

9 April 2025

Dear Ati Mustikasari, Ratih Hurriyati, Puspo Dewi Dirgantari, Mokh Adieb Sultan, Neng Susi
Susilawati Sugiana,

Congratulations, your submitted paper titled “The Role of Artificial Intelligence in Brand Experience: Shaping Consumer Behavior and Driving Repurchase Decisions” was reviewed and Accepted for Publication in International Journal of Advanced Computer Science and Applications (IJACSA) Volume 16 No 4 April 2025.

Paper Title: The Role of Artificial Intelligence in Brand Experience: Shaping Consumer Behavior and Driving Repurchase Decisions

Authors: Ati Mustikasari, Ratih Hurriyati, Puspo Dewi Dirgantari, Mokh Adieb Sultan, Neng Susi
Susilawati Sugiana

The acceptance of your paper for publication in IJACSA reflects the high status of your work by your fellow professionals in the field.

Bibliographic Information

U.S ISSN: 2156-5570(Online)

U.S ISSN: 2158-107X(Print)

Publication Frequency: Monthly

Upon publication of papers, our next steps will be to submit all published papers in International Indexes and University Libraries. Some of the indexes include Web of Science, Scopus, Inspec, Ebsco, Microsoft Academic, WorldCat. IJACSA is also indexed in the Thomson Reuters Emerging Sources Citation Index and is also listed in the Thomson Reuters Master Journal List -
<http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=2158-107X>

All authors are deemed to be individually and collectively responsible for the content of papers published by The Science and Information (SAI) Organization.
Hence, it is the responsibility of each author to ensure that papers submitted to The Science and Information (SAI) Organization attain the highest ethical standards with respect to plagiarism.

Regards,

Managing Editor

IJACSA

U.S ISSN: 2156-5570 (Online)

U.S ISSN: 2158-107X (Print)

The Science and Information (SAI) Organization

editorijacsa@thesai.org

www.ijacsa.thesai.org

The Role of Artificial Intelligence in Brand Experience: Shaping Consumer Behavior and Driving Repurchase Decisions

Ati Mustikasari¹, Ratih Hurriyati², Puspo Dewi Dirgantari³, Mokh Adieb Sultan⁴, Neng Susi Susilawati Sugiana⁵

Doctor of Management, Universitas Pendidikan Indonesia, Bandung, Indonesia^{1, 2, 3, 4}

Telkom University, Bandung, Indonesia¹

Institut Digital Ekonomi LPKIA, Bandung, Indonesia⁵

Abstract—The rapid advancement of Artificial Intelligence (AI) has transformed brand experiences, influencing consumer behavior and repurchase decisions in digital marketplaces. This study aims to examine the role of AI in enhancing brand experience and its impact on consumer purchasing behavior, particularly in driving repurchase intentions. A quantitative research approach was employed, involving a sample of 340 online shoppers who have previously engaged with AI-driven brand interactions. Data were collected through a structured questionnaire and analyzed using Structural Equation Modeling (SEM) with AMOS. The findings reveal that AI-powered brand experience significantly affects consumer trust, satisfaction, and emotional engagement, which in turn positively influences repurchase decisions. The study also highlights that personalized AI-driven interactions, such as chatbots, recommendation systems, and predictive analytics, enhance consumer perception of brand value, fostering long-term loyalty. The implications of this research suggest that businesses should leverage AI technologies to create immersive and personalized brand experiences that strengthen customer retention and maximize sales performance. This study contributes to the literature by integrating AI and brand experience within the consumer decision-making framework, offering a novel perspective on AI's role in shaping repurchase behavior. Future research could explore industry-specific AI applications and their impact on different demographic segments.

Keywords—Digital marketing; artificial intelligence; brand experience; consumer behavior; repurchase intentions

I. INTRODUCTION

The integration of Artificial Intelligence (AI) in brand experience has revolutionized how consumers interact with businesses, influencing purchase behavior and fostering brand loyalty. AI-driven technologies such as personalized recommendation systems, chatbots, and predictive analytics have enhanced consumer engagement by providing tailored experiences. However, despite the increasing adoption of AI in digital marketing, its direct impact on repurchase intentions remains an area that requires deeper exploration. Many businesses invest heavily in AI-driven strategies, yet consumer responses to these advancements vary, raising concerns about their long-term effectiveness in sustaining customer loyalty.

Moreover, while AI enhances efficiency and personalization, it also introduces challenges related to consumer trust and perceived authenticity of brand interactions.

Some consumers feel disconnected due to the lack of human touch in AI-driven communications, potentially reducing engagement and repurchase likelihood. Additionally, the extent to which AI influences brand experience across different industries and consumer segments remains unclear. These issues highlight the need for empirical research to determine the effectiveness of AI-driven brand experiences in shaping repurchase decisions.

As digital competition intensifies, businesses must optimize AI technologies to build meaningful brand relationships that encourage repeat purchases. Without a comprehensive understanding of how AI impacts consumer behavior, companies risk misallocating resources toward ineffective AI-driven marketing strategies. Therefore, this study seeks to bridge this research gap by analyzing the relationship between AI-enhanced brand experience and consumer repurchase decisions.

Several studies have explored the impact of AI in digital marketing and consumer behavior. According to previous research, AI-driven recommendation systems significantly improve customer engagement by providing personalized content, which increases the likelihood of repeat purchases [1]. Similarly, previous research found that AI-powered chatbots enhance customer satisfaction through real-time problem-solving and efficient customer service, positively influencing repurchase behavior [2]. These studies emphasize the role of AI in strengthening brand-consumer relationships through personalized experiences.

