consumer decision making process in the different sectors.

5. Discussion

The current study observed whether the effectiveness of technological innovations in marketing functions uniformly across various sectors or is conditioned by industry-specific decision logics. By comparatively analyzing e-commerce and FMCG sectors in India, this research provides robust evidence that the influence of personalization, mobile convenience, trust, loyalty, satisfaction, and social media engagement on purchase intention is context-dependent rather than universally applicable. The findings contribute to both theoretical and managerial perspectives by expounding the mechanisms through which technological

adoption affects consumer behavior and demonstrating the importance of sectoral modifications in designing marketing strategies.

From a theoretical perspective, this study adds to the growing research on digital transformation by framing it not as a universal set of practices but as a shift shaped by consumer contexts (Verhoef et al., 2021). Earlier studies often highlighted personalization, mobile-first approaches, and social media as broadly effective tools (Bleier & Eisenbeiss, 2015; Dwivedi et al., 2021). However, this study establishes that the impact of these factors is facilitated by satisfaction and filtered through sector-specific consumer decision logics. In e-commerce, consumers are more sensitive to technological cues like AI-driven personalization and seamless mobile platforms due to high involvement and experiential decision-making processes. However, in the FMCG sector, trust and social narratives take precedence, with personalization playing a smaller role due to routine purchases, low customer involvement, and habit-based buying. These results show that technological effectiveness is not a universal concept but is related to the structural features of the industry and the cultural habits of consumers.

The findings illustrate that the effectiveness of technology in marketing is not uniform across all contexts and depends on industry structures and consumer habits. This underlines the necessity for a contingency perspective in digital marketing research, distinguishing that consumer reactions to innovation are influenced by factors such as product type, habitual behavior, and perceived risk.

Likewise, it can be pointed out that for both e-commerce and FMCG sectors, satisfaction acts as a prime mediator and possesses a significant role. In line with expectation disconfirmation and service quality theories, satisfaction plays a major role in influencing consumers' purchase intention by connecting both technological and relational factors to the consumer decision-making process. However, the variables triggering customer satisfaction differ across sectors. In e-commerce, satisfaction is driven by personalization and mobile convenience, while in FMCG, it results more from the 'trust' variable. These variations show satisfaction as a shared pathway but one rooted in specific contexts. The analysis reveals that satisfaction leads to loyalty, which in turn reinforces purchase intention and opens the gateway for building long-lasting brand relationships.

This study contributes to management by providing actionable insights for marketers navigating digital transformations in emerging economies. In e-commerce, the results emphasize achieving positive outcomes by investing in AI-based personalization, consumer-friendly mobile interfaces, and seamless digital experiences. Alternatively, in FMCG, the results guide marketers to adopt initiatives for building credibility, strengthening loyalty programs, and creating authentic, culturally resonant social media content to build trust and loyalty among customers.

Ultimately, when innovations are purposely associated with sectoral dynamics and consumer expectations, efficiency and effectiveness in technological marketing innovations can be achieved in the long run.

6. Conclusion

From the Indian context, this study highlighted the sector-specific potentials of technological innovations on the effectiveness and efficiency of marketing strategies across the e-commerce and FMCG industries. Grounded in an in-depth survey and using multi-group structural equation modeling, the results demonstrate that the impact of personalization, mobile convenience, customer trust, customer loyalty, satisfaction, and interactions through social media platforms differs across various sectors. This is consistent with variables such as consumer decision-making logics and levels of product involvement. In e-commerce, variables like personalization and mobile convenience were the prime significant drivers of satisfaction and purchase intention. These results are consistent with the reasoning of high-customer-involvement digital buying contexts. In such cases, customers observe highly tailored experiences and smooth mobile platforms as essential signals of service quality and value. On the other hand, in the FMCG sector, interaction through social media and trust were more significant, resonating with the low-involvement and habitual patterns of regular purchases, where brand credibility and socially situated narratives inform consumer choices.

Across both the e-commerce and FMCG sectors, satisfaction always acted as a mediator amid technological determinants and purchase intent, besides feeding into loyalty as a sequential process. Hitherto, the precursors to satisfaction remained sectorally different, i.e., convenience and personalization in e-commerce, and trust in FMCG. This difference

leads to the argument that satisfaction is a universal process, but one constrained by contexts determined by industry features. Theoretically, the research enriches digital marketing scholarship by reversing the universalist premises of technological uptake and proposing a contingency approach, underlining that technologies take on meaning and utility only in certain sectoral and cultural contexts. Practically, it emphasizes sector-specific strategies over generic ones. In e-commerce, investments by organizations or managers should prioritize personalization and mobile friendliness from the customer's perspective, while for the FMCG sector, organizations should put effort into building brand trust and leveraging social media, which continues to be crucial for sustaining competitiveness.

On balance, the study shows that the success of technological innovation in marketing depends on sectoral contexts rather than being universally apposite. Though personalization and mobile convenience are the main drivers of e-commerce success, trust and social media are more critical for FMCG performance. Satisfaction is the mediating mechanism at the heart of all sectors, although its antecedents vary, supporting the contextualization of consumer responses. These results extend theoretical insights by adding digital transformation to industry logics and propose policy implications by highlighting the need for sectoral strategies in emerging economies like India.

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