International Journal of Scientific Research and Engineering Development-– Volume 9 Issue 5, Sep-Oct 2026
Available at www.jsred.com

RESEARCH ARTICLE OPEN ACCESS

Role of Artificial Intelligence in Personalized Marketing

Nikita Vinayak Gonde, Dr. Nitin Vasontrao Ganokar
Marketing management (Appearing) Wainganga college of engineering and management Nagpur Maharashtra
Assistant Professor Department of Business Administration, Wainganga College of Engineering and Management, Nagpur
Email: nikitagonde239@gmail.com , nitinganorkar@gmail.com

Abstract

Artificial Intelligence (AI) is changing personalized marketing by enabling firms to analyse consumer data, predict preferences, automate interactions, and deliver individualized content, recommendations and offers. This research paper examines the role of AI in personalized marketing, with particular attention to consumer engagement, perceived relevance, trust, purchase intention, and privacy. A structured literature-based approach was used to synthesize recent academic evidence on AI-enabled personalization and consumer behaviour. The review indicates that personalization can improve relevance, usefulness, engagement and loyalty when consumers perceive the recommendations as valuable and non-intrusive. At the same time, excessive personalization, unclear data practices, and lack of transparency can create privacy concerns and reduce trust. Recent empirical studies also show that perceived relevance and transparency are important drivers of consumer responses to AI-enabled marketing. The paper concludes that successful AI personalization requires a balance between analytical precision and consumer control. Marketers should therefore combine AI capabilities with transparent communication, responsible data practices, consent, fairness and continuous measurement.

Keywords: Artificial Intelligence, Personalized Marketing, Consumer Behaviour, Customer Engagement, Trust, Privacy, Digital Marketing

1. Introduction

Personalized marketing refers to the practice of tailoring marketing messages, products, recommendations and offers to the needs or characteristics of individual consumers. Digital platforms have made personalization more scalable because marketers can use behavioural, transactional and interaction data to understand customer preferences. Artificial Intelligence strengthens this process through machine learning, predictive analytics, natural language processing, recommendation systems and automated customer interactions.

AI-enabled personalization is increasingly relevant across e-commerce, social media, search, email, mobile applications and customer-service channels. Recent research suggests that AI-driven personalization can improve perceived usefulness, trust and engagement, but privacy concerns and opaque data practices may weaken these benefits. □cite□turn0search3□turn0search5□ A broader review of AI and consumer behaviour also identifies trust, engagement, decision-making and adoption as major research themes.

The central issue is therefore not simply whether AI can personalize marketing, but how organizations can use AI to create relevant consumer experiences while maintaining transparency, privacy and consumer autonomy. This paper examines that role and develops a practical framework for responsible AI-driven personalized marketing.

2. Objectives of the Study

1. To examine the role of AI technologies in personalized marketing.
2. To analyse how AI-based personalization influences consumer engagement and purchase-related responses.
3. To identify the importance of relevance, trust, transparency and perceived value in AI personalization.
4. To examine privacy and ethical challenges associated with consumer-data-driven personalization.
5. To suggest managerial practices for effective and responsible AI-enabled personalized marketing.

3. Research Questions

6. How does AI enable personalized marketing across digital channels?

 ©IJSRED: All Rights are Reserved

7. How does perceived relevance of AI-generated recommendations affect consumer responses?
8. What role do trust and transparency play in AI-enabled personalization?
9. How can privacy and ethical concerns affect the success of personalized marketing?

4. Literature Review

Jain, Wadhwani and Eastman reviewed 107 studies on AI and consumer behaviour and identified major themes involving consumer acceptance and trust, interaction and engagement, attitudes, decision-making and adoption. This indicates that AI personalization should be studied as a consumer-experience issue as well as a technological capability. cite turn0search11

Teepapal's study of AI-driven personalization in social-media marketing reported that personalization can enhance trust and perceived usefulness, while privacy concerns challenge its effectiveness. The study used data from 245 appropriate responses and examined trust, privacy concerns, usefulness and engagement. cite turn0search3

Srivastava and Gurme examined AI and consumer behaviour on social media and found that perceived personalization and consumer trust were associated with stronger brand loyalty, while privacy concerns had a negative relationship with the relevant outcomes. The study highlights the importance of transparent AI design and ethical data use. cite turn0search5

A 2026 study of AI-driven advertising found that personalization, interactivity and transparency influence consumers' internal evaluations, while perceived relevance was particularly important for emotional and behavioural engagement. Transparency was highlighted as important for credibility. cite turn0search4

