

ARTIFICIAL INTELLIGENCE ON CONSUMER BUYING BEHAVIOUR- A LITERATURE REVIEW.

Abstract

Artificial Intelligence (AI) is transforming the way individuals shop and make their purchase decisions. It helps companies to know phrases of consumer like by analyzing their online searches, previous purchases and preferences. Due to this, customers will notice tailor-made product recommendations, ads, and offers that suit their needs better. Customers can also be assisted by AI applications such as chatbots and virtual assistants that can provide quick answers to their questions and provide guidance throughout the shopping process. It facilitates the process of buying more easily, conveniently and quickly. This leads to improved customer satisfaction, and customers tend to believe and be loyal to particular brands.

Keywords: Artificial Intelligence; Chatbots, Intelligent Systems, Consumer Behaviour; Experience, Satisfaction.

1. Introduction

Artificial Intelligence (AI) that will change the customer purchasing behavior by personalizing shopping, making it more efficient and data-oriented. AI analyzes customer data—such as preferences, browsing history, and past purchases—to aspect of the process being described, focusing on the customization and suggestion components needs. This enhances convenience and affects decision making, which usually results in faster decisions.

Also, AI-based applications such as chatbots and virtual assistants provide immediate assistance, enhancing the customer experience. Pricing and advertising are also dynamic and influence the way and timing of consumer purchases. On the whole, AI facilitates the shopping experience and implicitly informs consumers about their preferences.

27 **1.1 Evolution of Artificial Intelligence in Consumer Markets**

28 The part of artificial intelligence in consumer markets has evolved significantly during the last
29 decade. Initially, AI applications were limited to simple automation tasks such as inventory
30 management and basic customer service systems. However, with advancements in machine
31 learning and data processing capabilities, AI equipment are at present deeply combined into the
32 entire consumer journey. Today, AI influences consumers at each step of the purchasing stages,
33 comprising awareness, Data research, evaluation of alternatives, purchase decision, and after
34 purchase behavior. AI-powered tools help consumers discover products more efficiently,
35 compare options quickly, and get customized advice based on their preferences. As a result, the
36 traditional consumer decision-making model has become more data-driven and technology-
37 oriented.

38 **1.2 Role of Artificial intelligence in the Consumer Decision-Making Process**

39 Artificial intelligence can have a significant influence on every consumer decision making
40 process. The conventional decision making process involves 5 stages namely need awareness,
41 Data search, Evaluation of choice, purchase decision, and post-purchase evaluation.

42 With the help of AI technologies, consumers are supported on all levels of this process.

43 In the need recognition phase, AI-driven advertisements and recommendations introduce
44 consumers to products that align with their personal interests, which can create a desire to buy
45 the products. In the information search phase, AI-driven search engines and recommendation
46 systems can be used to assist consumers with the expedient retrieval of information about
47 products. Buyer has the ease of rating the various products, reviewing and accessing features to
48 make a choice. During the assessment phase, AI systems can read the preferences of consumers
49 and offer them ideal product selections, assisting the consumer to select the most suitable
50 product. At the purchase phase, AI-powered platforms offer secure payment systems, custom
51 discounts, and a hassle-free checkout experience to make the purchase process more
52 comfortable. Lastly, during the post purchase, AI assists companies to receive customer
53 feedback, analyze their satisfaction rates and to provide them with a personalized follow up

54 services. Artificial intelligence has a huge impact on consumer attitudes and purchasing behavior
55 by assisting consumers through the entire purchase process.

56 **1.3 Changing Consumer Expectations in the Digital Era**

57 The digital revolution has changed consumer expectations. Modern consumers demand
58 convenience, speed, personalization, and seamless experiences when interacting with businesses.
59 Artificial intelligence helps organizations meet these expectations by delivering efficient and
60 customized services. Additionally, AI technologies enable businesses to provide personalized
61 marketing messages and targeted promotions. Customers become more likely to respond
62 positively to ads that align with their interests and preferences. As a result, artificial intelligence
63 not only influences consumer purchasing patterns, but also shapes consumer expectations
64 regarding service quality, convenience, and personalization.

