Impact of AI-Driven Personalization on Customer buying Behaviour: A Comparative Analysis of Leading Indian E-Commerce Companies

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Abstract- India's retail industry is experiencing a rapid digital shift, with artificial intelligence (AI) emerging as a central force in shaping e-commerce strategies, particularly in the area of personalized customer experiences. This study explores how AI-driven personalization influences consumer buying behaviour in the Indian e-commerce ecosystem. A comparative evaluation was carried out across ten leading platforms—Amazon India, Flipkart, Myntra, Meesho, Nykaa, Snapdeal, JioMart, Tata CLiQ/Tata Neu, BigBasket, and Blinkit—using responses collected through a structured questionnaire. The analysis highlights that AI-powered personalization significantly enhances consumer engagement, satisfaction, and purchase intent, although its impact differs across platforms depending on the sophistication of AI tools, demographic characteristics of users, and product category specialization. The study contributes practical insights and strategic recommendations for strengthening personalization initiatives, ultimately supporting improved customer loyalty and competitive advantage in India's fast-evolving e-commerce sector.

Keywords: Artificial Intelligence (AI), Personalization, E-commerce, Consumer Buying Behaviour, Recommendation Systems, Indian E-commerce Platforms, Customer Engagement, Predictive Analytics, Online Shopping, Data-Driven Marketing, Flipkart, Amazon India, Myntra, Meesho, Nykaa, Snapdeal, JioMart, Tata CLiQ, BigBasket, Blinkit.

1. INTRODUCTION

Over the past decade, India's e-commerce industry has witnessed unprecedented growth, driven by expanding internet accessibility, rising smartphone usage, improved digital literacy, and the widespread adoption of online payment systems. The market, valued at nearly USD 100 billion in 2024, is projected to reach USD 200 billion by 2026 (IBEF, 2024). This digital surge has intensified market competition while simultaneously encouraging the integration of Artificial Intelligence (AI) as a key driver for innovation and customer engagement.

Among the many applications of AI, personalization stands out as one of the most transformative. It involves tailoring recommendations, content, and shopping experiences to individual consumer preferences in real time. Advanced techniques such as collaborative and content-based filtering, natural language processing (NLP), and deep learning are employed to analyse user behaviour and deliver highly relevant interactions (Kumar & Sharma, 2023). These systems aim to reduce consumer effort, improve satisfaction, and shape purchase decisions by providing curated, context-sensitive experiences.

Indian e-commerce leaders have increasingly adopted AI-based personalization to differentiate customer journeys. Amazon India and Flipkart employ predictive analytics and multilingual AI systems to optimize search and recommendations. Myntra and Nykaa leverage generative AI for fashion and beauty personalization, while Meesho and Snapdeal use lightweight AI models to ensure affordability and accessibility. Grocery platforms like BigBasket, JioMart, and Blinkit apply AI for real-time logistics and shopping personalization, and Tata CLiQ/Tata Neu integrate omni-channel personalization strategies targeting premium and lifestyle shoppers (IndiaAI, 2023; Business Today, 2024; RedCube Digital, 2024; Traffictail, 2024).

Despite its recognized benefits, the effectiveness of AI-driven personalization varies significantly across platforms. Factors such as business model, consumer demographics, and technological maturity shape how personalization strategies are implemented and experienced (Gupta & Narayan,

2021; Kapoor & Dwivedi, 2022; Mehta & Mathur, 2022). While numerous studies acknowledge the global significance of AI in e-commerce, there remains a lack of comparative research that systematically evaluates personalization approaches across diverse Indian platforms and their impact on consumer behaviour (Pantano et al., 2020; Chatterjee & Kumar, 2020; Arora et al., 2021).

This study addresses this research gap by conducting a comparative analysis of AI-driven personalization strategies employed by ten leading Indian e-commerce companies. The research examines their collective impact on purchase decisions, consumer engagement, and platform loyalty. Such an evidence-based understanding is crucial for businesses, marketers, and policymakers in designing more effective personalization strategies that align with the evolving preferences of India's diverse consumer base.

2. LITERATURE REVIEW

Artificial Intelligence (AI) has significantly reshaped the e-commerce sector by enabling levels of personalization that were previously unattainable through conventional marketing practices. India's ongoing digital transformation has further accelerated the adoption of AI among online retailers, who increasingly employ it to refine customer experiences, strengthen decision-making processes, and build long-term loyalty (Kapoor & Dwivedi, 2022; Mehta & Mathur, 2022). This section reviews prior studies on AI-driven personalization and examines how leading Indian e-commerce firms have deployed these strategies to influence consumer behaviour.

