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THE ROLE OF AI POWERED PERSONALIZATION IN ENHANCING CUSTOMER EXPERIENCE: A CROSS-INDUSTRY ANALYSIS

PERAN PERSONALISASI BERBASIS KECERDASAN BUATAN (AI) DALAM MENINGKATKAN PENGALAMAN PELANGGAN: ANALISIS LINTAS INDUSTRI

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ABSTRACT
The rapid adoption of Artificial Intelligence (AI) has transformed customer experience (CX) strategies across industries, shifting from generalized approaches to data-driven personalization. While AI-based personalization has shown positive impacts, most existing studies are sector-specific, limiting comprehensive understanding across different industry contexts. This study conducts a narrative review to explore and compare the influence of AI-powered personalization on key CX dimensions—such as satisfaction, trust, engagement, and loyalty—across retail, banking, healthcare, and hospitality sectors. A systematic literature search (2015–2025) was performed using Scopus, Web of Science, and Google Scholar. Findings reveal significant improvements in CX across sectors, particularly through AI-driven recommendation systems, chatbots, and behavioral personalization. However, ethical concerns, data privacy, and algorithmic bias remain persistent challenges, especially in sensitive sectors like healthcare. The study highlights the importance of adopting a contextual and ethically grounded personalization strategy tailored to each industry's characteristics and customer expectations. This review contributes to the theoretical integration of AI personalization and CX literature, and offers practical guidance for developing responsible, sector-specific AI strategies that enhance customer value.
Keywords: ***AI powered Personalization, Customer Experience, Cross Industry Analysis, Digital Transformation, Customer Trust***

ABSTRAK
Adopsi Kecerdasan Buatan (AI) yang pesat telah mentransformasi strategi customer experience (CX) di berbagai industri, dari pendekatan yang bersifat umum menuju personalisasi berbasis data. Meskipun personalisasi berbasis AI menunjukkan dampak positif, sebagian besar penelitian yang ada masih bersifat sektoral, sehingga membatasi pemahaman komprehensif lintas konteks industri. Studi ini melakukan kajian naratif untuk mengeksplorasi dan membandingkan pengaruh personalisasi berbasis AI terhadap dimensi utama CX—seperti kepuasan, kepercayaan, keterlibatan, dan loyalitas—dalam sektor ritel, perbankan, layanan kesehatan, dan hospitality. Pencarian literatur sistematis (2015–2025) dilakukan melalui Scopus, Web of Science, dan Google Scholar. Temuan menunjukkan peningkatan signifikan dalam CX di berbagai sektor, khususnya melalui sistem rekomendasi berbasis AI, chatbot, dan personalisasi perilaku. Namun, isu etika, privasi data, dan bias algoritmik tetap menjadi tantangan, terutama di sektor yang sensitif seperti layanan kesehatan. Studi ini menekankan pentingnya penerapan strategi personalisasi yang kontekstual dan berlandaskan etika, disesuaikan dengan karakteristik industri dan ekspektasi pelanggan. Kajian ini berkontribusi terhadap integrasi literatur AI dan CX secara teoritis, serta memberikan panduan praktis dalam merancang strategi AI yang bertanggung jawab dan bernilai tambah bagi pelanggan.
Kata Kunci: AI powered Personalization, Customer Experience, Cross Industry Analysis, Digital Transformation, Customer Trust

1. INTRODUCTION

In recent years, adoptionArtificial Intelligence (AI) in the industry has experienced very rapid growth. According to a report fromStatesman (2025), the global AI market is estimated to

reach USD 305.9 billion in 2025, increasing from USD 126 billion in 2022, with a compound annual growth rate (CAGR) of 37.3%. AI adoption is now a key pillar in digital transformation strategies across various industrial sectors, including e-commerce, banking, And health services. In the sector-commerce, McKinsey's report (2024) shows that more than35% of global retail companies have integrated AI in form recommender systems And dynamic pricing, with the result being an increased income up to 15% And customer conversion by 25–30%. In the sector banking, more than 60% of financial institutions bigg useAI chatbot and predictive analytics to improve customer service and detect fraud, based on a survey by Deloitte (2024). Meanwhile, in the field of health services, a report from Accenture (2023) estimates that AI can saveUSD 150 billion per year for the US healthcare system through personalized care and increased operational efficiency.

This development goes hand in hand with evolution of customer experience (CX) strategy which is now moving from a generic approach towards data-driven personalization. Modern customers expect relevant, contextual, and real-time interactions. A survey by Salesforce (2024) found that73% of customers expect companies to understand their unique needs and62% of customers willing to provide personal data if it is used to create a better experience.However, the implementation of AI-powered personalization not uniform across all industriesDifferent industry characteristics—such as level of regulation, data sensitivity, and customer expectations—lead to variations in implementation strategies and outcomes. For example, while AI personalization in e-commerce focuses heavily on increasing sales, in healthcare, the emphasis is more on improving patient engagement and trust.Therefore, it is necessary cross-industry understanding to assess how AI-powered personalization affects customer experience holistically and contextually. This study is important for filling gaps in the current literature, which tends to be sectoral and fragmented.