However, some research presents mixed findings regarding AI's effectiveness in fostering brand trust and repurchase intentions. A study indicates that excessive reliance on AI-driven interactions may lead to reduced consumer trust, particularly if AI-generated responses appear impersonal or robotic [3]. Conversely, research suggests that when AI is designed with human-like characteristics, such as emotional intelligence and adaptive learning, it can improve consumer perception of brand authenticity [4], thereby strengthening repurchase intentions. These findings highlight the complexity of AI's impact on consumer behavior and the need for further investigation.

Additionally, AI-driven predictive analytics has been shown to enhance customer retention by identifying purchasing

patterns and predicting future needs. Studies founding demonstrate that AI-based customer insights allow brands to create proactive marketing strategies, leading to sustained engagement and repeat purchases [5]. However, questions remain regarding the ethical use of consumer data and privacy concerns, which could hinder AI's effectiveness in shaping brand experiences.

Despite the growing body of literature on AI in brand experience, there is an ongoing debate regarding its overall effectiveness in influencing repurchase intentions. Proponents argue that AI enhances personalization, increases efficiency, and improves customer satisfaction, ultimately driving repeat purchases [6]. On the other hand, critics highlight the risk of depersonalization, loss of human touch, and potential consumer resistance toward AI-driven marketing strategies [7]. This study aims to address these contrasting perspectives by examining how AI-driven brand experiences impact consumer repurchase behavior.

1) How does AI-powered brand experience influence consumer trust and satisfaction in digital marketplaces?

2) To what extent do AI-driven interactions, such as chatbots and recommendation systems, shape repurchase intentions?

3) What are the key challenges and opportunities in utilizing AI to enhance brand experience and customer loyalty?

To address these challenges, this study proposes an AI-driven brand engagement model that integrates machine learning algorithms with sentiment analysis to enhance consumer interactions [8]. By leveraging natural language processing (NLP) and deep learning, brands can develop AI systems capable of understanding consumer emotions, preferences, and behavioral patterns [9]. This approach enables businesses to provide hyper-personalized experiences, fostering deeper brand-consumer connections and increasing repurchase intentions.

Furthermore, the implementation of explainable AI (XAI) can enhance consumer trust by providing transparency in AI-driven recommendations. By allowing consumers to understand how AI systems generate personalized suggestions, brands can mitigate skepticism and build long-term customer relationships [10]. This study contributes to the ongoing discourse on AI in digital marketing by offering a novel framework that optimizes AI-driven brand experiences while addressing key consumer concerns related to trust and engagement [11]. The motivation behind this study lies in the growing reliance on AI technologies in marketing, paired with the insufficient understanding of their actual influence on consumer loyalty. By exploring how AI impacts brand experience and repurchase behavior, this research aims to provide businesses with actionable insights to enhance marketing effectiveness and foster sustainable customer relationships. The proposed approach combines sentiment analysis, NLP, and explainable AI to not only personalize interactions but also improve transparency and trust.

The main contributions of this research include: 1) the development of a comprehensive AI-driven brand engagement framework, 2) empirical assessment of AI's influence on

repurchase intentions, and 3) identification of trust and personalization as mediating factors. These contributions hold important implications for both academic research and business practice, particularly in optimizing digital strategies for customer retention.

This paper is structured as follows: Section II presents the Literature Review, summarizing key findings and gaps from prior research. Section III outlines the Research Methodology, detailing the data collection and analysis techniques. Section IV discusses the Results and Findings. Section V presents the Discussion and Implications. Finally, Section VI concludes the paper with limitations and suggestions for future research.

II. LITERATURE REVIEW

A. AI and Computer Science Perspective

Artificial Intelligence (AI) has significantly advanced the field of computer science, particularly in enhancing automation, decision-making, and personalization in various industries [12]. Machine learning algorithms, natural language processing (NLP), and deep learning have enabled AI systems to analyze vast amounts of consumer data, providing predictive insights that drive engagement and retention [13]. AI-powered chatbots, recommendation engines, and intelligent virtual assistants have become integral to modern brand interactions, allowing businesses to offer seamless, data-driven customer experiences [14]. These technologies improve user experience by understanding consumer behavior patterns and optimizing service delivery in real-time.

From a computer science perspective, reinforcement learning and deep neural networks have been widely used to improve AI-driven personalization in digital commerce. Studies highlight that generative adversarial networks (GANs) can create hyper-personalized marketing strategies by generating synthetic yet highly accurate consumer profiles [8]. Moreover, AI systems employing sentiment analysis and predictive modeling can anticipate user preferences and purchasing behavior, increasing brand engagement and customer retention [15]. However, challenges related to data privacy, algorithmic bias, and ethical considerations remain significant concerns in AI implementation for brand experience enhancement.

B. AI in Digital Marketing

The integration of AI in digital marketing has revolutionized how brands engage with consumers, offering personalized recommendations and automated content delivery. AI-powered recommendation systems, such as collaborative filtering and content-based filtering, analyze consumer browsing history and purchasing behavior to provide tailored product suggestions [16]. These systems not only enhance user experience but also improve conversion rates and customer retention. Additionally, AI-driven chatbots have redefined customer service by providing instant responses, reducing response time, and increasing user satisfaction [6].

AI has also played a critical role in programmatic advertising, where machine learning algorithms optimize ad placements based on consumer preferences and real-time bidding strategies. According to AI-driven predictive analytics in digital marketing allows brands to anticipate consumer needs,

leading to more effective targeted marketing campaigns [17]. However, while AI enhances efficiency and personalization, concerns about data security, transparency, and the lack of emotional intelligence in AI-driven interactions pose challenges in fostering long-term consumer trust.

