

**Review Form 3**

Journal Name:	<a href="#">Asian Journal of Research in Computer Science</a>
Manuscript Number:	Ms_AJRCOS_130795
Title of the Manuscript:	<b>Personalization in Digital Marketing: A Review of Machine Learning Techniques in E-Commerce</b>
Type of the Article	

### Review Form 3

#### **PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	<p>This manuscript presents a comprehensive review of machine learning techniques in digital marketing, <b>focusing on</b> personalization strategies in e-commerce. As AI-driven marketing becomes increasingly essential, this study provides valuable insights into how machine learning models enhance customer engagement, recommendation systems, and targeted advertising. By analyzing recent advancements, challenges, and applications, the paper bridges a critical knowledge gap between theoretical machine learning frameworks and their real-world impact in digital marketing. The findings contribute to the scientific community by providing a structured evaluation of AI-driven personalization techniques, helping researchers, data scientists, and marketing professionals understand emerging trends and optimize digital marketing strategies.</p> <p><b>Suggestions for Improvement</b></p> <ol style="list-style-type: none"><li>1. Provide a comparative analysis of different ML models to highlight their effectiveness in various personalization tasks.</li><li>2. To strengthen the review's practical relevance, including real-world case studies from companies like Amazon, Netflix, or Alibaba.</li><li>3. Discuss ethical concerns such as data privacy, AI biases, and transparency in personalized marketing.</li><li>4. Incorporate more recent references (2023-2024) on deep learning and reinforcement learning in digital marketing.</li></ol> <p>These enhancements <b>will</b> increase the manuscript's impact and relevance, making it more valuable for researchers and industry practitioners.</p>	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<p>The article's title is generally suitable as it accurately reflects the core theme of the manuscript—machine learning techniques in digital marketing and personalization strategies. However, the title could be refined to make it more specific, engaging, and structured for a wider audience.</p> <p>Suggested Title <b>AI-Driven Personalization in Digital Marketing: Advances, Challenges, and Future Directions"</b> <i>(This makes it clear that the study is about AI-based personalization and its challenges.)</i></p>	

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<p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p>	<p>The abstract is well-structured, providing a clear overview of the study's focus on machine learning techniques in digital marketing and personalization. It effectively outlines the objectives and significance of the research. However, there are a few areas that could be improved for clarity and completeness. Here is my version that can adopted , if the authors feel appropriate”</p> <p>“ In the era of digital transformation, machine learning (ML) techniques have revolutionized personalized marketing, enabling businesses to enhance customer engagement through <b>data-driven strategies</b>. This paper presents a systematic review of ML applications in digital marketing and e-commerce, focusing on customer segmentation, recommendation systems, and targeted advertising. Specifically, it explores the role of collaborative filtering, deep learning, reinforcement learning, and hybrid AI models in improving personalization and predictive analytics.</p> <p>The findings indicate that deep learning-based models, such as neural networks and transformers, significantly enhance personalization accuracy, while reinforcement learning optimizes real-time bidding and dynamic pricing strategies. Hybrid recommendation systems outperform traditional methods by combining user behavior data with contextual insights to improve ad targeting and customer retention.</p> <p>Beyond theoretical insights, this study provides practical implications for marketers, data scientists, and e-commerce businesses, enabling them to optimize AI-driven personalization strategies for increased conversion rates and customer loyalty. However, challenges such as data privacy concerns, algorithmic biases, and high computational costs remain barriers to widespread adoption. Future research should focus on developing ethical AI frameworks to ensure fairness and transparency in automated personalization.”</p>	
<p><b>Is the manuscript scientifically, correct? Please write here.</b></p>	<p><i>The manuscript is scientifically accurate and well-structured, covering key machine learning techniques in digital marketing. However, minor improvements are recommended to enhance the depth and scientific rigor of the discussion:</i></p> <ol style="list-style-type: none"> <li>1 . A more detailed comparison of ML models would provide greater clarity on their effectiveness in marketing.</li> <li>2 . Real-world implementation challenges (e.g., ethical concerns, computational costs) should be discussed in more detail.</li> <li>3. <b>Incorporating recent studies (2023-2024)</b> would further strengthen the scientific basis of the review. Few Examples are given below</li> </ol> <ol style="list-style-type: none"> <li>1. Broklyn, P., Olukemi, A., Bell, C., &amp; Potter, K. (2024). AI-driven personalization in digital marketing: Effectiveness and ethical considerations. <i>Journal of Marketing Dostupno na: <a href="https://www.researchgate.net/publication/382622708_AI-Driven_Personalization_in_Digital_Marketing_Effectiveness_and_Ethical_Consid_erations">https://www.researchgate.net/publication/382622708_AI-Driven_Personalization_in_Digital_Marketing_Effectiveness_and_Ethical_Consid_erations</a> [pristupljeno 31. srpnja 2024.].</i></li> <li>2. Sami, A., Adrousy, W. E., Sarhan, S., &amp; Elmougy, S. (2024). A deep learning based hybrid recommendation model for internet users. <i>Scientific Reports</i>, 14(1), 29390.</li> <li>3. Potla, R. T., &amp; Pottla, V. K. (2024). AI-Powered Personalization in Salesforce: Enhancing Customer Engagement through Machine Learning Models. <i>Valley International Journal Digital Library</i>, 1388-1420.</li> <li>4. Gowri, D. P. (2024). Impact of AI in Personalized Digital Marketing: Boosting Customer Engagement through Tailored Content. <i>Journal of Communication and Management</i>, 3(03), 216-221.</li> </ol>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>See above</p>	

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<b>Is the language/English quality of the article suitable for scholarly communications?</b>	The manuscript maintains a scholarly tone and uses appropriate technical terminology. 1. Minor improvements are needed to enhance sentence clarity, grammar, and paragraph transitions. 2. Proofreading for minor errors will improve readability.  3.Using data references or real-world examples will make the discussion more impactful.	
<b>Optional/General</b> comments	Overall, this manuscript presents a well-researched and structured review of machine learning techniques in digital marketing, specifically focusing on personalization strategies in e-commerce. The study is timely and relevant, given the increasing reliance on AI-driven marketing tools to enhance customer engagement and optimize targeted advertising. The paper effectively discusses various machine learning models and their applications, making it valuable for researchers, industry professionals, and businesses aiming to implement AI-based marketing solutions.	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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