

AI as a Decision Partner in Consumer Purchasing: Behavioral Transformation, Decision Autonomy, and Ethical Implications

Masoud Naeimi¹, Qazale Family²

M.A. Graduate, South Tehran Azad University, Tehran, Iran

BSc Graduate, Payame Noor University, Tehran, Iran

Abstract: Artificial intelligence (AI), as a decision-making partner, transforms consumer purchasing decisions by leveraging advanced and real-time data processing to deliver personalized insights. Drawing on empirical data from global surveys and theoretical frameworks, we analyze how AI enhances product selection, pricing optimization, and purchase timing through predictive analytics and recommendation algorithms, while differentiating its impact on routine versus complex decisions. Key findings reveal AI's influence on increasing purchase frequency, product variety, and impulse buying, alongside shifts in preferences and reduced autonomy. However, its integration raises ethical concerns, including risks to consumer autonomy, privacy, and potential biases in algorithmic recommendations, which are analyzed to highlight the broader implications for consumers and society. By integrating practical insights and ethical considerations, this work contributes to the growing discourse on AI's role in consumer psychology and decision-making, offering directions for future research to balance technological advancements with consumer well-being.

Keywords: Artificial intelligence, Consumer behavior, Decision partner, marketing strategies, ethical considerations

1. Introduction

With the emergence of artificial intelligence (AI) and its substantial effects, consumers in today's dynamic digital marketplace face an extensive range of options, resulting in increasingly complex purchasing decisions influenced by informational, preferential, and behavioral factors. These days, AI has become a trusted guide, revolutionizing how individuals assess choices, evaluate value, and make purchases (Dujmović & Raval, 2025). AI not only automates tasks but also serves as a strategic partner through the evaluation of large volumes of data, providing personalized recommendations that may appear straightforward while being powered by advanced technology. AI makes the purchasing experience a personalized, dynamic process, unlike previous methods (Ifekanandu et al., 2023). AI can predict consumer needs by analyzing past behaviors, online interactions, and even real-time context, often before they are fully understood. AI uses data on consumer behavior, previous purchases and customer feedback to provide users with customized choices (Adawiyah et al., 2024). The ability of AI is based on its capability to learn patterns, predict preferences, and detect subtleties in consumer behavior (Bleier et al., 2020).

Essentially, algorithms serve as adaptive tools, monitoring both customer behavior and implementing suitable responses as needed, which results in not only improved consumer satisfaction but also a higher proportion of consumers following AI suggestions for purchasing products. AI suggestions, through search history for

instance, present customized suggestions based on a user's unique features and preferences, leading to a satisfying purchase that matches their specific need for a personalized and satisfying purchase. This level of satisfaction is closely associated with repeated purchases as a result of personalization, which can help customers stay loyal by providing them with consistent and relevant recommendations from the AI (Naeimi & Family, 2025).

Furthermore, some empirical evidence indicates that the integration of generative AI will be affected by certain factors. According to Bergur Thormundsson's global survey in Sender (2024), a substantial proportion of respondents (35%) believe that mistakes or errors in generative AI will lead to significant real-world consequences, severely impacting consumer trust. Similarly, a considerable number (34%) are willing to acknowledge that generative AI may fall short of delivering anticipated economic or operational benefits, potentially hindering its adoption. Additionally, a significant portion (30%) expresses concerns regarding the availability of sufficient high-quality data, which could restrict AI's effectiveness in consumer applications. Similarly, regarding trust, a considerable percentage of respondents (29%) indicate that a general decrease in trust, stemming from biased behavior, misinformation, and errors, will influence AI adoption. Additionally, a sizable share of respondents (25%) are reluctant to fully embrace AI due to intellectual property issues, which create uncertainty and limit enthusiasm for its integration.

AI's impact extends beyond making easy choices, as it transforms consumer thinking and behavior (Prasad et al., 2024). By providing quick and useful advice, AI can simplify the process of buying. When making significant choices, such as purchasing a vehicle or creating an investment strategy, it explores the details, forecasts the worth of each item, and presents case studies. The ability of AI to be flexible can make it a practical companion for everyday tasks or supplementary in order to assist with complex decisions (Gupta et al., 2022). In spite of AI's capacity to reduce the mental effort involved in navigating options, it can occasionally channel consumers into established patterns, potentially restricting discovery and innovative decision-making. By providing personalized recommendations that reflect customer preferences, this system plays a crucial role in influencing consumer behavior and purchasing decisions, using a comprehensive set of data, including past transactions and online interactions, to deliver personalized recommendations that enhance the overall shopping experience.