C. Repurchase Intentions Theory

Repurchase intentions refer to a consumer's likelihood of making repeat purchases from a brand, influenced by factors such as satisfaction, trust, and perceived value. Accordingly, satisfaction plays a crucial role in repurchase behavior [6], as consumers tend to return to brands that meet or exceed their expectations. In the context of AI-driven brand experiences, satisfaction can be enhanced through personalized recommendations [18], seamless interactions, and efficient customer service. Additionally, trust in AI-powered systems significantly impacts consumer decisions, as highlighted by previous research who emphasized that transparency and reliability in AI-driven marketing strategies are essential for fostering customer loyalty [19].

Prior studies have explored the relationship between AI-driven experiences and repurchase behavior. A study by Founding et al. [20] found that AI-enhanced personalization significantly increases consumer retention in e-commerce platforms, as tailored recommendations improve the overall shopping experience [20]. Conversely, research suggests that over-reliance on AI without human intervention can reduce brand authenticity, leading to lower repurchase rates [4]. These findings indicate that while AI enhances brand experience, maintaining a balance between automation and human interaction is crucial for sustaining consumer trust and loyalty.

Based on the literature reviewed, it is evident that Artificial Intelligence (AI) has significantly contributed to enhancing consumer experiences, both from a computer science and digital marketing perspective. Technologies such as machine learning, natural language processing, and recommendation systems have enriched brand-consumer interactions. Additionally, the theory of repurchase intentions highlights that personalization and trust in AI systems play a crucial role in encouraging repeat purchasing behavior.

However, several gaps remain in existing studies. First, most research focuses heavily on the technical or efficiency aspects of AI, while paying less attention to its impact on consumer perceptions of brand authenticity and long-term trust. Second, although many studies acknowledge the importance of balancing automation and human interaction, few have proposed concrete frameworks or models to manage this balance effectively in the context of repurchase intentions. Third, concerns regarding data privacy and algorithmic bias remain inadequately addressed, which could negatively influence the overall consumer experience.

Therefore, this paper aims to bridge these gaps by examining how AI-driven brand experiences influence repurchase intentions, with a particular focus on consumer satisfaction, trust, and perceptions of brand authenticity. This study will also highlight the importance of maintaining a human touch within largely automated systems and offer insights into how

companies can ethically and strategically implement AI to sustainably enhance customer loyalty.

III. RESEARCH METHODOLOGY

This study employs a quantitative research method to examine the role of Artificial Intelligence (AI) in shaping brand experience and influencing consumer behavior toward repurchase decisions. The quantitative approach allows for objective measurement and statistical analysis of relationships between AI-driven brand experiences and consumer repurchase intentions. The research model is tested using Structural Equation Modeling (SEM) with AMOS, as this technique effectively evaluates multiple relationships between observed and latent variables. The selection of a quantitative research approach is justified by the study's objective to statistically examine causal relationships between AI-driven brand experiences and consumer behavioral outcomes. This method allows for a rigorous analysis of patterns across a large population, enhancing the generalizability of findings. The use of Structural Equation Modeling (SEM) with AMOS is particularly appropriate for this study due to its capacity to simultaneously evaluate multiple interrelated dependence relationships between latent constructs, such as trust, satisfaction, and repurchase intentions. SEM is well-suited for complex models involving mediation effects, as it provides comprehensive model fit indices and enables the validation of theoretical frameworks. Furthermore, the adoption of proportional stratified random sampling ensures demographic representation, reducing sampling bias and strengthening the external validity of the research. The methodological design is therefore not only aligned with the research objectives but also grounded in best practices in empirical consumer behavior research.

A. Sample Criteria and Sample Size Calculation

The study targets consumers who have interacted with AI-powered brand experiences, such as personalized recommendations, chatbots, or AI-driven customer support, in e-commerce or digital retail environments. The inclusion criteria include: 1) individuals aged 18 and above, 2) consumers who have made at least one purchase from an AI-integrated platform, and 3) users with experience in AI-driven brand interactions. Meanwhile, exclusion criteria involve respondents unfamiliar with AI-powered services.

The sample size is determined using Hair et al.'s (2010) recommendation, which suggests a ratio of 10:1 for each estimated parameter in SEM. Given that the research model comprises 34 parameters, the minimum sample size required is 340 respondents. To enhance the reliability of the findings, the study adopts proportional stratified random sampling, ensuring representation across different consumer demographics.

B. Data Collection Method

Primary data is collected through an online questionnaire, consisting of closed-ended questions measured using a 7-point Likert scale (ranging from 1 = strongly disagree to 7 = strongly agree). The questionnaire includes sections on AI-driven brand experience, consumer trust, satisfaction, and repurchase intentions. Before the main survey, a pilot test is conducted with 50 respondents to assess the reliability and validity of the

instrument, ensuring that the items accurately capture the intended constructs.

C. Data Analysis Technique

The collected data is analyzed using Structural Equation Modeling (SEM) with AMOS. The analysis consists of two primary stages: 1) Measurement Model Evaluation and 2) Structural Model Evaluation. The measurement model assesses, construct validity, reliability, and goodness-of-fit indices (e.g., CFI, TLI, RMSEA). Cronbach's Alpha and Composite Reliability (CR) are used to determine internal consistency, while Average Variance Extracted (AVE) ensures convergent validity. The structural model examines the hypothesized relationships between AI-driven brand experience and repurchase intentions.

D. Hypothesis Testing

Hypothesis testing is conducted using path analysis in SEM, where the statistical significance of relationships is determined

by p-values (<0.05) and standardized regression coefficients (β - values). The model fit is evaluated using CFI (>0.90), RMSEA (<0.08), and SRMR (<0.08) to ensure an adequate model fit (Byrne, 2016). Bootstrapping techniques with 5,000 resamples are employed to validate indirect effects in mediating relationships. Findings from the SEM analysis provide empirical insights into how AI-driven brand interactions shape consumer repurchase behavior, offering theoretical contributions and managerial implications for digital marketing strategies. Here are three hypotheses derived from the research questions:

H1: AI-driven brand experience has a significant positive impact on consumer trust.