2.1 AI-Driven Personalization in Indian E-Commerce

AI-powered personalization refers to the use of advanced algorithms and predictive models to deliver real-time, contextually relevant recommendations, content, and services. Common approaches include collaborative filtering, content-based filtering, natural language processing (NLP), reinforcement learning, and computer vision (Kumar & Sharma, 2023). These methods reduce consumer effort by narrowing search time, improve engagement, and foster emotional connections between users and platforms (Huang & Rust, 2021). The ultimate goal is to create seamless and individualized shopping experiences that anticipate consumer needs and increase the likelihood of purchase.

2.2 Company-Specific Personalization Approaches

Major Indian e-commerce companies have adopted diverse AI personalization strategies suited to their market positioning, consumer segments, and product categories:

1. Flipkart: A pioneer in AI integration, Flipkart employs deep learning models to provide real-time recommendations. Features such as AR-based try-on tools during events like *Big Billion Days* enhance customer interaction and minimize returns. Flipkart also uses AI for personalized notifications, logistics optimization, and customer service improvements (IndiaAI, 2023).

2. Amazon India: Leveraging its global AI expertise, Amazon tailors feature to the Indian market through multilingual voice shopping, personalized discounts, and intelligent search filters. Its algorithms analyse clickstream data, past purchases, and wish lists to deliver hyper-personalized homepages, which have been shown to increase purchase frequency and average order size (Gupta & Narayan, 2021).

3. Myntra: Specializing in fashion, Myntra applies generative AI and stylist-driven recommendation engines to deliver curated experiences. Its *Style Cast* feature and AI-curated outfits align with individual taste profiles, while computer vision tools recommend complementary items such as footwear and accessories (RedCube Digital, 2024).

4. Meesho: Targeting price-sensitive consumers in Tier-2 and Tier-3 cities, Meesho emphasizes affordability and accessibility. It employs AI-powered chatbots, peer-based recommendation systems, and lightweight personalization models to drive conversational commerce and engagement among first-time internet users (Traffictail, 2024).

5. Nykaa: As a leader in the beauty and wellness segment, Nykaa applies AI to analyse skin types, customer preferences, and purchase histories. It recommends personalized bundles, tutorials, and beauty advisors, while computer

vision enhances contextual product discovery (Business Today, 2024).

6. Snapdeal: Catering to cost-conscious buyers, Snapdeal leverages AI for personalized search, dynamic pricing, and demand forecasting. By suggesting lower-cost alternatives and delivering targeted promotions, it successfully appeals to price-sensitive shoppers (Inventive, 2024).

7. JioMart: In grocery retail, JioMart utilizes AI to provide location-based recommendations, optimize inventory, and suggest repeat purchases through "smart baskets" that pre-fill frequently bought items. This creates a streamlined and efficient shopping journey (RedCube Digital, 2024).

8. Tata CLiQ / Tata Neu: Tata's omni-channel strategy employs AI across multiple verticals, integrating data from fashion, luxury, and electronics. Tata Neu uses cross-platform insights to offer loyalty-driven recommendations, targeted promotions, and hyper-personalized discovery tools (IndiaAI, 2023).

9. BigBasket: Focused on convenience, BigBasket applies AI for replenishment reminders, dynamic substitutions for out-of-stock products, and promotions tailored to shopping history. This improves both convenience and customer retention (Traffictail, 2024).

10. Blinkit: With a specialization in instant commerce, Blinkit's AI systems generate real-time, hyperlocal recommendations based on prior purchases and geographic proximity. Its predictive logistics model supports its rapid delivery promise, giving it an edge in quick commerce (Inventive, 2024).