AI not only controls purchases but also alters habits. Shopping with personalized instructions allows individuals to make frequent purchases or explore different products, enabling them to make complex decisions. This system can offer insights to help make complex decisions more manageable over time by analyzing the potential benefits. Additionally, AI can anticipate the timing and rationale of consumer purchases by utilizing behavioral patterns as well as affective responses expressed on social media platforms. Customized recommendations might focus more on business goals rather than real customer needs, leading to minor changes in the suggestions provided, which are not always beneficial (Azad et al., 2023). Under certain circumstances, algorithms trained on past data might prioritize specific products or customer segments, leading to disparities in informational or promotional availability (Akter et al., 2022).

The present research examines the pivotal role of AI as a decision-making partner in consumer purchasing processes. We analyze the mechanisms through which AI enhances product customization, pricing optimization, and purchase timing decisions, and the moral dilemmas that arise, all while integrating a practical approach, empirical data, and ethical considerations. By doing this, we add to the expanding body of research on the relationship between AI-driven personalization, consumer psychology, and artificial intelligence.

This paper is structured as follows: First, we examine the functional attributes of AI, such as predictive analytics, recommendation algorithms, and real-time data processing, which enable personalized decision support and behavioral adaptation. Following this, we review global survey data to comprehend challenges and barriers that influence AI adoption, including errors, unmet expectations, and data limitations. Consequently, we discuss the ethical issues related to these aspects, including the loss of autonomy, privacy risks, and biased algorithms. As a final point, we highlight the limitations of this paper and propose future research that focuses on both ethical considerations and academic rigor.

The Role of Artificial Intelligence in the Purchase Process

Artificial intelligence (AI) acts as a crucial decision partner in consumer purchasing, leveraging advanced analytics to provide customized insights. It enhances product selection, pricing evaluation, and purchase timing by analyzing large amounts of data with complex algorithms. This system not only offers rapid suggestions for routine purchases but also provides deep analysis for complex ones. By adapting to consumer behavior via machine learning, AI reduces cognitive overload, builds trust with transparent recommendations, and enhances efficiency ([Ribeiro & Grolinger, 2015](#)). This also makes the purchasing process both more efficient and user-friendly. Now, we will explore the dimensions of AI in the purchase process.

1-How AI Functions as a Decision Partner in the Purchasing Process

AI is considered a pivotal factor in the buying process, significantly enhancing the efficiency and precision of consumer choices. The processing of user preferences, behaviors, and needs is achieved through the use of advanced algorithms and big data analytics in AI. By means of machine learning, it identifies consumer buying patterns and delivers tailored recommendations that meet their specific needs. Through the use of past data, searches conducted on specific users, and live analysis of their behavior, these recommendations are made more precisely. Furthermore, AI collects and analyzes user feedback and social media comments to provide comprehensive insights into the quality of goods or services. Anticipating market patterns and price fluctuations helps consumers choose the most advantageous time to make purchases, providing them with a strategic advantage in making their purchases.

2-Decisions Most Impacted by AI

AI significantly impacts consumer purchasing decisions. By using sophisticated data analytics and predictive algorithms to optimize product selection, pricing, and purchase timing ([Chong & Shi, 2015](#)). Considering product selection, this system evaluates historical consumer behavior to offer customized choices, increasing decision accuracy, and making it easier to decide. For pricing decisions, AI uses models that change based on demand to offer prices that are both competitive and personalized, thereby increasing perceived value and guiding consumers toward cost-effective choices ([Seele et al., 2021](#)). AI, particularly, helps determine optimal buying moments to make purchases by analyzing market trends and product availability, reducing the possibility of missed deals.

3-Differences in AI's Role in Routine vs. Complex Purchases

Either the complexity of the decision or user needs can lead to distinct roles for AI in everyday and complex purchases. Recommendation systems are utilized by AI to analyze past consumption patterns for routine purchases, such as groceries or household items. However, considering more complicated purchases, such as cars or homes, AI goes beyond simple recommendations. It provides detailed comparisons, predicts long-term value, and performs financial scenario simulations. It helps by comparing different choices, predicting how much value you'll get over time, and showing how different financial situations. So, for everyday purchasing tasks, AI uses easier methods to ensure quick and easy transactions. But for more complicated purchases, it uses smart technologies like deep learning and natural language processing to evaluate user feedback and market trends, providing detailed and comprehensive insights ([Beyari & Garamoun, 2022](#)).

4-Changes in Consumer Purchasing Habits

Using big data analytics to identify and predict buying patterns, AI changes consumer purchasing habits, offering highly personalized recommendations ([Okeleke et al., 2024](#)). These suggestions match their personal needs, leading to more frequent and different purchases. AI makes shopping easier and faster, by enhancing shopping, encouraging more online shopping, and providing the opportunity for individuals to make purchases items easier on their own terms. However, depending a lot on AI suggestions can lead to less independent product searching, possibly limiting the range of choices and making them follow the platform's choices more ([Rosário et al., 2025](#)). Eventually, AI's impact helps build stronger brand loyalty for platforms that use

personalization well, changing the market structure to focus more on tailored consumer experiences. Now, we will discuss the four dimensions of AI in Changes in Consumer Purchasing Habits.