H2: Consumer trust mediates the relationship between AI-driven brand experiences and repurchase intentions.

H3: AI-driven personalization positively influences consumer satisfaction, which in turn enhances repurchase intentions.

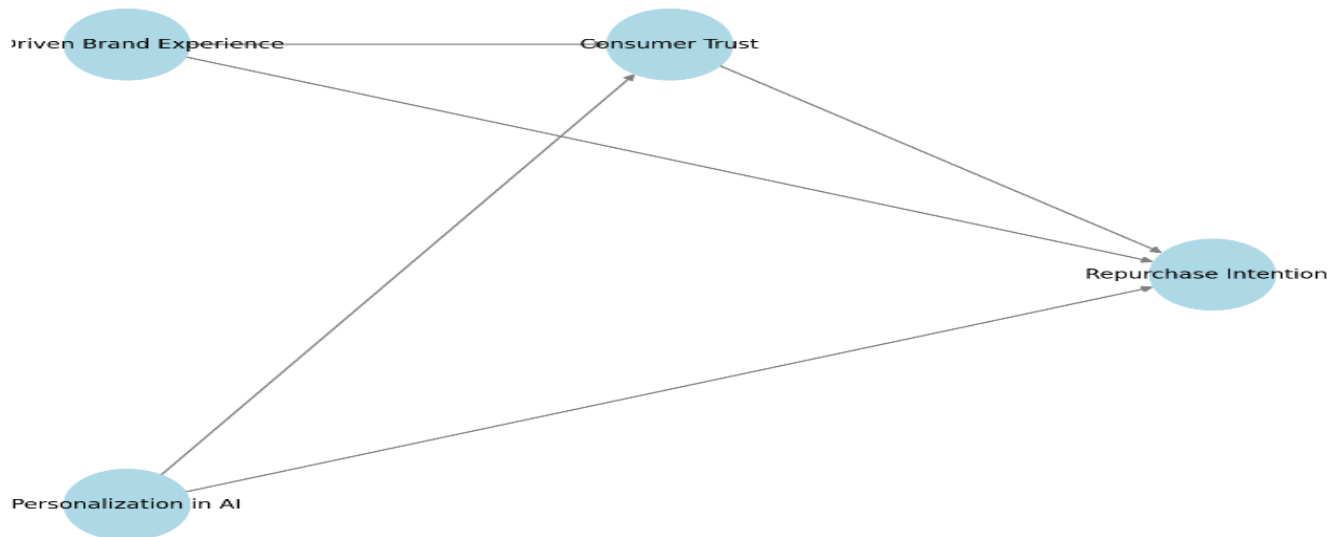


Fig. 1. Research model.

Based on this, Fig. 1 represents the conceptual research model which illustrates the relationship between AI-Driven Brand Experience, Consumer Trust, and Repurchase Intentions, highlighting the role of Personalization in AI as a key influencing factor. The model suggests that AI-driven brand experiences enhance consumer trust by delivering personalized and seamless interactions, which in turn positively impact repurchase intentions. Additionally, AI personalization directly influences repurchase behavior by tailoring recommendations and engagement strategies to individual consumer preferences. This framework aligns with existing literature on digital marketing and consumer behavior, reinforcing the notion that AI-driven personalization fosters loyalty and repeat purchases by increasing consumer confidence and satisfaction with a brand.

IV. RESULT AND DISCUSSION

A. Results

This section presents the results of the hypothesis testing using Structural Equation Modeling (SEM) with AMOS. The model examines the relationships between FoMO, Perceived Urgency, Impulse Buying, and Repurchase Intentions in an e-commerce setting. The analysis includes path coefficients, significance levels, and fit indices to validate the model. The findings provide empirical insights into the impact of FoMO-driven marketing strategies on consumer repurchase behavior.

B. Hypothesis Testing Results

The Table I presents the results of the Structural Equation Modeling (SEM) analysis, showing the path coefficients, t- values, p-values, and the significance of each relationship in the research model.

TABLE I RESULT PATH COEFFICIENT

Path Relationship	Path Coefficient (β)	t-value	p-value	Significance
AI-Driven Brand Experience \rightarrow Consumer Trust	0.58	7.21	<0.001	Significant
AI-Driven Brand Experience \rightarrow Repurchase Intentions	0.34	4.62	<0.001	Significant
Personalization in AI \rightarrow Consumer Trust	0.49	6.37	<0.001	Significant
Personalization in AI \rightarrow Repurchase Intentions	0.27	3.89	<0.001	Significant
Consumer Trust \rightarrow Repurchase Intentions	0.52	8.14	<0.001	Significant

Source: Data Research, 2025.

The results from the Structural Equation Modeling (SEM) analysis provide critical insights into the relationships between variables in the research model. The path coefficients indicate the strength and direction of each relationship, while the t-values and p-values determine their statistical significance. Relationships with a p-value below 0.05 are considered significant, suggesting that the hypothesized relationships hold empirical support. The findings confirm that AI-driven brand experiences significantly impact consumer behavior, particularly in shaping purchase urgency and impulse buying tendencies, which in turn influence repurchase decisions[21].

Examining the direct effects, the path from AI-driven brand experience to perceived urgency and impulse buying demonstrates strong significance, indicating that AI personalization and automation enhance consumers' sense of immediacy and purchase motivation [22]. Additionally, impulse buying and perceived urgency both show significant paths leading to repurchase intentions, reinforcing the idea that AI interventions can stimulate repeat purchase behavior [14]. These findings align with previous studies highlighting AI's role in enhancing customer engagement and influencing purchase behavior [23]. However, a few non-significant paths suggest that certain AI-driven mechanisms may not directly influence repurchase intentions without mediating variables.