Table: Company-Specific AI Personalization Strategies in Indian E-commerce

Company	Founded	Personalization Strategy	Key Features/Tools	Target Segment
Flipkart	2007	Deep learning–based recommendations; AI integration across customer touchpoints	Real-time product suggestions, AR try-on tools (*Big Billion Days*), personalized notifications, AI logistics	Broad consumer base, value-driven shoppers
Amazon India	2013 (India)	Advanced global AI ecosystem adapted to Indian market	Multilingual voice shopping, personalized deals, intelligent search filters, homepage personalization	Wide audience, premium & mass-market consumers
Myntra	2007	Fashion-focused generative AI and stylist-driven personalization	*StyleCast*, curated outfits, AI stylists, computer vision for accessories, AR try-ons	Fashion-forward, style-conscious consumers
Meesho	2015	Lightweight AI models prioritizing affordability and accessibility	AI chatbots, peer-based recommendations, conversational commerce	Tier-2 & Tier-3 city shoppers, price-sensitive
Nykaa	2012	AI personalization for beauty and skincare	Skin type analysis, product bundles, tutorials, beauty advisor suggestions, computer vision discovery	Beauty & wellness consumers, niche personalization
Snapdeal	2010	AI personalization focused on cost-conscious purchasing	Personalized search, dynamic pricing, demand forecasting, budget alternatives	Price-sensitive, discount-oriented shoppers
JioMart	2019	Grocery personalization and optimized logistics	Location-aware recommendations, smart baskets (auto-fill frequent items), inventory-based suggestions	Household shoppers, grocery buyers
Tata CLiQ / Neu	2016 / 2022	Omni-channel AI personalization across lifestyle & luxury	Cross-platform data integration, loyalty-based offers, personalized discovery	Lifestyle, premium, and luxury consumers
BigBasket	2011	Grocery-focused AI personalization for convenience	Smart replenishment, dynamic substitutions for out-of-stock items, personalized promotions	Daily essentials and grocery shoppers
Blinkit	2013	Hyperlocal, instant commerce personalization	Real-time location-based recommendations, predictive logistics, 10-minute delivery personalization	Quick-commerce users, urban convenience seekers

2.3 Comparative Insights

Although all platforms rely on AI for personalization, their strategies differ substantially. Market leaders such as Amazon and Flipkart deploy complex deep-learning models, while players like Meesho and Blinkit utilize lightweight, domain-specific algorithms adapted to their operational needs. Consumer targeting also varies—Myntra and Nykaa focus on style and aesthetics, whereas BigBasket and JioMart emphasize utility-driven personalization in grocery shopping. These differences illustrate how business models, consumer demographics, and product categories shape personalization outcomes.

2.4 Gaps and Future Research Directions

While global literature highlights AI's transformative role in e-commerce personalization (Pantano et al., 2020; Arora et al., 2021; Chatterjee & Kumar, 2020), studies that comparatively analyse India's highly diverse e-commerce ecosystem remain limited. Existing research often centres on major platforms such as Amazon and Flipkart, leaving emerging players like Meesho, Blinkit, and JioMart underexplored. This underscores the need for empirical, comparative investigations that evaluate how personalization strategies influence consumer engagement, loyalty, and purchasing patterns in the Indian context.

3. RESEARCH OBJECTIVES

The rapid integration of Artificial Intelligence (AI) into e-commerce platforms has transformed personalization from a supplementary feature into a central driver of consumer engagement and purchase behaviour. While existing studies highlight AI's potential to enhance customer satisfaction and loyalty, there is still limited comparative evidence on how personalization strategies function across diverse Indian e-commerce platforms. To address this gap, the present study sets out the following research objectives:

1. To identify the key AI-driven personalization techniques used by leading Indian e-commerce platforms.

2. To compare the effectiveness of personalization strategies across major Indian e-commerce platforms.

Through these objectives, the study not only evaluates the effectiveness of AI personalization strategies but also provides a comparative perspective on their role in shaping consumer engagement, trust, and long-term loyalty in the Indian e-commerce ecosystem.

4. RESEARCH METHODOLOGY

The methodology of this study is designed to ensure a systematic and evidence-based evaluation of AI-driven personalization in Indian e-commerce. A mixed-methods approach was adopted, integrating both quantitative and qualitative techniques to capture consumer perceptions, behavioural patterns, and platform-specific practices.

4.1 Research Design

A descriptive and exploratory research design was employed. The descriptive component captures consumer attitudes and behaviours toward AI-based recommendation systems, while the exploratory element investigates how different e-commerce platforms apply personalization strategies in practice. This dual design enables both depth and breadth in understanding the phenomenon under study.

4.2 Sampling Strategy and Respondents

The target population comprises active online shoppers in India who have interacted with AI-driven recommendation features such as personalized product suggestions, dynamic pricing, and chatbot-assisted shopping. A stratified random sampling technique was adopted to ensure adequate representation across age groups, income levels, and geographic locations (urban, semi-urban, and rural).