1. The Effect of AI Use on Changes in Consumer Purchasing Habits

Frequent use of AI-powered recommendation systems changes consumer purchasing habits by guiding their choices with customized suggestions based on data ([Vallabhaneni et al., 2024](#)). By analyzing purchase behavior, AI increases purchase frequency and diversifies product selections, encouraging consumers to explore items aligned with their interests. However, these systems can build brand loyalty, consistently promoting trusted brands, they might also reduce it by novel alternatives that change consumer preferences ([Matosas-López, 2025](#)). AI can make choices simpler, but in some cases, it can also limit the variety of options ([Shrestha et al., 2019](#)). Overall, this dynamic process leads to more frequent and varied buying, but it also challenges the balance between personalized choices and making independent decisions. Subsequently, three major changes are identified and discussed.

1.1 Purchase Frequency

AI greatly influences how often people purchase by using predictive analytics to encourage more frequent buying. By monitoring how people behave as customers, AI discloses patterns and prompts timely suggestions, which match emerging needs, thereby reducing the intervals between purchases ([Ashrafuzzaman et al., 2025](#)). Personalized notifications and targeted promotions, powered by AI, create a sense of urgency and relevance, motivating consumers to engage in additional transactions. Over time, this habitual exposure to curated suggestions fosters a routine of frequent buying, as users become accustomed to AI's anticipatory guidance. Also, when AI is part of mobile apps and online shopping sites, it makes buying simpler with just one click, facilitating individuals to purchase. These processes ultimately lead to a noticeable increase in overall purchases, changing the approaches customers interacting with retail environments.

1.2 Product Variety

By using AI-driven systems, consumer purchasing can be facilitated by diverse recommendations from artificial intelligence that are informed by advanced data analysis. While users' preferences are combined with extensive data, AI exposes consumers to more than just their typical choices, promoting discovery ([Tyser et al., 2024](#)). The implementation of algorithms that suggest complementary or alternative products enhances the shopping experience by diversifying the selection. In addition, consumers' purchasing portfolios expand to include a greater variety of categories and brands as a result of their increased engagement with these recommendations. However, the expansion can overwhelm users and potentially decision paralysis if not balanced with intuitive filtering ([Arnold et al., 2023](#)). Nevertheless, the net effect is a more varied consumption pattern that reflects a dynamic adaptation to AI-curated diversity ([Sharma & Sharma, 2024](#)).

1.3 Brand Loyalty

AI's ability to influence consumer attachment can be both effective and detrimental, with a dual nature of its effects on brand loyalty ([Prentice et al., 2023](#)). Particularly, Loyalty is strengthened by AI through the regular appearance of well-known brands in suggestions, based on previous data, to promote returning customers ([Chaturvedi & Verma, 2023](#)). Using AI analytics, loyalty programs are improved with tailored rewards that increase customers' commitment to specific brands. However, AI can also weaken loyalty by showcasing more attractive alternatives with better offers, causing customers to shift to these more appealing choices. The presence of variability in algorithms leads to loyalty being determined by perceived benefits rather than habitual preference ([Obiegbu & Larsen, 2024](#)).

2. Impact of AI on Increasing Impulse Buying

AI is changing consumer behavior, particularly increasing impulsive purchases, through emotional targeting, real-time nudges, and hyper-personalization ([Pezeshgi et al., 2025](#)). Behavioral data and psychological stimuli like scarcity and emotional reactivity are employed by AI-driven systems to stimulate impulsive buying patterns. AI-powered recommendation systems evaluate both behavioral patterns and preferences, offering personalized suggestions that increase the possibility of unplanned purchases. By optimizing the timing and presentation of offers, AI uses machine learning to target critical decision-making moments, creating a sense

of urgency through targeted promotions (Bhardwaj et al., 2024). This creates a feeling of urgency through special deals. Sentiment analysis enables AI to align recommendations with consumers' emotional states, further stimulating impulse purchases. Collectively, these capabilities create dynamic, engaging e-commerce experiences that amplify momentary buying impulses.

3. Impact of AI on Shifting Consumer Preferences Over Time

Through the analysis of user behavior, search records, and online activity, machine learning algorithms offer customized suggestions that provide consumers with novel options or trends by gradually steering their habits towards new categories (Bhaskaran & Marappan, 2023). Machine learning is applied to artificial neural networks in this way. By matching products more accurately, this personalization helps people make better decisions and persuade them to make impulse purchases (Upreti et al., 2023). Trusting AI is more firmly established than previous methods, leading people to search at a faster pace on their own. Although AI can make shopping more convenient and faster, this approach might limit the variety of options by presenting only a few, changing both market structures and marketing strategies.