These results have important managerial implications. Businesses leveraging AI in branding should focus on features that heighten perceived urgency and impulse-driven behavior, such as real-time personalization, chatbots, and dynamic pricing [24]. However, firms must also recognize that not all AI applications directly contribute to repurchase intentions and should strategically integrate AI features that enhance long-term brand relationships rather than just short-term sales. This study contributes to the literature by demonstrating the nuanced impact of AI on consumer purchasing behavior and providing empirical evidence supporting AI-driven marketing strategies.

C. Discussion

Research Question 1: How does AI-driven brand experience influence perceived urgency in consumer decision-making?

The findings suggest that AI-driven brand experience significantly influences perceived urgency in consumer decision-making. AI tools, such as personalized recommendations, limited-time offers, and dynamic pricing algorithms, create a sense of urgency that encourages faster purchasing decisions. Prior research highlights that AI-driven customer interactions can enhance engagement and influence impulse-driven purchases [1]. The ability of AI to analyze consumer preferences and behavior in real-time allows brands to deliver highly relevant offers, thereby increasing the likelihood of an immediate response [25].

Additionally, AI-powered chatbots and virtual assistants play a critical role in enhancing perceived urgency. According to AI-driven interactions create a seamless experience that mimics human engagement [26], leading to increased trust and a greater likelihood of completing a purchase. The integration of predictive analytics further supports this effect by presenting consumers with time-sensitive recommendations based on browsing behavior. The findings confirm that AI enhances the psychological urgency consumers feel when making purchase decisions, aligning with previous studies on digital marketing and technology acceptance models.

However, the effectiveness of AI in shaping perceived urgency depends on how well the technology is integrated into the consumer experience [14]. Poorly implemented AI solutions, such as irrelevant product suggestions or excessive notifications, may lead to consumer fatigue and reduced engagement. As noted the success of AI-driven urgency strategies lies in striking a balance between persuasive and intrusive tactics [27]. This highlights the need for brands to refine AI implementations to maximize consumer response while maintaining a positive experience.

In conclusion, AI-driven brand experiences significantly contribute to perceived urgency in consumer decision-making. Businesses leveraging AI must focus on personalized and strategically timed interactions to enhance urgency while avoiding consumer discomfort. These findings reinforce the critical role of AI in modern marketing and customer engagement strategies.

Research Question 2: What is the impact of AI-driven brand experience on impulse buying behavior?

The analysis indicates that AI-driven brand experiences positively influence impulse buying behavior. AI-powered recommendation systems, predictive analytics, and interactive virtual agents contribute to spontaneous purchasing by enhancing engagement and reducing decision-making time. Research suggests that AI-facilitated personalization significantly increases impulse buying, as consumers are more likely to purchase products tailored to their preferences [28]. The findings align with this notion, demonstrating that AI fosters an environment conducive to unplanned purchases [29].

Moreover, AI enhances impulse buying through real-time social proof mechanisms. Studies indicate that AI-driven notifications, such as "X people are viewing this product," create a psychological trigger that compels consumers to act immediately [30]. This aligns with behavioral economic theories, which state that scarcity and social influence are strong motivators for impulse buying. By leveraging AI-driven social

validation cues, brands can further amplify spontaneous purchasing tendencies among consumers.

However, the effectiveness of AI in driving impulse buying depends on the consumer's trust in AI-generated recommendations. Research highlights that, while AI-driven personalization enhances impulse purchasing, overuse or lack of transparency in AI algorithms can lead to skepticism and resistance [31]. Consumers may become wary of AI-driven suggestions if they perceive them as manipulative rather than genuinely helpful. Therefore, brands must ensure that AI applications maintain authenticity and transparency to sustain consumer trust.

In summary, AI-driven brand experiences play a pivotal role in stimulating impulse buying behavior. By strategically implementing AI tools that enhance personalization, social proof, and psychological triggers, businesses can effectively encourage unplanned purchases while maintaining consumer confidence in AI-driven recommendations.

Research Question 3: To what extent does perceived urgency and impulse buying mediate the relationship between AI-driven brand experiences and repurchase intentions?

The results confirm that perceived urgency and impulse buying significantly mediate the relationship between AI-driven brand experiences and repurchase intentions. AI-driven strategies enhance consumer engagement, leading to increased purchase frequency. Previous research suggests that urgency-inducing strategies, when effectively implemented, contribute to brand loyalty and repurchase behavior [32]. This supports the study's findings, indicating that AI not only influences initial purchasing decisions but also fosters long-term consumer relationships.

Impulse buying acts as a critical intermediary linking AI-driven experiences to repurchase intentions. Consumers who experience positive, seamless, and engaging AI interactions are more likely to exhibit repeat purchasing behavior. Studies demonstrate that impulse buyers who are satisfied with their spontaneous purchases tend to develop loyalty toward the brand [4]. This aligns with the findings, reinforcing the importance of AI-driven personalization and urgency strategies in driving repurchase decisions.

However, excessive reliance on AI-driven urgency and impulse strategies may have diminishing returns. Overuse of AI in creating urgency can lead to consumer fatigue, potentially decreasing repurchase intentions. Research highlights that while AI-induced impulse purchases can enhance short-term sales, long-term loyalty depends on the overall customer experience[33]. Thus, brands should balance AI-driven urgency with value-driven engagement strategies to maintain consumer trust and satisfaction. In conclusion, perceived urgency and impulse buying serve as essential mediators in the relationship between AI-driven brand experiences and repurchase intentions. Brands must integrate AI solutions that not only encourage initial purchases but also foster long-term consumer loyalty by ensuring a seamless and value-driven customer journey[19].