Recent literature therefore supports a balanced view: AI can improve the relevance and efficiency of marketing, but the benefits depend on how consumers perceive the personalization and how responsibly their data are handled. Systematic review evidence also points to privacy, transparency, fairness, algorithmic opacity, perceived control and consumer autonomy as important governance issues in AI-based personalization. cite turn0search6

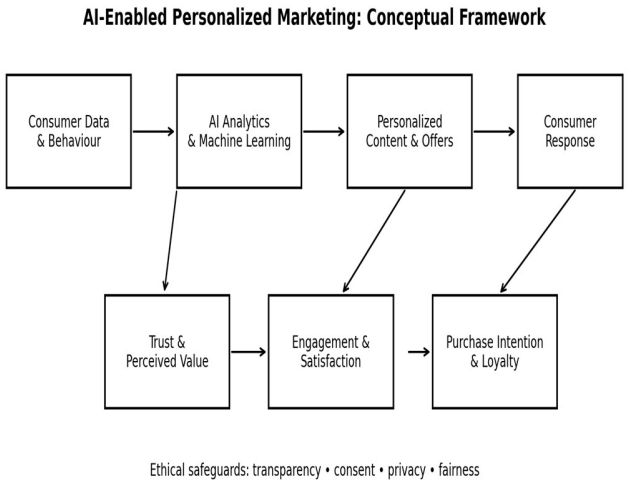

Figure 1. Conceptual Framework for AI-Enabled Personalized Marketing.

5. Materials and Methods

This study uses a structured literature-based research design. Academic studies and review articles concerning AI, personalized marketing, consumer behaviour, engagement, trust and privacy were examined, with emphasis on recent peer-reviewed evidence. The selected literature was synthesized thematically under five dimensions: AI capability, personalization quality, consumer response, trust and ethical/privacy considerations. No primary survey data were collected for this paper; therefore, the results represent a literature synthesis rather than original respondent-level statistical findings.

The conceptual framework proposes that consumer data and behaviour are processed through AI analytics and machine-learning systems, which generate personalized content or offers. These personalized experiences can influence perceived value, trust, engagement, purchase intention and loyalty. Transparency, consent, privacy and fairness act as essential ethical safeguards throughout the process.

6. Results and Discussion

6.1 AI technologies used in personalized marketing

AI supports personalization through recommendation engines, predictive analytics, machine learning, natural language processing, customer-service chatbots, sentiment analysis and automated content selection. Recommendation systems can match consumers with products or content based on previous interactions, while predictive models can estimate likely interests or purchase intentions. Chatbots and conversational

 ©IJSRED: All Rights are Reserved

systems extend personalization into real-time customer service.

6.2 Influence on consumer engagement

The literature indicates that personalization can increase engagement when consumers perceive the content as relevant and useful. The 2026 AI-advertising study found that perceived relevance was a particularly influential factor in emotional and behavioural engagement, while transparency contributed to credibility. □cite□turn0search4□ This suggests that marketers should optimize for meaningful relevance rather than simply increasing the amount of personal data used.

6.3 Trust, privacy and transparency

Trust is a critical condition for sustainable personalization. Consumers may appreciate recommendations while still questioning how their data were collected, stored or used. Evidence from social-media research shows that privacy concerns can reduce positive consumer responses to AI personalization. □cite□turn0search3□turn0search5□ Consequently, marketers should clearly communicate data practices, provide appropriate choices, and avoid personalization that feels intrusive or manipulative.

6.4 Effect on purchase intention and loyalty

AI personalization can support purchase decisions by reducing search effort and presenting products that are more closely aligned with consumer interests. Literature also links personalization and trust with engagement and loyalty outcomes. However, the effect is conditional: poor recommendations, excessive targeting or low transparency can reduce confidence. The strategic objective should therefore be to create useful personalization rather than personalization for its own sake.

6.5 Descriptive evidence from selected empirical studies

The chart below compares respondent counts reported in three selected empirical studies. These sample sizes are shown only to provide descriptive context; they should not be interpreted as a measure of study quality or as a direct comparison of effectiveness.