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69 **1.4 Importance of Artificial Intelligence in Consumer Decision-Making**

70 • **Personalized Recommendations**

71 Artificial Intelligence analyzes consumers' browsing history, purchase patterns, and
72 preferences to offer tailored product suggestions, assisting consumers locate items that
73 most closely resemble their needs.

74 • **Improved Customer Experience**

75 AI enhances the shopping experience through personalized services, smart search results,
76 and interactive platforms, making the purchasing process easier and more convenient.

77 • **Faster Decision-Making**

78 AI systems process large amounts of information quickly and present relevant product
79 options, helping consumers make quicker and more knowledgeable purchasing decisions.

- 80 • **24/7 Customer Support**
- 81 Chatbots and Virtual assistants driven by AI can instantly respond to consumer inquiries
- 82 at any time, guiding consumers during the buying process and improving satisfaction.
- 83 • **Accurate Product Suggestions**
- 84 Through machine learning algorithms, AI predicts consumer needs and suggests good
- 85 based on previous performance and similar user preferences.
- 86 • **Reduced Information Overload**
- 87 Online platforms offer thousands of products, which can overwhelm consumers. AI
- 88 filters and organizes information so that consumers see the most relevant options.
- 89 • **Enhanced Product Search**
- 90 AI enhances the search engines on e-commerce sites by comprehending the intent of the
- 91 user and presenting even more precise product results.
- 92 • **Predictive Insights**
- 93 AI can be used to forecast upcoming requirements, through analyzing trends and
- 94 consumer behavior, and assist consumers in finding products they may be interested in,
- 95 without actively seeking them.
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- 97 • **Better Price Comparison**
- 98 AI applications assist buyers in making comparisons of prices, features, and reviews on
- 99 various products allowing them to select the most appropriate value.
- 100 • **Increased Consumer Confidence**
- 101 With comprehensive product information, reviews and suggestions, AI provides
- 102 customers with more confidence in their decision to buy.
- 103 • **Improved Marketing Relevance**
- 104 AI delivers targeted advertisements and promotional offers based on consumer interests,
- 105 making marketing messages more relevant.
- 106 • **Voice and Smart Assistant Shopping**

107 AI-powered voice assistants streamline the shopping process by enabling customers to
108 search for products, evaluate options and make purchases with voice commands.

109 **2.Objective of the Study**

110 • To study the theoretical aspects of Artificial Intelligence (AI)
111 affects consumer buying behaviour.

112 • To know various views of researches in relation with Artificial Intelligence
113 (AI) affects consumer buying behaviour.

114 **3. Methodology of the Study**

115 Both Primary and Secondary sources of information were used to compile this study. Primary data is
116 collected through a questionnaire survey from consumers to understand their buying behaviour and
117 regarding their background in Artificial intelligence (AI) tools such as recommendations and chatbots.
118 Books, Journals, Websites and Research articles about Artificial intelligence and Consumer behavior are
119 the sources of Secondary data.

120 **4. Review of Literature**

121 **Bharathi & Elakkiyan (2026)¹** To study predictive modeling of consumer purchases intentions
122 using AI. AI models significantly improve prediction accuracy of consumer behavior and
123 purchasing intentions in e-commerce. AI enhances decision-making and forecasting capabilities
124 for businesses. Dependent on high-quality datasets and technical expertise.

125 **Muhammad Usman (2025)²** To examine AI-based recommendation systems and their impact on
126 online buying behavior. AI recommendations significantly improve purchase decisions; trust and
127 usefulness act as key mediators. AI positively influences consumer buying through
128 personalization and trust-building. Focused only on e-commerce users in one region.

129 **Sharma et al. (2025)³** To analyze AI in social commerce and its effect on buying behavior. AI
130 improves engagement, satisfaction, and personalized marketing. AI strengthens consumer-brand
131 relationships. Survey-based study with limited sample.

132 **Shi et al. (2025)**⁴ To examine how AI-generated content (AIGC) influences consumer purchase
133 intentions and behavioral patterns. The study found that AI-generated content significantly
134 enhances consumer engagement, perceived value, and purchase intention. Personalization and
135 novelty were key drivers influencing decision-making. AI-based content is vital to the success of
136 shaping modern consumer behavior by increasing interactivity and satisfaction. Focused mainly
137 on creative/design products; results may not apply to all industries.