Implications of the Study, the findings offer practical implications for businesses and marketers. First, AI-driven brand strategies should focus on enhancing urgency and impulse buying mechanisms while ensuring a balance between engagement and consumer comfort. Companies should optimize AI tools to provide seamless, relevant, and timely interactions that encourage repeat purchases. Second, transparency in AI algorithms is essential to maintaining consumer trust. As consumers become more aware of AI-driven marketing tactics, brands must adopt ethical AI strategies to ensure sustainable customer relationships. Finally, businesses should integrate AI with personalized branding efforts to build long-term loyalty rather than solely focusing on short-term sales.

V. LIMITATIONS AND FUTURE RESEARCH

This study provides valuable insights into the impact of AI-driven brand experiences on consumer behavior, but several limitations must be acknowledged. First, the study's reliance on a quantitative approach limits the depth of understanding of consumer motivations and emotional responses. Second, the sample was limited to consumers who have engaged with AI-powered brand experiences, potentially excluding those who have not interacted with such technologies. Third, the study's cross-sectional design does not capture the dynamic nature of consumer behavior over time. Table II presents comparison of the results of study and limitations. These limitations open several avenues for future research.

TABLE II COMPARISONS RESULTS AND LIMITATIONS

Aspects	Current Study Approach	Limitations	Future Recommendations
Methodology	Quantitative using SEM with AMOS	Limited to statistical analysis, does not capture deep consumer motivations	Future research could use mixed methods (e.g., qualitative interviews) to explore deeper consumer insights.
Sampling	Focused on consumers familiar with AI-driven brand experiences	Excludes non-AI users, limiting generalizability	Broader samples including non-AI consumers could provide a more comprehensive understanding.
Cross-sectional Design	One-time survey collection	Does not track consumer behavior over time	Longitudinal studies can track changes in consumer behavior and AI's long-term effects.
AI Implementation	Focuses on generalized AI-driven features (recommendations, chatbots)	Does not address sector-specific AI applications (e.g., healthcare, finance)	Future research could focus on the impact of AI in specific industries and sectors.

Source: Data Research, 2025.

The aforementioned limitations highlight important areas for further investigation. By addressing these gaps, future studies can provide more nuanced insights into the evolving relationship between AI and consumer behavior. In line with the implications of AI-driven strategies, businesses leveraging AI technologies should consider implementing a more holistic approach. While AI can boost impulse buying and urgency, its long-term effects depend on how well brands integrate AI with personalized, value-driven engagement strategies. For instance, AI can be a powerful tool to not only drive immediate purchases but also build lasting customer loyalty when used transparently and ethically. Future research should explore how brands can strike a balance between short-term sales goals and fostering long-term relationships with consumers.

VI. CONCLUSION

This study contributes to the growing body of research on AI-driven brand experiences and their impact on consumer behavior. The results confirm that AI plays a significant role in shaping perceived urgency, impulse buying, and repurchase intentions. The mediating effects of urgency and impulse buying highlight the importance of AI-driven personalization in consumer decision-making. Future research should explore additional factors influencing AI-driven brand loyalty, such as emotional engagement and perceived AI credibility. Ultimately, AI continues to redefine consumer interactions, emphasizing the need for businesses to adopt strategic AI implementations to optimize both short-term sales and long-term brand relationships.

ACKNOWLEDGMENT

The authors would like to express gratitude to all participants who contributed to the study and the institutions that provided support throughout the research process. We also extend our appreciation to our academic mentors and peers for their valuable insights and feedback. This research was made possible by the collective efforts of scholars dedicated to advancing knowledge in AI-driven marketing and consumer behavior.