4. Impact of AI on Reducing Consumer Decision-Making Autonomy

Although artificial intelligence can improve consumer choice management by suggesting the most effective and personalized recommendations, it often limits individual autonomy by limiting independent alternatives. Through the use of historical behavioral data, recommender algorithms prioritize options that match user preferences, deter consumers from exploring diverse possibilities and promote narrower decision-making in digital platforms such as online marketplaces (Bakalov et al., 2013). A dependency on intelligent systems results in automatic decision making without the possibility of creative thinking or critical analysis, potentially resulting to psychological effects like sensations that control is controlled and diminished (Jiang & Wang, 2021).

Generative AI Integration in Consumer Decisions: Evidence from Consumer Behavior Data

A closer look at global survey data demonstrates how barriers shape generative AI adoption in the digital environment. According to a 2024 survey conducted by Bergur Thormundsson and published by Statista, the most critical factors in hindering integration include mistakes/errors (35%), unmet value expectations (34%), data availability (30%), and trust decline (29%). Each of these factors aligns with challenges in consumer trust, demographics, culture, and industry-specific applications.

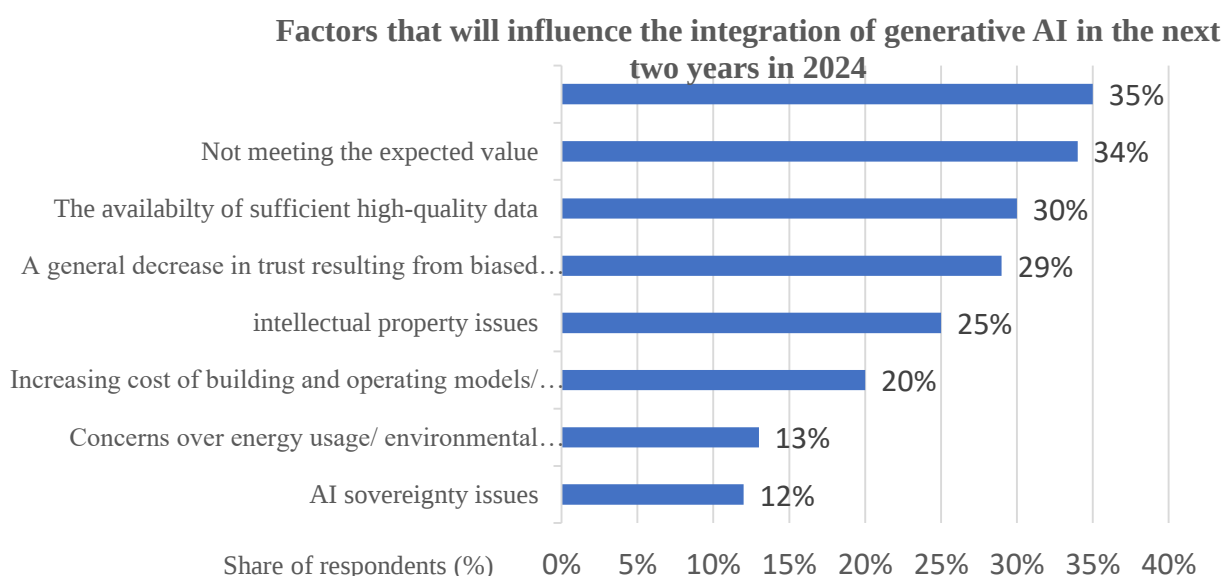


Figure 1: Bergur Thormundsson, (September 2024).

Barriers to generative AI adoption in the next two years globally in 2024 2024 [Graph]. In Statista. Retrieved August 15, 2025, from <https://www.statista.com/statistics/1607101/barriers-to-genai-adoption-in-the-future-global/>

1. Mistakes/errors resulting in real-world consequences (35%)

On top of the chart, 35% of respondents believed that mistakes or errors in generative AI will lead to significant real-world consequences, severely impacting consumer trust. These errors, such as misdiagnoses in healthcare or faulty recommendations in e-commerce, will likely discourage users from relying on AI for critical decisions. Industries like finance and transportation will face heightened scrutiny due to the potential for financial losses or safety risks. Respondents predict that this factor will remain a top barrier, necessitating stricter regulations to ensure safer AI integration by 2026.

2. Not meeting the expected value (34%)

34% of individuals reported that they expect generative AI to fall short of delivering anticipated economic or operational benefits, hindering its adoption. The deficiency will cause widespread disappointment among those who are eager to use transformations in their businesses and among consumers. As time goes by, enthusiasm for AI integration will dwindle. Embedded users will question the feasibility of using generative AI to make decisions.

3. The availability of sufficient high-quality data (30%)

30% of shoppers who responded to the survey indicated that the lack of sufficient high-quality data will restrict generative AI's effectiveness in consumer applications. In the absence of robust datasets, AI models will face a challenge in producing precise outcomes, such as personalized product recommendations. The imposition of privacy regulations will limit data access, making integration efforts across different industries more challenging. By 2026, respondents predict that companies will attempt to overcome this hurdle by utilizing synthetic data or using global data-sharing programs.