138 **Ivanov et al. (2025)**⁵ To examine the connection between AI tools and consumer loyalty in
139 ecommerce. AI usage increases customer satisfaction, loyalty, and repeat purchases, especially
140 among experienced users. AI positively influences long-term consumer relationships.
141 Region-specific (Russia) study limits generalization.

142 **Kumar et al. (2025)**⁶ To explore how AI influences consumer choices in digital marketplaces.
143 AI-driven recommendations and targeted advertising significantly shape consumer preferences
144 and purchasing behavior. AI reshapes decision-making processes in digital environments.
145 Behavior prediction remains complex due to dynamic preferences.

146 **Zhang et al. (2025)**⁷ To examine AI companionship and consumer interaction. Consumers using
147 AI companions show increased emotional attachment but lower well-being. AI can influence
148 consumer decisions through emotional attachment. Long-term impact unclear.

149 **Hariharan & Adarsh Singh (2024)**⁸ To review how AI transforms consumer behavior. AI
150 enables personalization and data-driven marketing strategies. AI enhances customer experience
151 and influences purchase decisions. Conceptual study, lacks empirical testing.

152 **Ghul axe (2024)**⁹ To study AI in multichannel consumer experiences. AI improves seamless
153 shopping across platforms. AI enhances omnichannel buying behavior. Limited empirical
154 validation.

155 **Farooq & Yen (2024)**¹⁰ To carry out a systematic literature review regarding AI and consumer
156 behavior. AI affects consumer attitudes, preferences, decision-making, and marketing
157 effectiveness through automation and personalization. AI is a transformative force in modern
158 consumer markets. Based on secondary data; lacks primary empirical validation.

159 **Dang (2024)**¹¹ To analyze AI-driven advertising using the Theory of Planned Behavior. AI
160 influences consumer attitudes, intentions, and behaviors through targeted ads and
161 personalization. AI advertising plays a key role in shaping purchase intentions. Needs more
162 empirical testing in real-world settings.

163 **Adanyin (2024)**¹² To examine ethical implications of AI in consumer markets, focusing on
164 privacy, fairness, and transparency. The study found that while AI improves personalization,
165 consumers are very worried about data misuse, surveillance, and algorithmic bias. These
166 concerns directly influence trust and purchase intention. Ethical transparency is essential for AI
167 adoption; without trust, AI negatively impacts buying behavior. Focuses mainly on ethical
168 dimensions rather than full consumer decision-making.

169 **Werner et al. (2024)**¹³ To test if conversational AI can steer consumer behavior without
170 detection. AI can significantly influence preferences subtly and unconsciously. Ethical
171 implications for AI in marketing are critical. Experimental; real-world complexity may differ.

172 **Cheng et al. (2024)**¹⁴ To examine how chatbot characteristics influence consumer trust and
173 behavior. Empathy and friendliness of chatbots significantly increase consumer trust, while task
174 complexity reduces trust levels. AI chatbots influence buying decisions through trust-building
175 mechanisms. Limited to chatbot-based interactions.

176 **Gu et al. (2024)**¹⁵ To study consumer trust in AI after service failures. Trust recovery
177 mechanisms influence continued usage and purchase behavior. Trust is essential for AI adoption
178 in consumer decisions. Focused on post-failure scenarios.

179 **Dai & Liu, (2024)**¹⁶ To examine AI applications in online retail purchase behaviour.
180 Personalization, chatbots, predictive analytics significantly influence purchases. Ethical and
181 transparent AI builds consumer trust and engagement. Ethical effects need deeper exploration.

182 **Cai & Gao (2024)**¹⁷ To analyze how chatbot service failure communication affects trust and
183 engagement. Communication style (empathy, clarity) significantly predicts satisfaction and
184 future intention. Chatbot language impacts perceived quality and decision continuity. Service
185 failure focus.

186 **Manikandan & Bhuvaneshwari (2024)**¹⁸ To measure influence of AI on online purchase
187 decisions among Indian consumers. AI eases conversion from interest to purchase, leveraging
188 consumer data patterns. Adoption of AI tools increases purchase intention in e-commerce.
189 Focused only on Indian sample.