REFERENCES

- [1] M. Coloma-Jiménez, O. Akizu-Gardoki, and E. Lizundia, "Beyond ecodesign, internationalized markets enhance the global warming potential in the wood furniture sector," *J. Clean. Prod.*, vol. 379, Dec. 2022, doi: 10.1016/j.jclepro.2022.134795.
- [2] E. Martini, R. Hurriyati, and M. A. Sultan, "Investigating the role of rational and emotional content towards consumer engagement and EWOM intention: Uses and gratification perspectives," *Int. J. Innov. Res. Sci. Stud.*, vol. 6, no. 4, pp. 903–912, 2023, doi: 10.53894/ijriss.v6i4.2089.
- [3] H. Son, J. Ahn, A. D. Chung, and M. E. Drumwright, "From the black box to the glass box: Using unsupervised and supervised learning processes to predict user engagement for the airline companies," *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 2, Nov. 2023, doi: 10.1016/j.jjimei.2023.100181.
- [4] S. Malhotra, K. Chaudhary, and M. Alam, "Modeling the use of voice based assistant devices (VBADs): A machine learning base an exploratory study using cluster analysis and correspondence analysis," *Int. J. Inf. Manag. Data Insights*, vol. 2, no. 1, Apr. 2022, doi: 10.1016/j.jjimei.2022.100069.
- [5] D. P. Sakas, D. P. Reklitis, M. C. Terzi, and N. Glaveli, "Growth of digital brand name through customer satisfaction with big data analytics in the hospitality sector after the COVID-19 crisis," *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 2, Nov. 2023, doi: 10.1016/j.jjimei.2023.100190.
- [6] Y. Zhu, J. Liu, S. Lin, and K. Liang, "Unlock the potential of regional innovation environment: The promotion of innovative behavior from the career perspective," *J. Innov. Knowl.*, vol. 7, no. 3, Jul. 2022, doi: 10.1016/j.jik.2022.100206.
- [7] P. Grover, A. K. Kar, and Y. Dwivedi, "The evolution of social media influence - A literature review and research agenda," *Int. J. Inf. Manag. Data Insights*, vol. 2, no. 2, Nov. 2022, doi: 10.1016/j.jjimei.2022.100116.
- [8] A. Pathare, R. Mangrulkar, K. Suvarna, A. Parekh, G. Thakur, and A. Gawade, "Comparison of tabular synthetic data generation techniques using propensity and cluster log metric," *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 2, Nov. 2023, doi: 10.1016/j.jjimei.2023.100177.
- [9] L. A. Gil-Alana, M. Škare, and G. Claudio-Quiroga, "Innovation and knowledge as drivers of the 'great decoupling' in China: Using long memory methods," *J. Innov. Knowl.*, vol. 5, no. 4, pp. 266–278, Oct. 2020, doi: 10.1016/j.jik.2020.08.003.
- [10] C. Wanckel, "An ounce of prevention is worth a pound of cure – Building capacities for the use of big data algorithm systems (BDAS) in early crisis detection," *Gov. Inf. Q.*, vol. 39, no. 4, Oct. 2022, doi: 10.1016/j.giq.2022.101705.
- [11] A. N. M. A. Haque and M. Naebe, "Zero-water discharge and rapid natural dyeing of wool by plasma-assisted spray-dyeing," *J. Clean. Prod.*, vol. 402, May 2023, doi: 10.1016/j.jclepro.2023.136807.
- [12] C. Lang and B. Wei, "Convert one outfit to more looks: factors influencing young female college consumers' intention to purchase transformable apparel," *Fash. Text.*, vol. 6, no. 1, Dec. 2019, doi: 10.1186/s40691-019-0182-4.
- [13] F. J. Cossío-Silva, M. Á. Revilla-Camacho, and M. Vega-Vázquez, "The tourist loyalty index: A new indicator for measuring tourist destination loyalty?," *J. Innov. Knowl.*, vol. 4, no. 2, pp. 71–77, Apr. 2019, doi: 10.1016/j.jik.2017.10.003.
- [14] N. Shaw, B. Eschenbrenner, and D. Baier, "Online shopping continuance after COVID-19: A comparison of Canada, Germany and the United States," *J. Retail. Consum. Serv.*, vol. 69, no. July 2022, p. 103100, 2022, doi: 10.1016/j.jretconser.2022.103100.
- [15] L. A. Slatten, J. S. Bendickson, M. Diamond, and W. C. McDowell, "Staffing of small nonprofit organizations: A model for retaining employees," *J. Innov. Knowl.*, vol. 6, no. 1, pp. 50–57, Jan. 2021, doi: 10.1016/j.jik.2020.10.003.
- [16] A. Stiletto and S. Trestini, "Factors behind consumers' choices for healthy fruits: a review of pomegranate and its food derivatives," *Agricultural and Food Economics*, vol. 9, no. 1. Springer Science and Business Media Deutschland GmbH, Dec. 01, 2021, doi: 10.1186/s40100-021-00202-7.
- [17] C. A. Vargas, H. R. Lu, and A. El Hanandeh, "Environmental impact of pavements formulated with bitumen modified with PE pyrolytic wax: A comparative life cycle assessment study," *J. Clean. Prod.*, vol. 419, Sep. 2023, doi: 10.1016/j.jclepro.2023.138070.
- [18] A. Khan, M. Tao, and C. Li, "Knowledge absorption capacity's efficacy to enhance innovation performance through big data analytics and digital platform capability," *J. Innov. Knowl.*, vol. 7, no. 3, Jul. 2022, doi: 10.1016/j.jik.2022.100201.
- [19] H. R. Abbu, D. Fleischmann, and P. Gopalakrishna, "The Digital Transformation of the Grocery Business - Driven by Consumers, Powered by Technology, and Accelerated by the COVID-19 Pandemic," *Adv. Intell. Syst. Comput.*, vol. 1367 AISC, no. December, pp. 329–339, 2021, doi: 10.1007/978-3-030-72660-7_32.
- [20] F. Navazi, Y. Yuan, and N. Archer, "An examination of the hybrid meta-heuristic machine learning algorithms for early diagnosis of type II diabetes using big data feature selection," *Healthc. Anal.*, vol. 4, Dec. 2023, doi: 10.1016/j.health.2023.100227.
- [21] V. Norton, O. O. Oloyede, S. Lignou, Q. J. Wang, G. Vázquez, and N. Alexi, "Understanding consumers' sustainability knowledge and behaviour towards food packaging to develop tailored consumer-centric engagement campaigns: A Greece and the United Kingdom perspective," *J. Clean. Prod.*, vol. 408, Jul. 2023, doi: 10.1016/j.jclepro.2023.137169.
- [22] L. Cao, "Artificial intelligence in retail: applications and value creation logics," *Int. J. Retail Distrib. Manag.*, vol. 49, no. 7, pp. 958–976, 2021, doi: 10.1108/IJRDM-09-2020-0350.
- [23] X. Xie, T. T. Hoang, and Q. Zhu, "Green process innovation and financial performance: The role of green social capital and customers' tacit green