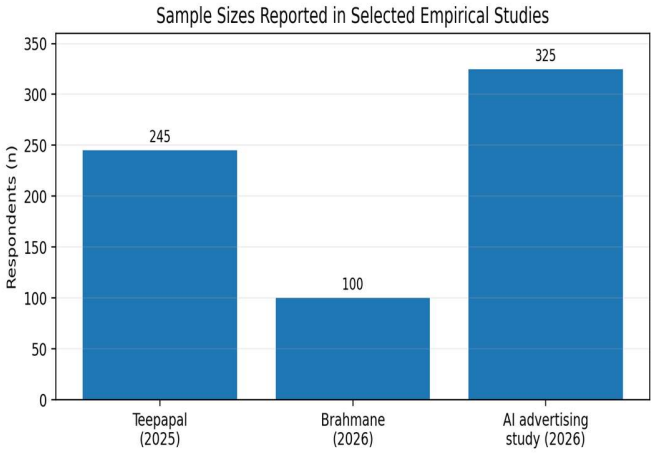

Figure 2. Respondent Counts Reported in Selected Empirical Studies; Descriptive Comparison Only.

Table 1. Summary of selected literature

Study	Focus	Key evidence	Implication
Jain et al. (2024)	AI & consumer behaviour	107 studies reviewed; trust, engagement and decision-making are major themes.	AI personalization should be evaluated through consumer outcomes.
Teepapal (2025)	AI personalization & social media	Personalization supports trust/usefulness; privacy concerns challenge effectiveness.	Balance relevance with privacy protection.
Srivastava & Gurme (2026)	AI, personalization, trust & privacy	Perceived personalization and trust support loyalty; privacy concerns can harm outcomes.	Use transparent and ethical AI practices.
AI advertising study (2026)	Personalization, interactivity & transparency	Perceived relevance strongly supports engagement; transparency supports credibility.	Optimize relevance and explain AI use.

7. Managerial Implications

- Use AI to improve relevance and convenience, not simply to increase targeting intensity.

 ©IJSRED: All Rights are Reserved

- Combine behavioural data with explicit consumer preferences where appropriate.
- Provide clear explanations of personalization and meaningful privacy choices.
- Monitor recommendation quality, customer satisfaction and opt-out behaviour.
- Establish governance for fairness, bias, transparency, data minimization and accountability.
- Use human oversight for sensitive or high-impact marketing decisions.

8. Limitations and Future Scope

The present paper is based on secondary academic literature and does not report an original consumer survey. Findings may also vary by product category, platform, age group, culture and degree of personalization. Future research can test the proposed framework using primary survey data and structural equation modelling, compare different digital platforms, and examine how consumers respond to different levels of personalization and transparency.

9. Conclusions

Artificial Intelligence has become an important enabler of personalized marketing because it can process large volumes of consumer information and convert behavioural signals into tailored recommendations, content and interactions. The literature reviewed in this paper indicates that AI personalization can strengthen relevance, engagement, trust and loyalty when it provides genuine value. At the same time, privacy concerns, lack of transparency and excessive targeting can undermine these benefits. The future of personalized marketing therefore depends on a human-centred balance between AI-driven precision and consumer control. Organizations that combine strong analytics with transparency, consent, fairness and responsible data governance are more likely to create sustainable customer relationships.

10. Acknowledgments

The author acknowledges the academic guidance and institutional support received during the preparation of this research paper.

References

Jain, V., Wadhwani, K., & Eastman, J. K. (2024). Artificial intelligence consumer behavior: A hybrid review and research agenda. Journal of Consumer Behaviour, 23(2), 676–697. https://doi.org/10.1002/cb.2233

Teepapal, T. (2025). AI-driven personalization: Unraveling consumer perceptions in social media engagement. Computers in Human Behavior, 165, 108549. https://doi.org/10.1016/j.chb.2024.108549

Sahu, J. K., Sankhla, D., & Chamoli, A. (2025). Personalized marketing in the digital age: The role of AI in consumer behavior analytics. European Economic Letters, 15(3), 292–303. https://doi.org/10.52783/eel.v15i3.3415

Srivastava, R. K., & Gurme, V. (2026). Artificial intelligence and consumer behaviour on social media: A study of personalization, trust, and privacy. Measurement: Digitalization, 5, 100021. https://doi.org/10.1016/j.meadig.2025.100021

Das, A., Mishra, S., & Mayaluri, Z. L. (2026). Business intelligence, AI-driven personalization, and ethical customer segmentation in e-commerce: A systematic review of consumer trust and digital marketing. SN Business & Economics, 6, 84. https://doi.org/10.1007/s43546-026-01079-8

AI-driven advertising and consumer engagement: Explaining cognitive, emotional, and behavioral responses through the stimulus–organism–response framework. (2026). Strategic Business Research. https://doi.org/10.1016/j.sbr.2026.100247

Brahmane, P. (2026). Understanding the nexus of personalized marketing on consumer behaviour through artificial intelligence. Canadian Journal of Marketing Research, 15(1). https://doi.org/10.61336/fp2dat54

 ©IJSRED: All Rights are Reserved