4. A general decrease in trust resulting from biased behavior, incorrect information, and errors (29%)

The data also indicates that a general decrease in trust (29%) will influence generative AI adoption due to biased behavior, misinformation, and errors. Consumers will hesitate to use AI-driven tools, such as chatbots or recommendation systems, if outputs reflect biases or inaccuracies. This erosion of confidence will slow integration, as users demand greater transparency and fairness in AI algorithms. By 2026, this factor is predicted to remain a critical barrier unless addressed through proactive measures.

5. Intellectual property issues (25%)

An additional 25% of customers stated that they expect intellectual property issues to hinder generative AI integration in consumer applications. Concerns over ownership and usage rights of AI-generated content will create uncertainty among users. This factor will limit enthusiasm for adopting AI in content-driven industries. The lack of clarity in intellectual property frameworks will slow the integration process. Respondents predict that these issues will continue to impact consumer confidence through 2026.

Ethical Considerations

The use of AI-driven tools as decision makers changes consumer behavior and purchasing habits, leading to ethical questions about autonomy, privacy, and long-term consequences. Concerns about the use of AI as a decision-making partner in consumer purchasing processes raise profound ethical questions that extend beyond immediate efficiencies to the broader implications for individuals and society. Considering the implications of this technological influence from a normative and forward-looking angle is crucial.

Another ethical issue is the problem of bias and discrimination, as algorithms can generate recommendations that unfairly target specific customer groups based on incomplete or biased data generated from various user interactions. Historical data often reveals an imbalance of prejudiced attitudes, such as those towards the wealthier or more engaged customer base while neglecting others. Subsequently, some groups may not be able to receive better offers or services due to algorithmic bias. This can lead to skewed recommendations that influence consumer decisions and result in poor or restricted decision-making.

Furthermore, potential violations of consumer autonomy represent other pressing ethical concerns. AI suggestions can weaken autonomy by using curated choices and persuasive interfaces, while also manipulating choices in a subtle way that aligns them with business objectives. Users' dependence may reinforce their own cognitive biases and emotional weaknesses, resulting in the conversion of voluntary decisions into conditioned responses. As consumers become more and more reliant on machines, the dependence on AI over time may result in diminished critical thinking skills that could lead to a loss of control over consumer choices. The gradual exposure to AI-driven nudges that prey on cognitive biases and emotional weakness can diminish autonomy, even though unnecessary and partially imposed purchases may be harmless or even joyful. This problem is more prevalent in individuals who struggle with poor self-discipline or compulsive buying. Data privacy is a major concern, as AI algorithms collect and store customer behavioral data, including online purchases and purchase history, which can lead to significant privacy breaches. The use of AI-driven systems can encourage individuals to disclose their personal data, such as past transactions, online activity, and preferences, by offering exclusive deals and personalized experiences that enhance their satisfaction. If privacy safeguards are not effective, AI can potentially manipulate consumer autonomy and behavioral patterns by manipulating habits and decisions. A lack of transparency in the way information is processed encourages distrust, which reduces user adoption and lowers consumer interest in AI-integrated platforms. Moreover, inadequate safeguards may allow unauthorized access.