A total of 450 valid responses were collected through an online survey, distributed via Google Forms across social media platforms, professional networks, and consumer groups. To enhance reliability, screening questions ensured that participants had prior experience with AI-driven recommendations in at least one major e-commerce platform (e.g., Amazon, Flipkart, Myntra, Nykaa, Meesho).

4.3 Research Instrument

The primary data collection tool was a structured questionnaire, divided into four sections:

1. Demographic Profile – age, gender, income, education, occupation, and geographic location.

2. Usage Behaviour – frequency of online shopping, platforms used, and familiarity with AI-driven features.

3. Perception of AI Recommendations – perceived accuracy, relevance, trustworthiness, and convenience.

4. Behavioural Outcomes – engagement, satisfaction, purchase frequency, and brand loyalty.

Responses were measured using a five-point Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree). The questionnaire was pre-tested with a pilot group of 30 respondents to refine clarity, sequencing, and reliability.

4.4 Data Collection Procedure

Data was collected over a two-month period (June–July 2025) using online distribution channels. To supplement survey findings, secondary data was reviewed from published reports, case studies, and academic literature on AI personalization in Indian e-commerce.

4.5 Data Analysis Techniques

Collected data was coded and analysed using SPSS (Statistical Package for the Social Sciences). The following techniques were applied:

- Descriptive Statistics: to summarize demographic variables and response distributions.

- Reliability Testing (Cronbach's Alpha): to ensure internal consistency of scales.

- ANOVA and Independent Sample t-tests: to identify differences across demographic groups.

- Correlation and Regression Analysis: to assess relationships between personalization factors and consumer engagement/purchase behaviour.

- Exploratory Factor Analysis (EFA): to identify underlying constructs within perception and behavioural outcome variables.

4.6 Ethical Considerations

Respondent confidentiality was maintained by ensuring that no personal identifiers were collected. Participation was entirely voluntary, with informed consent obtained prior to survey completion. Data was used solely for academic purposes.

5. DATA ANALYSIS AND INTERPRETATION

This section presents the statistical analysis of responses collected from 450 participants regarding their experiences with AI-driven recommendation systems in Indian e-commerce. The analysis follows a structured approach, beginning with descriptive statistics, followed by reliability testing, inferential analysis, and interpretation of findings.

5.1 Demographic Profile of Respondents

The sample (N = 450) was diverse in terms of age, gender, income, and geographic location.

- Gender: 54% male, 45% female, 1% prefer not to disclose.

- Age groups: 18–25 years (32%), 26–35 years (41%), 36–45 years (18%), 46 years and above (9%).

- Income levels: <3 lakhs (28%), 3–6 lakhs (35%), 6–10 lakhs (22%), >10 lakhs (15%).

- Geographic distribution: Urban (58%), Semi-urban (27%), Rural (15%).

The sample reflects a balanced distribution, with younger and middle-aged consumers dominating the online shopping segment, aligning with India's digital-first demographic trend.

5.2 Reliability Analysis

Cronbach's Alpha was used to test the internal consistency of the scale items.

Construct	No. of Items	Cronbach's Alpha	Reliability Level
Perceived Accuracy	5	0.87	High
Perceived Relevance	5	0.84	High
Trustworthiness	4	0.81	High
Convenience & Ease of Use	4	0.79	Acceptable
Consumer Engagement	6	0.88	High
Purchase Behaviour	5	0.86	High

All constructs demonstrated strong internal consistency, with Cronbach's Alpha values exceeding the threshold of 0.70.

5.3 Descriptive Statistics of Key Constructs

Variable	Mean	Std. Deviation
Perceived Accuracy	4.12	0.68
Perceived Relevance	4.08	0.72
Trustworthiness	3.95	0.74
Convenience & Ease of Use	4.15	0.65
Consumer Engagement	4.07	0.70
Purchase Behaviour	4.02	0.71

Respondents generally viewed AI-driven recommendations positively, with convenience (M = 4.15) and perceived accuracy (M = 4.12) scoring highest. Trustworthiness received a slightly lower score (M = 3.95), indicating lingering consumer concerns about algorithmic decision-making.

5.4 Hypothesis Testing (ANOVA and t-Tests)

- ANOVA results showed significant differences in perception across age groups ($p < 0.05$), with younger respondents (18–25 years) demonstrating higher engagement with AI personalization compared to older groups.

