

THE EMERGING ROLE OF ARTIFICIAL INTELLIGENCE IN SHAPING CONSUMER BEHAVIOR: A GLOBAL PERSPECTIVE

Anju Bala

Principal (Offg.) & Professor in Commerce, Arya Girls College, Ambala Cantt

ABSTRACT

Artificial intelligence (AI) has become a central force in modern consumer markets, fundamentally altering how individuals search for information, evaluate alternatives, make purchase decisions, and interact with firms. AI-powered technologies, such as recommender systems, algorithmic pricing, chatbots, and generative artificial intelligence (GenAI), increasingly mediate consumer decision-making processes through personalization, automation, and predictive analytics. This paper examines the emerging role of AI in shaping consumer behaviour from a global perspective. Drawing on interdisciplinary research from marketing, information systems, and policy studies, it analyses how AI influences consumer cognition, affect, and behaviour while also introducing new risks related to privacy, trust, manipulation, and inequality. The paper argues that AI's effects on consumer behaviour are unevenly distributed across regions due to disparities in digital infrastructure, regulatory frameworks, and data governance, contributing to a widening global digital divide. While AI offers significant benefits, including reduced search costs and enhanced customer experiences, its unchecked deployment may undermine consumer autonomy and welfare. The study concludes by emphasizing the need for ethical, transparent, and consumer-centric AI governance to ensure that AI-driven markets remain inclusive, competitive, and trustworthy worldwide.

Keywords: Artificial intelligence, consumer behaviour, generative artificial intelligence, AI-driven personalization, recommender systems, digital marketing, algorithmic decision-making, customer experience, consumer trust, data privacy, ethical AI

INTRODUCTION

Artificial intelligence has transitioned from a behind-the-scenes analytical tool to a visible and influential actor in consumer markets. Today, AI systems determine which advertisements consumers see, which products are recommended, how prices fluctuate, and how customer service interactions unfold. These developments represent a structural shift in consumer behaviour, as decision-making is increasingly shaped by algorithmic processes rather than solely by individual preferences or traditional marketing communications.

Recommender systems exemplify this transformation. By leveraging vast datasets and machine-learning techniques, these systems filter information and rank products in ways that reduce cognitive effort and guide consumer attention (Valencia-Arias et al., 2024). More recently, generative AI has extended these capabilities by producing human-like text and conversational responses, enabling scalable yet personalized engagement with consumers (Mogaji & Jain, 2024).

However, the growing influence of AI raises important concerns. Consumers increasingly worry about data privacy, surveillance, and algorithmic manipulation, even as they adopt AI-enabled services at scale (Deloitte, 2024). Moreover, AI's benefits are not evenly distributed globally. Differences in infrastructure, regulatory capacity, and digital literacy mean that consumers in developing economies may face greater risks and fewer benefits (UNCTAD, 2024).

This paper explores how AI reshapes consumer behaviour across global contexts. It examines five key dimensions: AI’s impact on the consumer decision journey, personalization and recommender systems, generative AI and persuasion, trust and ethical considerations, and global disparities and policy implications.

ARTIFICIAL INTELLIGENCE AND THE CONSUMER DECISION JOURNEY

AI fundamentally alters the consumer decision journey by restructuring how information is presented and how choices are made. Traditional models of consumer behaviour describe a linear progression from problem recognition to post-purchase evaluation. AI compresses and reshapes this journey by automating search, evaluation, and engagement.

During the information search stage, AI-powered search engines and chatbots provide instant, context-aware responses, reducing reliance on manual comparison. Recommender systems narrow choice sets by ranking options based on predicted preferences derived from past behaviour and aggregated user data (Valencia-Arias et al., 2024). While this reduces cognitive load, it also shifts decision authority toward algorithms.

AI-driven nudges, dynamic pricing, and personalized promotions influence the evaluation and purchase stages by encouraging faster decision-making. Behavioural research suggests that such automation can increase impulsive purchases and reduce deliberation, especially when transparency is limited (Aguirre et al., 2015). Post-purchase, AI systems manage feedback, customer support, and loyalty programs, shaping satisfaction and repeat behaviour.

Table 1. AI Applications Across the Consumer Decision Journey

Decision Stage	AI Application	Behavioural Effect	Consumer Risk
Problem recognition	Personalized feeds	Need stimulation	Manipulative targeting
Information search	AI chatbots, semantic search	Reduced effort	Opaque filtering
Evaluation	Recommender systems	Narrowed choice set	Reduced diversity
Purchase	Dynamic pricing	Faster decisions	Perceived unfairness
Post-purchase	Predictive support	Loyalty reinforcement	Excessive data use

PERSONALIZATION, RECOMMENDER SYSTEMS, AND CONSUMER BEHAVIOR

Personalization is the most visible mechanism through which AI shapes consumer behaviour. By tailoring content and product offerings to individual users, firms aim to enhance relevance and engagement. Recommender systems play a central role in this process, particularly in e-commerce and digital platforms.

