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ARTIFICIAL INTELLIGENCE AS A DRIVER OF CONSUMER BEHAVIOR TRANSFORMATION

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Abstract. *This study examines the transformative impact of artificial intelligence on consumer behavior, highlighting how AI tools reshape decision-making, enable personalized experiences, and create new models of digital consumer behavior. While AI-driven personalization enhances customer satisfaction and engagement, it also introduces systemic risks, such as algorithmic discrimination, biased recommendations, and social inequities, which can undermine trust and loyalty of consumer. The study underscores the importance of transparency, ethical AI governance, and data diversification in designing adaptive marketing strategies.*

Key words*:* consumer bahavior; artificial intelligence; AI tools; marketing strategies.

In today's technological landscape, artificial intelligence (AI) has moved beyond being a tool for automating routine tasks; it has become a powerful force shaping consumer preferences, reshaping decision-making, and creating new economic realities [1]. The current pace of adoption of GenAI is unprecedented: over 53% of consumers in the US are already actively experimenting with the technology, and its use in the workplace has more than quadrupled in the past two years alone.

AI has begun to be perceived by consumers as a trusted personal assistant. About 42% of GenAI users report that the technology has had a «very positive» impact on their lives, exceeding the satisfaction they get from using physical devices or traditional mobile apps [1]. However, this deep integration comes with growing concerns about data transparency and security. The modern consumer is in a state of dissonance: they crave intelligent, hyper-personalized experiences, but at the same time they are showing the highest level of distrust of tech giants in recent years.

The economic underpinnings of this transformation are as far-reaching as its psychological implications. McKinsey estimates the potential for generative AI to unlock between $2.6 trillion and $4.4 trillion in added value annually, significantly adding to the contribution of traditional analytical AI [2]. Retail and e-commerce are seeing explosive growth: the AI market in this sector, estimated at $9.36 billion in 2024, is projected to reach $85.07 billion by 2032, with a compound annual growth rate (CAGR) of around 32%.

Previously, the decision-making process consisted of entering keywords, browsing a list of links, and manually aggregating data. Today, the consumer is moving into the «generative intent» stage. This means using AI to solve a holistic problem in a single interaction cycle. For example, instead of searching for «best hotels in Italy», the consumer formulates a complex query: «Plan a 10-day trip to Tuscany for a family with children, taking into account a budget of 5,000 euros and the need for gluten-free food» [3]. This transition creates the phenomenon of «zero-click decisions». Users rely on summaries generated by ChatGPT or Gemini without visiting the original source sites [4]. This forces marketers to rethink their presence strategy, moving from classic SEO to AEO (Answer Engine Optimization), where the main goal is to become part of the AI's training sample and be mentioned in its answers.

Table 1

Mechanism of AI tool's influence on the consumer

AI Tool	Mechanism of influence on the consumer
Dynamic Pricing. Using algorithms to adjust prices in real time based on a consumer's geolocation, search history, or device type	This directly affects the perception of the value of the product and the elasticity of demand. However, if the consumer shows signs of discrimination (for example, a higher price for owners of premium smartphones), this leads to abandonment of the platform and harsh criticism on social networks

Predictive Analytics. Analyzing metadata, context, and past transactions to suggest products before a consumer actively searches	The main effect is to reduce cognitive load and effort for reflection. This transforms the purchase from an active process of selection to a passive acceptance of a recommendation, which stimulates impulsive purchases and increases the frequency of transactions
Virtual Try-Ons (AR/AI)	These tools eliminate the “paradox of choice”, when the customer is lost among a large number of options. Virtual fitting reduces the psychological barrier of “fear of mistake”, increases confidence in the purchase and significantly reduces the percentage of product returns
Providing products based on similarities to other users' interests or previous interactions	Helps consumers find new interests. However, prolonged use can lead to the formation of “information bubbles” where the consumer sees only a limited range of products, which narrows their autonomy and limits critical thinking
Algorithmic Nudge. Using AI-generated signals of scarcity («2 units left») or urgency («Sale valid for 1 hour») based on behavioral data	Exploits cognitive biases such as “fear of missing out” (FOMO) and loss aversion, which forces the consumer to accelerate the decision-making cycle, often ignoring rational analysis

The impact of AI-powered personalization goes beyond a single purchase. Brands have been able to increase customer satisfaction by 20% and conversion rates by 15% [5]. However, success depends on the quality and availability of data: while 64% of companies have access to their own data for AI, only 26% use it to train models, indicating significant untapped potential [5].

One of the most controversial aspects of the transformation of consumer behavior is «algorithmic discrimination». This occurs when AI models trained on biased historical data begin to reproduce and reinforce existing social inequalities [6]. Summarizing the directions of such discrimination identified by researchers, we can distinguish the following types of it [6-8]:

1) Price discrimination: Dynamic pricing models can set higher prices for residents of certain neighborhoods or for users of premium devices. This often hurts less protected segments of the population, who are forced to pay more for similar products.

2) Recommendation bias: If a system is trained on data from a predominantly male audience, it may offer women or people from other cultures less relevant products, narrowing their consumer choices and reinforcing stereotypes.

3) Language barriers: Chatbots trained primarily on English-language datasets are less likely to serve customers who speak other languages or dialects, leading to discrimination based on ethnicity.

4) Discrimination in lending and insurance: Algorithms can use zip codes as a proxy for race, leading to loan denials or higher interest rates for certain communities.

Consumers react strongly to perceived signs of discrimination. Research shows that a negative experience with a biased AI significantly increases the likelihood that a customer will leave the platform. Moreover, the feeling of injustice activates the mechanism of «negative reciprocity»: consumers begin to perceive unethical actions against a company as «restoring balance» [8].

An analytical review indicates that algorithmic discrimination constitutes a systemic risk within the digital transformation of consumer behavior, as it reproduces structural inequalities through the use of data containing social biases and non-transparent decision-making models. This issue is evident in practices such as price discrimination, biased recommendations, language barriers, and discriminatory lending, which generate not only social concerns but also strategic reputational risks for companies, ultimately reducing customer loyalty. In the context of marketing and the study of AI-driven transformations in consumer behavior, companies should integrate algorithmic auditing and diversified training data into the analysis of customer journeys to identify bias-induced distortions in personalization, pricing, and recommendation systems. At the same time, enhancing transparency and embedding ethical standards into AI governance should inform the development of adaptive customer experience strategies that strengthen trust, perceived fairness, and long-term customer relationships.

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