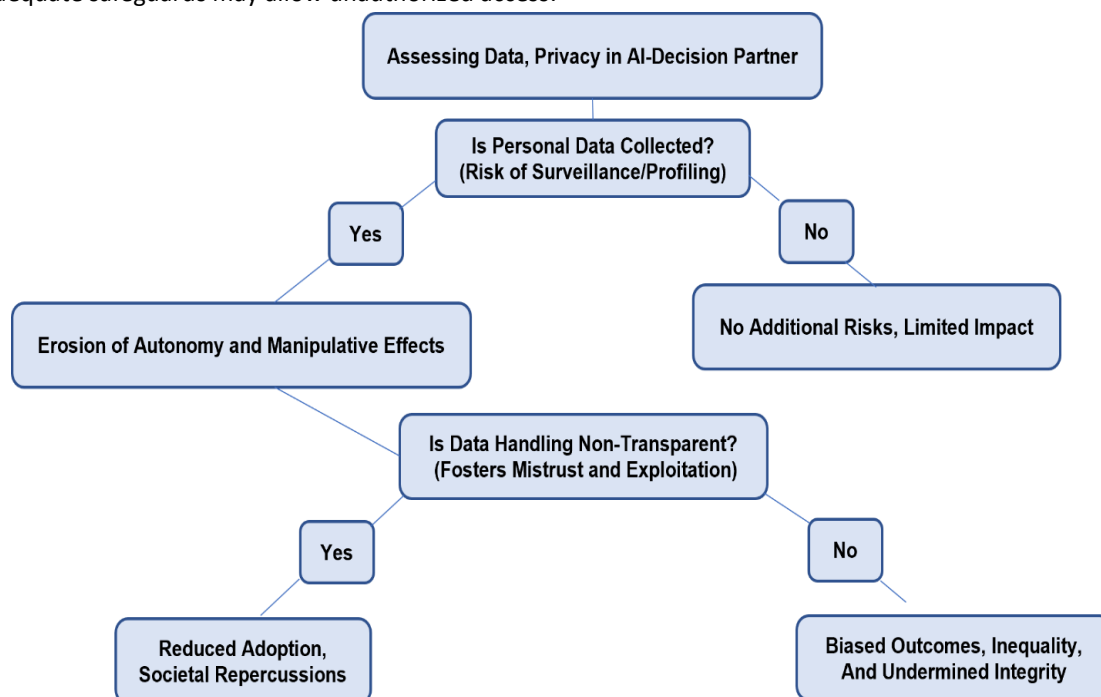


Figure 2 | Ethical Risk Pathway of Data and Privacy in AI-Decision Making

2. Limitations

The current research has limitations that require addressing, regardless of ethical concerns. The majority of research on AI and its impact as a decision partner transforming is based on self-reported data, which is typically obtained through online surveys or laboratory experiments. Despite their usefulness in theoretical advancement, these methods may encounter recall bias and social desirability influence. They may understate their negative role as a decision-making partner experiences or occasionally omit them to create a more consistent image for themselves. The impact of AI in real-world scenarios requires more naturalistic investigations to monitor it.

In addition, many studies are constrained by their surroundings. The study results are often limited to particular platforms, geographical areas, or product classifications. Consumers across different cultures may

exhibit varying reactions to the artificial intelligence system that controls their shopping experience, in contrast to what is represented on eBay. It is significant to conduct studies that both compare different cultures and consider how customers behave.

A further limitation is the difficulty of discerning the impact of AI on marketing from other factors. AI-driven suggestions are frequently combined with mechanisms such as influencer support, visual signals, time-sensitive offers such as proximity sensing and social proof, or AI itself. It's exceedingly challenging to differentiate the precise function of AI from these factors. Moreover, it is crucial to consider the overall viewpoint of customers when crafting customized research on the effects of AI. Also, due to the fast-paced changes in AI technology, it is a challenge that can develop quickly and possibly advance beyond what is being studied. The investigation utilizes present AI technologies and moral guidelines, including transparency versus consent. In the long term, the impact of AI changes may diminish the usefulness of certain conclusions. The quick transformation may have an impact on customer behavior in ways that have not been explored, as new AI techniques could influence either customer satisfaction or loyalty in a way that was previously thought. Unprecedented shifts make it Complicated to forecast long-term trends, obscuring how the changing nature of AI affects trust and subsequent purchases.

3. Conclusion and Future Research Directions

The varying connection between AI and customer behavior will lead to numerous significant research opportunities in the future. Exploring the long-term effects of AI exposure on product variety, brand loyalty, impulse buying, preference shifts, and autonomy reduction could be worth considering. although the current research demonstrates that AI can have a significant effect on customer behaviors, AI as a decision partner in modifying Consumer Behavior in the short term. Longer-term studies should evaluate whether these behaviors persist, evolve, or ultimately result in consumer fatigue or regret. A further critical focus is investigating the emotional aspect of the way AI-driven recommendations make customers feel, for example, whether consumers experience feelings of trust or compulsion, and how these perceptions influence them in the long term. AI influences the emotions of buyers, such as excitement or trust, during their purchasing decision process. The execution and quality of this process are sufficiently important to make its study imperative.

Furthermore, it is essential to direct additional focus toward understanding how AI facilitates change in preferences and personalized experiences in the long term, as well as recognizing patterns in repeated purchases and shifts in customers' behavior based on past interactions. This helps to show how AI can respond to sudden changes, such as seasonal shifts or emerging market trends, allowing businesses to create more effective strategies in the purchase process. Moreover, this can uncover shortcomings in AI's existing capabilities, leading to advancements that better align with diverse customer expectations over extended periods.

Moreover, comparing AI impacts on different industries, such as travel versus financial services, might demonstrate special trends that can help improve its use. These trends could offer valuable ideas on how to adjust AI to better serve various customer needs. By studying these trends, AI suggestions can become more accurate and flexible, leading to better experiences as a decision partner in modifying consumer behavior and purchases in different sectors. These steps will build a better comprehension of AI's role and make sure it offers value to both marketers and customers in the future.

In conclusion, a balance between theoretical progress and practical implementation is essential at the intersection of AI, consumer behavior, and purchasing practices. Uncontrolled use of AI poses a threat that erodes consumer autonomy and critical thinking, even brand loyalty and decision-making independence. To prevent this situation when technology improves rather than impacting human behavior, researchers, academics, and marketers need to adopt responsible strategies. An approach that can achieve harmony between business goals and moral principles.