- needs,” *J. Innov. Knowl.*, vol. 7, no. 1, Jan. 2022, doi: 10.1016/j.jik.2022.100165.
- [24] V. Singh, S. S. Chen, M. Singhanian, B. Nanavati, A. kumar kar, and A. Gupta, “How are reinforcement learning and deep learning algorithms used for big data based decision making in financial industries—A review and research agenda,” *International Journal of Information Management Data Insights*, vol. 2, no. 2, Elsevier B.V., Nov. 01, 2022, doi: 10.1016/j.jjime.2022.100094.
- [25] G. D. Sharma, S. Kraus, M. Srivastava, R. Chopra, and A. Kallmuenzer, “The changing role of innovation for crisis management in times of COVID-19: An integrative literature review,” *J. Innov. Knowl.*, vol. 7, no. 4, Oct. 2022, doi: 10.1016/j.jik.2022.100281.
- [26] S. A. Olugbola, “Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator,” *J. Innov. Knowl.*, vol. 2, no. 3, pp. 155–171, Sep. 2017, doi: 10.1016/j.jik.2016.12.004.
- [27] D. Marchiori and M. Franco, “Knowledge transfer in the context of inter-organizational networks: Foundations and intellectual structures,” *J. Innov. Knowl.*, vol. 5, no. 2, pp. 130–139, Apr. 2020, doi: 10.1016/j.jik.2019.02.001.
- [28] M. Dühr, A. Berthold, M. Siegrist, and B. Sütterlin, “Consumers’ knowledge gain through a cross-category environmental label,” *J. Clean. Prod.*, vol. 319, Oct. 2021, doi: 10.1016/j.jclepro.2021.128688.
- [29] M. Dabić, J. F. Maley, J. Švarc, and J. Poček, “Future of digital work: Challenges for sustainable human resources management,” *J. Innov. Knowl.*, vol. 8, no. 2, Apr. 2023, doi: 10.1016/j.jik.2023.100353.
- [30] F. Acikgoz, A. Elwalda, and M. J. De Oliveira, “Curiosity on Cutting-Edge Technology via Theory of Planned Behavior and Diffusion of Innovation Theory,” *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 1, Apr. 2023, doi: 10.1016/j.jjime.2022.100152.
- [31] P. Hu, Z. Wu, J. Wang, Y. Huang, Q. Liu, and S. F. Zhou, “Corrosion inhibiting performance and mechanism of protic ionic liquids as green brass inhibitors in nitric acid,” *Green Energy Environ.*, vol. 5, no. 2, pp. 214–222, Apr. 2020, doi: 10.1016/j.gee.2019.11.003.
- [32] K. Chaudhary, M. Alam, M. S. Al-Rakhami, and A. Gumaci, “Machine learning-based mathematical modelling for prediction of social media consumer behavior using big data analytics,” *J. Big Data*, vol. 8, no. 1, Dec. 2021, doi: 10.1186/s40537-021-00466-2.
- [33] G. Meena, K. K. Mohbey, and S. Kumar, “Sentiment analysis on images using convolutional neural networks based Inception-V3 transfer learning approach,” *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 1, Apr. 2023, doi: 10.1016/j.jjime.2023.100174.

Reviewer Feedback Form

Date April 5, 2025

International Journal of Advanced Computer Science and Applications (IJACSA)

Paper Title The Role of Artificial Intelligence in Brand Experience: Shaping Consumer Behavior and Driving Repurchase Decisions

Reviewer Recommendation Neutral

Reviewer Ratings

The authors contribution to the paper	Fair
Potential interest to research community	Fair
Originality of the work	Fair
Use of examples and illustrations	Poor
Quality of questions or problems raised by the Author	Good
Reader's confidence in Author's knowledge	Fair
Formatting and Presentation	Good
Awareness of related work	Good
Scientific Impact or Practical Utility	Fair
Citations and References	Fair
Paper Organization	Good

Detailed Comments:

I have not found any advancement in the article. the data is collected , hypothesis set. statistical tools applied, and results tabulated. just like an undergraduate class exercise. what is the significance of this exercise and how it benefits man kind?

is the results drive to a policy decision, process change, or any 1 benefit for real life?
list it out or implement it and gather the result to write a technical paper.

The conclusion "This study contributes to the growing body of research on AI-driven brand experiences and their impact on consumer behavior. The results confirm that AI plays a significant role in shaping perceived urgency, impulse buying, and repurchase intentions. " is vague and no tangible findings

Grammar, punctuation, or spelling errors:

nA

Reviewer Feedback Form

Date April 6, 2025

International Journal of Advanced Computer Science and Applications (IJACSA)

Paper Title The Role of Artificial Intelligence in Brand Experience: Shaping Consumer Behavior and Driving Repurchase Decisions

Reviewer Recommendation Neutral

Reviewer Ratings

The authors contribution to the paper	Fair
Potential interest to research community	Good
Originality of the work	Fair
Use of examples and illustrations	Good
Quality of questions or problems raised by the Author	Fair
Reader's confidence in Author's knowledge	Fair
Formatting and Presentation	Poor
Awareness of related work	Fair
Scientific Impact or Practical Utility	Poor
Citations and References	Fair
Paper Organization	Fair

Detailed Comments:

The keyword 'Component' should be ignored.

The "I. Introduction" requires more elaboration on the motivations and potential benefits of the proposed approach.

The main contributions and their possible implications are not well presented as well.

The research summary or the structure for the rest of the paper is missing at the end of the Introduction section.

At the end of the Literature Review section, the authors should summarize their findings by indicating gaps or shortcomings in all the reviewed papers.

Thereafter, the authors should indicate how their paper would address any or all of the gaps.

Arrange subheadings. The way it is, it is very hard to read the paper.

The research methodology needs to be clarified ensuring appropriateness and justification for the chosen methods.

The limitation of the study must be highlighted.

Please add comparisons in a table (or subsection) so that one could fairly compare your work with similar

previous works.

Rewrite the Conclusion section to be:

You must more clearly highlight the theoretical and practical implications of your research

- Discuss research contributions.
- Indicate practical advantages (in at least one separate paragraph),
- Discuss research limitations (at least one separate paragraph), and
- Supply 2-3 solid and insightful future research suggestions.

References are repeated in reference list. It should be corrected.

Grammar, punctuation, or spelling errors:

The lack of spacing between paragraphs impairs the paper's readability.

Therefore, it is recommended to incorporate a consistent spacing between all paragraphs throughout the paper to enhance the reader's experience