Empirical research demonstrates that personalization increases perceived usefulness and satisfaction by aligning offerings with consumer preferences (Valencia-Arias et al., 2024). Reduced information overload enables consumers to make decisions more efficiently, which can enhance perceived value and trust.

However, personalization also introduces behavioural lock-in. Algorithms trained on historical data tend to reinforce existing preferences, limiting exposure to novel options and reducing exploratory behaviour (Sunstein, 2017). Over time, consumers may become dependent on algorithmic guidance, weakening their sense of autonomy.

From a market perspective, personalization strengthens platform power. Firms with superior data capabilities can deliver better recommendations, reinforce network effects and increase switching costs (Shankar et al., 2020). For consumers, this creates a trade-off between convenience and competition.

GENERATIVE AI, PERSUASION, AND CONSUMER AUTONOMY

Generative AI represents a qualitative shift in AI–consumer interaction. Unlike predictive systems, GenAI actively creates content, enabling personalized persuasion at unprecedented scale. Applications include automated advertising copy, customized product descriptions, and conversational shopping agents.

GenAI enhances engagement by simulating human-like interaction and adapting language, tone, and framing to individual consumers (Mogaji & Jain, 2024). These capabilities can increase persuasion effectiveness and perceived responsiveness.

However, GenAI raises concerns about authenticity and manipulation. Studies indicate that consumers may perceive AI-generated content as less credible or trustworthy, even when disclosure is provided (Buder et al., 2024). This “trust penalty” complicates transparency strategies and may influence brand evaluations.

Additionally, GenAI lowers the cost of producing misleading or deceptive content, including fake reviews and endorsements. This degrades the information environment and increases perceived risk, pushing consumers to rely on heuristics such as brand reputation rather than information quality (Luca & Zervas, 2016).

TRUST, PRIVACY, AND ETHICAL CONSTRAINTS

Trust is a critical moderator of AI’s influence on consumer behaviour. Without trust, consumers may resist AI-enabled services or limit data sharing. Survey evidence shows that concerns about privacy and surveillance are rising alongside AI adoption (Deloitte, 2024).

Privacy concerns shape behaviour through avoidance, self-censorship, and strategic non-disclosure (Martin & Murphy, 2017). Such behaviours reduce personalization accuracy and may undermine the consumer experience.

Ethical issues extend to fairness and discrimination. Algorithmic pricing and targeting can produce unequal outcomes across demographic groups, leading to perceptions of injustice and loss of trust (Zuboff, 2019). These perceptions influence complaint behaviour, brand attitudes, and regulatory demand.

International frameworks emphasize trustworthy AI grounded in transparency, accountability, and human rights (OECD, 2024). For consumers, ethical AI is not an abstract concept but a practical determinant of acceptance and engagement.

GLOBAL PERSPECTIVE AND THE DIGITAL DIVIDE

AI’s impact on consumer behaviour varies significantly across regions. Differences in infrastructure, data governance, and regulatory capacity shape how consumers experience AI-mediated markets.

High-income economies capture disproportionate benefits, while many developing economies face structural disadvantages (UNCTAD, 2024).

Consumers in advanced economies benefit from sophisticated personalization but are exposed to extensive data collection. In middle-income economies, rapid digitalization accelerates AI adoption but often outpaces regulation. In lower-income contexts, limited connectivity and weak consumer protection increase vulnerability to fraud and exclusion.

Table 2. Global Differences in AI-Driven Consumer Behaviour

Region Type	Opportunity	Risk	Consumer Outcome
High-income	Seamless personalization	Surveillance	Privacy trade-offs
Middle-income	Market access	Weak enforcement	Trust instability
Low-income	Digital leapfrogging	Exclusion	Unequal welfare

Global cooperation and capacity-building are therefore essential to ensure that AI enhances consumer welfare rather than widening inequality.

CONCLUSION

Artificial intelligence is reshaping consumer behaviour by mediating decisions, personalizing experiences, and redefining persuasion. While AI offers efficiency and relevance, it also introduces risks related to trust, privacy, manipulation, and inequality. These effects vary globally, reflecting disparities in infrastructure and governance.

A consumer-centric AI agenda must prioritize transparency, fairness, and meaningful control. Ethical and inclusive AI governance is essential to ensure that technological innovation enhances, rather than undermines, consumer autonomy and welfare in global markets.

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