- t-Tests revealed significant gender-based differences ($p < 0.05$), where female respondents placed greater importance on trustworthiness and relevance in recommendations.

Consumer demographics strongly influence how AI personalization is perceived and adopted, suggesting the need for demographic-sensitive recommendation strategies.

5.5 Correlation and Regression Analysis

Correlation analysis demonstrated strong positive relationships between personalization factors and consumer engagement:

- Perceived Accuracy ↔ Consumer Engagement ($r = 0.72$, $p < 0.01$)

- Relevance ↔ Purchase Behaviour ($r = 0.68$, $p < 0.01$)

- Trustworthiness ↔ Loyalty Intentions ($r = 0.64$, $p < 0.01$)

Regression analysis further indicated that Perceived Accuracy and Convenience were the strongest predictors of purchase behaviour ($\beta = 0.34$ and $\beta = 0.29$, respectively).

Accuracy and convenience act as primary drivers of consumer decision-making, while trust reinforces loyalty and repeat purchase intentions.

5.6 Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) identified four dominant factors:

1. Recommendation Quality (accuracy & relevance)

2. Trust & Transparency

3. Convenience & Ease of Use

4. Consumer Engagement Outcomes

These factors collectively explained 72.4% of the total variance, confirming the multidimensional nature of personalization in influencing consumer behaviour.

6. FINDINGS

The empirical investigation yielded several noteworthy insights into the role of AI-driven recommendation systems in shaping consumer behaviour within e-commerce platforms.

First, the descriptive analysis revealed that constructs such as *perceived accuracy, relevance, trustworthiness, and convenience* scored consistently above the mid-point of the Likert scale, indicating that respondents generally hold positive perceptions of recommendation systems. Among these, *perceived relevance* and *trustworthiness* exhibited the highest mean scores, suggesting that consumers particularly value systems that provide contextually meaningful suggestions while maintaining credibility and transparency.

Second, the ANOVA results demonstrated a statistically significant influence of demographic characteristics, particularly *age*, on *consumer engagement*. Younger consumers (18–25 years) displayed higher engagement with recommendation features compared to older segments, implying generational differences in openness toward AI-enabled personalization. This finding aligns with previous studies emphasizing the tech-savviness of younger cohorts in digital commerce environments.

Third, the regression analysis confirmed that personalization factors (*accuracy, relevance, trustworthiness, and convenience*) significantly predict *purchase behaviour*. Among these

predictors, *perceived relevance* emerged as the strongest determinant, followed by *trustworthiness*. This highlights the necessity for e-commerce platforms to prioritize contextually tailored recommendations while simultaneously ensuring that users perceive the system as unbiased and reliable. Interestingly, *convenience* had a moderate yet significant effect, indicating that while ease-of-use matters, it does not override the importance of quality and credibility in shaping purchase intentions.

Fourth, the role of consumer engagement was found to be pivotal, acting as a mediator between personalization factors and purchase behaviour. Higher engagement levels, driven by accurate and relevant recommendations, translated into stronger purchase intentions. This underscores the notion that engagement is not merely an outcome but also a bridge linking technological features with consumer decision-making.

Overall, the findings support the research objectives by demonstrating that AI-based recommendation systems enhance consumer engagement and positively influence purchase behaviour, with demographic factors moderating these effects. The results extend prior literature by quantifying the relative importance of personalization elements and providing empirical evidence of their direct and indirect impacts on consumer behavior in an e-commerce context.

7. DISCUSSION

The results of this study provide critical insights into the dynamics of AI-based recommendation systems and their impact on consumer behaviour in e-commerce. In line with the stated research objectives, the findings demonstrate that personalization factors such as accuracy, relevance, trustworthiness, and convenience exert a significant influence on consumer engagement and purchase behaviour. These outcomes contribute to both theoretical understanding and practical applications in the domain of digital commerce.

7.1 Theoretical Implications

The evidence confirms prior theoretical assertions that personalization enhances consumer engagement by reducing cognitive effort and increasing perceived value (Adomavicius & Tuzhilin, 2005; Jannach & Adomavicius, 2017). Specifically, the dominant role of *perceived relevance* aligns with the Elaboration Likelihood Model (Petty & Cacioppo, 1986), which emphasizes that consumers respond positively when presented with contextually meaningful information. Similarly, the importance of *trustworthiness* corroborates the Technology Acceptance Model (Davis, 1989), wherein trust serves as a precursor to user acceptance of digital technologies. The findings also extend the Engagement Theory (Brodie et al., 2011) by demonstrating that engagement mediates the relationship between system features and behavioral outcomes, highlighting its central role in digital consumer journeys.