4. References

1. Dujmović, J., & Raval, M. (2025). An AI aid for general decision-making assistance. *Proceedings of the AAAI Symposium Series*, 5(1), 56–59. <https://doi.org/10.1609/aaais.v5i1.35555>.
2. Ifekanandu, C. C., Anene, J. N., Iloka, C. B., & Ewuzie, C. O. (2023). Influence of artificial intelligence (AI) on customer experience and loyalty: Mediating role of personalization. *Journal of Umm Al-Qura University for Engineering and Architecture*. <https://doi.org/10.1007/s44187-023-00062-0>.
3. Adawiyah, S. R., Purwandari, B., & Effendi, I. (2024). The influence of AI and AR technology in personalized recommendations on customer usage intention: A case study of cosmetic products on Shopee. *Applied Sciences*. <https://doi.org/10.3390/app14187654>.
4. Bleier, A., Harmeling, C. M., & Palmatier, R. W. (2020). Creating effective online customer experiences through personalization. *Journal of Marketing*, 84(2), 77–96. <https://doi.org/10.1177/0022242919894279>.
5. Naeimi, M., & Family, Q. (2025). *AI and Post-Purchase Behavior: Personalization, Behavioral Insights, and Ethical Challenges*. *SSRN Electronic Journal*, 10(3), 45–68. <https://doi.org/10.2139/ssrn.5460815>.
6. Prasad, H. K., Rajesh, M., et al. (2024). The Impact of Artificial Intelligence on Consumer Behavior and Decision-Making. In *Proceedings of the International Conference on Augmented Reality and Artificial Intelligence* (pp. 1–6). IEEE Xplore. <https://doi.org/10.1109/ICARAI.2024.123456>.
7. Gupta, S., Modgil, S., Bhattacharyya, S., & Bose, I. (2022). Artificial intelligence for decision support systems in the field of operations research: Review and future scope of research. *Annals of Operations Research*, 308(1-2), 1-37. <https://doi.org/10.1007/s10479-020-03828-6>.
8. Azad, M. S., Khan, S. S., Hossain, R., Rahman, R., & Momen, S. (2023). Predictive modeling of consumer purchase behavior on social media: Integrating theory of planned behavior and machine learning for actionable insights. *PLoS ONE*, 18(12), e0296336. <https://doi.org/10.1371/journal.pone.0296336>.
9. Akter, S., Dwivedi, Y. K., Sajib, S., Biswas, K., Bandara, R. J., & Michael, K. (2022). Algorithmic bias in machine learning-based marketing models. *Journal of Business Research*, 144, 201–216. <https://doi.org/10.1016/j.jbusres.2022.01.083>.
10. Ribeiro, M., & Grolinger, K. (2015). MLaaS: Machine learning as a service. In *2015 IEEE International Conference on Machine Learning and Applications (ICMLA)* (pp. 896–902). IEEE. <https://doi.org/10.1109/ICMLA.2015.152>.
11. Chong, D., & Shi, H. (2015). Big data analytics: A literature review. *Journal of Management Analytics*, 2(3), 175–201. <https://doi.org/10.1080/23270012.2015.1082449>.
12. Seele, P., Dierksmeier, C., Hofstede, R., & Dierksmeier, C. (2021). Mapping the ethicality of algorithmic pricing: A review of dynamic and personalized pricing. *Journal of Business Ethics*, 170(4), 697–719. <https://doi.org/10.1007/s10551-019-04371-w>.
13. Beyari, H., & Garamoun, H. (2022). The effect of artificial intelligence on end-user online purchasing decisions: Toward an integrated conceptual framework. *Sustainability*, 14(14), 8529. <https://doi.org/10.3390/su14148529>.
14. Okeleke, P. A., Ajiga, D., Folorunsho, S. O., & Ezeigweneme, C. (2024). Predictive analytics for market trends using AI: A study in consumer behavior. *International Journal of Engineering Research Updates*, 7(1), 0032. <https://doi.org/10.53430/ijeru.2024.7.1.0032>.
15. Rosário, A. T., & Dias, J. C. (2025). AI-driven consumer insights in business: A systematic review and bibliometric analysis of opportunities and challenges. *International Journal of Marketing, Communication and New Media*, (15), 6–35. <https://doi.org/10.54663/2182-9306.2024.SpecialIssueMBP.6-35>.
16. Vallabhaneni, A. S., Perla, A., Regalla, R. R., & Kumari, N. (2024). The power of personalization: AI-driven recommendations. In *Minds Unveiled* (1st ed., pp. 9). Productivity Press. <https://doi.org/10.1032711089>.