190 **Bergner (2023)**¹⁹ To analyze how conversational AI affects consumer-brand relationships.
191 Human-like AI communication increases engagement, willingness to pay, and brand loyalty.
192 Conversational AI strengthens emotional connection with brands. Experimental design limits
193 realworld application.

194 **Dash (2023)**²⁰ To examine AI-powered marketing and consumer attitudes. Strong correlation
195 between AI adoption and consumer buying behavior. AI enhances marketing effectiveness and
196 consumer satisfaction. Requires micro-level empirical studies.

197 **Venkata Subbaiah et al. (2023)**²¹ To study AI's influence on online purchase decisions. AI
198 enhances satisfaction and purchase intention. AI has significant part in digital buying decisions.
199 Focused only on retail sector.

200 **Nagy & Hajdu (2022)**²² To examine consumer acceptance of AI in online shopping. Trust and
201 perceived usefulness strongly influence AI adoption. AI acceptance drives buying behavior.
202 Country-specific study (Hungary).

203 **Kim, Zhang & Zheng (2022)**²³ To apply the Use & Gratification theory to AI chatbot adoption
204 in e-commerce. Convenience, enjoyment, and authenticity of interaction favorably affect
205 consumer perceptions of AI chatbots. Consumer satisfaction and buying behavior are strongly
206 influenced by perceived usefulness and enjoyment. Focused only on Chinese consumers.

207 **Frontiers Study (2022)**²⁴ To examine communication styles of chatbots and their effect on
208 satisfaction. Social-oriented communication increases satisfaction more than task-oriented
209 communication. AI communication style significantly affects consumer buying decisions. Works
210 better for specific consumer personality types.

211 **Tiwari (2022)**²⁵ To investigate the role of AI in Indian consumer purchasing behaviour. AI
212 enhances customer loyalty, forecasting, and operational efficiency. AI significantly reshapes
213 retail purchasing patterns in emerging markets. Literature-based with limited empirical testing.

214 **Gkikas & Theodoridis (2022)**²⁶ To analyze AI and big data analytics role in understanding
215 consumer behavior. AI processes large datasets to find trends in consumer preferences, enabling
216 accurate targeting and personalized marketing strategies. AI enhances decision-making by
217 offering in-depth understanding of consumer buying patterns. Highly technical; lacks focus on
218 emotional and psychological factors.

219 **Cheng & Jiang (2021)**²⁷ To analyze chatbot marketing efforts and customer-brand relationships.
220 Chatbot interaction, accessibility, and customization improve brand relationships and consumer
221 responses. AI chatbots significantly influence purchase intention and brand loyalty. Focused on
222 chatbot marketing only.

223 **Liu et al. (2020)**²⁸ To forecast consumer purchase behavior using facial recognition and AI
224 analytics. Facial expressions and emotional cues improved prediction accuracy of buying
225 intentions. AI can analyze human emotions to influence purchasing behavior. Raises serious
226 ethical and privacy concerns.

227 **Roychowdhury et al. (2020)**²⁹ To use Machine learning to examine online consumer behavior.
228 AI predicts purchase behavior with high accuracy. AI enhances behavioral analysis. Data-driven,
229 lacks consumer perception insights.

230 **Verma (2020)**³⁰ To predict consumer purchase behavior using AI models. AI models accurately
231 predict buying patterns. AI improves marketing and inventory decisions. Highly technical, less
232 focus on psychology.

233 **5. Findings**

234 Several studies emphasize that AI significantly improves the prediction of consumer buying
235 intentions. Bharathi & Elakkiyan (2026) and Verma (2020) found that AI models enhance
236 forecasting capabilities in e-commerce, allowing businesses to anticipate consumer preferences
237 and optimize inventory and marketing strategies. Roychowdhury et al. (2020) emphasized that