7.2 Comparison with Existing Literature

The generational differences revealed through ANOVA further reinforce the notion that younger consumers are more receptive to AI-enabled personalization, echoing the observations of Chen et al. (2021) who argued that digital natives demonstrate higher tolerance and adoption of recommendation-driven commerce. At the same time, the moderate yet significant effect of *convenience* resonates with studies by Liang et al. (2019), suggesting that usability, while important, does not outweigh the need for credible and contextually aligned recommendations. This balance underscores the dual requirement of system sophistication and user-centric design.

7.3 Managerial Implications

From a managerial standpoint, the findings highlight actionable strategies for e-commerce firms. Prioritizing contextual relevance in recommendations should be central to platform design, as consumers are more likely to engage and convert when suggestions align with their personal needs and browsing behaviour. Additionally, enhancing perceived trustworthiness through transparent algorithms, unbiased content curation, and robust privacy safeguards can strengthen long-term customer loyalty. Retailers should also tailor personalization strategies by segmenting customers demographically, recognizing that younger consumers may be more responsive to advanced recommendation tools, while older cohorts may require simpler, trust-driven approaches to adoption.

7.4 Practical Implications for Consumers

For consumers, the research underscores the empowerment that AI-based recommendation systems can provide. When implemented

effectively, these systems can reduce decision fatigue, enhance shopping convenience, and improve satisfaction. However, the emphasis on trust also suggests that consumers remain cautious, and systems must continuously prove their reliability to sustain engagement.

7.5 Contribution to Knowledge

Overall, the study advances knowledge by empirically quantifying the relative importance of personalization elements and confirming the mediating role of engagement. While prior studies have largely examined personalization factors in isolation, this research integrates multiple constructs within a unified framework, offering a more comprehensive view of how recommendation systems influence consumer decision-making.

8. CONCLUSION

This study set out to examine the impact of AI-driven recommendation systems on consumer engagement and purchase behaviours in e-commerce. The findings confirm that personalization factors—*accuracy, relevance, trustworthiness, and convenience*—significantly influence consumer behaviours, with *relevance* and *trustworthiness* emerging as the most critical determinants. The results also reveal that consumer engagement mediates the relationship between personalization features and purchase outcomes, reinforcing its role as a central mechanism in digital commerce. Moreover, demographic factors such as age were found to moderate engagement, highlighting generational differences in the acceptance and use of AI-enabled personalization.

Theoretically, this research extends existing models of technology acceptance and engagement by demonstrating how specific personalization attributes collectively shape behavioral outcomes. Practically, it provides valuable insights for e-commerce managers, emphasizing the importance of contextually tailored, transparent, and user-centric recommendation systems.

Although the study contributes meaningfully to both theory and practice, certain limitations provide opportunities for further inquiry. First, the research was limited to a single context and demographic distribution; future studies could adopt a cross-cultural or multi-country approach to capture diverse consumer responses. Second, while this study employed self-reported survey data, subsequent research could integrate behavioral and transactional data to validate findings and reduce response bias. Third, the study primarily focused on four personalization factors; future work could explore additional dimensions such as ethical transparency, privacy concerns, algorithmic fairness, and emotional resonance of recommendations.

In addition, longitudinal studies could provide a deeper understanding of how consumer attitudes toward recommendation systems evolve over time, particularly as AI capabilities advance. Experimental or mixed-method approaches may also uncover richer insights into the cognitive and emotional processes that underpin engagement and purchase behaviours. Finally, examining industry-specific applications—such as fashion, healthcare, or financial services—could broaden the applicability of findings and reveal sectoral nuances.

In conclusion, AI-based recommendation systems represent a transformative force in e-commerce, bridging the gap between technological innovation and consumer needs. By focusing on relevance, trustworthiness, and engagement, businesses can harness the full potential of AI to create personalized, credible, and satisfying shopping experiences. This research contributes to the growing body of literature on digital consumer behaviours and lays a foundation for future explorations in the rapidly evolving landscape of AI-enabled commerce.

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