17. Matosas-López, L. (2025). The influence of brand credibility and brand loyalty on customer satisfaction and continued use intention in new voice assistance services based on AI. *Journal of Marketing Analytics*, 13(1), 180–201. <https://doi.org/10.1057/s41270-023-00278-8>.
18. Shrestha, Y. R., Ben-Menahem, S. M., & von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. *California Management Review*, 61(4), 66–83. <https://doi.org/10.1177/0008125619862257>.
19. Ashrafuzzaman, M., Parveen, R., Sumiya, M. A., & Rahman, A. (2025). AI-powered personalization in digital banking: A review of customer behavior analytics and engagement. *American Journal of Interdisciplinary Studies*, 6(1), 40–71. <https://doi.org/10.63125/z9s39s47>.
20. Tyser, K., Segev, B., Longhitano, G., Zhang, X.-Y., Meeks, Z., Lee, J., Garg, U., Belsten, N., Shporer, A., Udell, M., Te'eni, D., & Drori, I. (2024). AI-driven review systems: Evaluating LLMs in scalable and bias-aware academic reviews. *arXiv preprint arXiv:2408.10365*. <https://doi.org/10.48550/arXiv.2408.10365>.
21. Balakrishnan, J., Cheng, C. H., Wong, K. F., & Woo, K. H. (2018). Product recommendation algorithms in the age of omnichannel retailing – An intuitive clustering approach. *Computers & Industrial Engineering*, 122, 271–281. <https://doi.org/10.1016/j.cie.2018.05.048>.
22. Arnold, M., Goldschmitt, M., Rig, T., & et al. (2023). Dealing with information overload: A comprehensive review. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2023.1121780>.
23. Sharma, A. K., & Sharma, R. (2024). Assessing the influence of artificial intelligence on sustainable consumption behavior and lifestyle choices. *Young Consumers*. <https://doi.org/10.1108/YC-04-2024-1764>.
24. Prentice, C., Loureiro, S. M. C., & Guerreiro, J. (2023). Engaging with intelligent voice assistants for wellbeing and brand attachment. *Journal of Brand Management*, 30, 449–460. <https://doi.org/10.1057/s41262-023-00321-0>.
25. Chaturvedi, R., & Verma, S. (2023). Opportunities and challenges of AI-driven customer service. In *Artificial Intelligence in Customer Service: The Next Frontier for Personalized Engagement* (pp. 33–71). Springer. https://doi.org/10.1007/978-3-031-33898-4_3.
26. Obiegbu, C. J., & Larsen, G. (2024). Algorithmic personalization and brand loyalty: An experiential perspective. *Marketing Theory*. Advance online publication. <https://doi.org/10.1177/14705931241259622>
27. Pezeshgi, A., Naeimi, M., & Family, Q. (2025). Buying on Impulse in the Age of AI: Mechanisms, Evidence, and Moral Dilemmas. *International Conference on Management, Economics and Entrepreneurship*, 8(1), 1–25. <https://doi.org/10.2139/ssrn.5402344>.
28. Bhardwaj, S., Sharma, N., Goel, M., Vandana, Sharma, K., & Verma, V. (2024). Enhancing customer targeting in e-commerce and digital marketing through AI-driven personalization strategies. In M. Ltifi (Ed.), *Advances in Digital Marketing in the Era of Artificial Intelligence* (pp. 41–60). CRC Press. <https://doi.org/10.1201/9781003450443-4>.
29. Bhaskaran, S., & Marappan, R. (2023). Enhanced personalized recommendation system for machine learning public datasets: Generalized modeling, simulation, significant results and analysis. *International Journal of Information Technology*, 15(3), 1583–1595. <https://doi.org/10.1007/s41870-023-01165-2>.
30. Upreti, K., Gangwar, D., Vats, P., Bhardwaj, R., Khatri, V., & Gautam, V. (2024). Artificial neural networks for enhancing e-commerce: A study on improving personalization, recommendation, and customer experience. In *Innovations in Electrical and Electronic Engineering* (pp. 141–153). Springer. https://doi.org/10.1007/978-981-99-8661-3_11.
31. Du, S., & Xie, C. (2021). Paradoxes of artificial intelligence in consumer markets: Ethical challenges and opportunities. *Journal of Business Research*, 134, 453–469. <https://doi.org/10.1016/j.jbusres.2021.05.022>.
32. Bakalov, F., Meurs, M. J., König-Ries, B., & Wauer, M. (2013). An approach to controlling user models and personalization effects in recommender systems. *Proceedings of the 2013 International Conference on Web Intelligence*, 1, 1–4. <https://doi.org/10.1109/WI-IAT.2013.111>.

33. Jiang, L., & Wang, Y. (2021). A personalized computational model for human-like automated decision-making. *IEEE Transactions on Automation Science and Engineering*, 19(2), 850–863. <https://doi.org/10.1109/TASE.2021.3057784>.

INFO

Corresponding Author: Masoud Naeimi, M.A. Graduate, South Tehran Azad University, Tehran, Iran.

How to cite/reference this article: Masoud Naeimi, Qazale Family, AI as a Decision Partner in Consumer Purchasing: Behavioral Transformation, Decision Autonomy, and Ethical Implications, *Asian. Jour. Social. Scie. Mgmt. Tech.* 2026; 8(4): 255-265.