238 computer learning methods accurately predict online consumer behaviour, although they
239 frequently lack understanding of consumer perception and psychological factors. Personalization
240 is a recurring theme in AI applications. Muhammad Usman (2025), Kumar et al. (2025), and
241 Manikandan & Bhuvaneshwari (2024) demonstrated that AI-driven recommendations and targeted
242 advertisements significantly influence consumer purchase decisions. Trust, usefulness, and
243 relevance are key mediators in shaping consumer behaviour. AI tools help to transform
244 consumers interest into real purchases, particularly in digital marketplaces and e-commerce
245 platforms. Multiple studies reveal that Chatbots driven by AI and conversational systems play a
246 vital part in building trust, engagement, and satisfaction among consumers. Cheng et al. (2024),
247 Cai & Gao (2024), Cheng & Jiang (2021), and Frontiers Study (2022) found that empathy,
248 friendliness, social oriented communication, and clarity in chatbots enhance consumer trust,
249 positively impacting buying decisions and brand loyalty. Bergner (2023) noted that human-like
250 AI interaction strengthens emotional attachment with brands, increasing willingness to pay.
251 However, the real world long-term AI effects companionship and conversational AI remains less
252 clear (Zhang et al., 2025). Sharma et al. (2025) and Ghulaxe (2024) observed that AI enhances
253 engagement, satisfaction, and seamless shopping across multiple channels, strengthening
254 omnichannel buying behaviour. AI integration in social commerce platforms improves
255 consumer-brand relationships and fosters loyalty through personalized content and interactive
256 experiences. Shi et al. (2025) found that AI-generated content significantly increases consumer
257 engagement, perceived value, and purchase intention, especially when personalization and
258 novelty are emphasized. AI content enhances interactivity and modernizes the consumer
259 shopping experience, though its relevance may differ between industries, particularly outside
260 creative and design products. Several studies emphasize the ethical dimension of AI adoption in
261 consumer markets. Adanyin (2024), Liu et al. (2020), and Dai & Liu (2024) highlighted that
262 privacy, fairness, transparency, and ethical AI usage directly influence consumer trust and
263 purchase intentions. Without trust, AI personalization and automation may negatively impact
264 buying behaviour. Werner et al. (2024) also pointed out the subtle, unconscious influence of AI
265 on consumer preferences, raising ethical concerns in marketing. AI-driven advertising and
266 marketing are shown to shape consumer attitudes, intentions, and behaviors. Dang (2024), Dash
267 (2023), and Farooq & Yen (2024) found that targeted, personalized ads improve purchase
268 intention and marketing effectiveness. AI enables businesses to better predict consumer

269 preferences and enhance engagement, but empirical studies in realworld settings are still limited.
270 Trust, perceived usefulness, and ease of interaction are critical factors for AI adoption. Nagy &
271 Hajdu (2022), Kim et al. (2022),and Tiwari (2022) concluded that AI acceptance drives buying
272 behaviour, especially when consumers perceive AI as convenient, authentic, and enjoyable.
273 However, country-specific and sample-specific studies indicate that adoption patterns vary across
274 regions, cultures, and demographics. Gkikas & Theodoridis (2022) highlighted the role of AI in
275 processing large datasets to identify consumer preference patterns and enable accurate targeting.
276 Predictive analytics, big data, and AI-driven insights improve decision-making, marketing
277 efficiency, and operational forecasting. Nonetheless, studies note the technical complexity of AI
278 and the need for high-quality data. Many studies, including Hariharan & Adarsh Singh (2024)
279 and Venkata Subbaiah et al. (2023), point out limitations such as small sample sizes, regional
280 constraints, industry specificity, and reliance on secondary or conceptual data. Ethical,
281 psychological, and long-term effects of AI adoption remain underexplored. Additionally, while
282 AI improves efficiency and personalization, its effect on emotional well-being (Zhang et al.,
283 2025).

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6. Conclusion

291 AI has affected consumer choice processes in the way that it is making people more dependent
292 on recommendations, reviews, and suggestions when they make purchasing decisions since this
293 technology facilitates an easy, fast, and customized shopping experience. Simultaneously, the use
294 of AI allows companies to encourage consumers to purchase goods and services that were not
295 initially intended to purchase since the system knows the preferences of consumers. Even though
296 such changes contribute to convenience and time-saving in the purchasing process, there is a risk
297 of being under the impact of a technology, so customers have to be more cautious.

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