Despite the significant growth in the adoption of Artificial Intelligence (AI) in marketing strategies, most existing research remains sector-specific, focusing on a single industry, such as retail, finance, or healthcare. This approach results in a partial understanding of the impact of AI-powered personalization on the overall customer experience. Different industry contexts—in terms of regulation, operational complexity, and customer expectations—have the potential to create unique dynamics in the implementation and success of AI-based personalization strategies. However, to date, few studies have systematically compared these differences.Furthermore, there is no comprehensive mapping that can explain how AI-powered personalization simultaneously shapes customer experiences across multiple sectors. For example, the effectiveness of chatbots in banking services may differ from the effectiveness of product recommendations in e-commerce or virtual assistants in healthcare. When contexts, user needs, and expectations for digital interactions vary significantly across industries, generalizations from single-study findings become less valid. Therefore, there is an urgent need for cross-industry studies that are not only descriptive but also elaborate on the mechanisms, challenges, and strategic value of AI-powered personalization in improving customer experience.

This research aims to provide a broader and deeper understanding of the role of AI-powered personalization in shaping customer experiences across various industries. The primary objective of this study is to explore and compare how AI-based personalization influences customer perceptions, satisfaction, engagement, and loyalty across different industry contexts. This cross-industry approach is expected to uncover similarities and differences in implementation and their impact on customer behavior and preferences.Furthermore, this research also aims to identify contextual factors that influence the effectiveness of AI personalization in each sector. These factors can include technological, organizational, regulatory, and customer characteristics. By understanding the various challenges and opportunities faced by each sector in implementing AI-powered personalization, this research will develop a best practices framework that can serve as a

strategic reference in designing more relevant, adaptive, and value-driven customer experiences.To direct the focus of the study and ensure clarity of the direction of analysis, this study formulates the main questions as follows:How does AI-powered personalization influence customer experience across different industries?". This question is both investigative and open-ended, allowing researchers to explore complex dynamics, identify structural differences across industries, and understand how AI-based personalization mediates the relationship between customers and organizations in different contexts. By formulating this question, this study seeks to answer not only the "what" impacts occur, but also the "how" and "why" of AI personalization resulting in varying outcomes depending on the context.

This research has significant contributions both theoretically and practically.theoretical contribution, this study attempts to bridge two domains of literature that are developing but have not been widely integrated, namely literature onAI personalization and literature on customer experience (CX)By adopting a cross-industry approach, this research has the potential to enrich existing theories by integrating the dimensions of technology-based intelligent personalization into a customer experience framework that has been dominated by traditional approaches. This study can also serve as a basis for developing new conceptual models that consider the role of AI technology in creating dynamic and contextual customer experiences.

Meanwhile, in terms of practical contributionThe results of this study are expected to provide strategic guidance for decision-makers across various industry sectors in designing, implementing, and evaluating AI-based personalization strategies. The findings will help organizations understand the key success factors for AI personalization and avoid potential pitfalls such as over-automation, algorithmic bias, or customer privacy violations. Therefore, the results of this study are not only academically relevant but also applicable in responding to real-world challenges in the increasingly digitized business world.

2. METHODS

2.1. Review Type

This research uses an approach narrative review, which is a descriptive, reflective, and interpretive literature review method. Narrative review was chosen because it allows researchers to examine in depth and critically various empirical findings and theoretical frameworks scattered throughout the related literature, without the strict limitations found in systematic reviews or meta-analyses. Unlike literature recapitulations, which are merely summaries, narrative reviews emphasize argumentative synthesis, identification of thematic patterns, And contextual meaning on various research results that have been published previously. This method is very appropriate for answering exploratory and multidimensional research questions, such as the relationship betweenAI-powered personalization And customer experience across-industry, because it is able to capture the complexity of issues that cannot always be converted into quantitative data.

2.2. Literature Search Strategy

The literature search process was carried out systematically and in stages by utilizing several major internationally recognized scientific databases, namelyScopus, Web of Science, And Google ScholarThese three sources were chosen because of their broad literature coverage, high publication quality, and access to relevant, up-to-date articles in the fields of marketing, information technology, and consumer behavior.

To maintain the focus of the search, a number of strategically combined keywords, among others:

- "AI personalization"
- "customer experience"
- "cross-industry"
- "machine learning in marketing"

- “personalized recommendation”
- “consumer trust in AI”
- “automated customer engagement”

These keywords are combined using Boolean operators such asAND, OR, And NOTto obtain more focused and relevant search results. In addition, a temporal restriction is also applied, namely only including publications published within the time period2015 to 2025, assuming that the development of AI technology and its implementation in customer personalization has accelerated significantly during this period. The literature used includes highly credible scientific journals, academic conference proceedings, and industry research reports.

2.3. Inclusion and Exclusion Criteria

To ensure the quality and relevance of the literature review, the following inclusion and exclusion criteria were established:

- **Inclusion Criteria:**
  - Studies that explore or test implementationAI-powered personalization in the context of improving customer experience.
  - Research with empirical and theoretical approaches that discusses the relationship between AI and customer perceptions, attitudes, or behavior.
  - Cross-industry and sectoral studies that provide contextual insights that can be compared across sectors.
  - Articles published in peer-reviewed journals or verifiable scientific sources.

- **Exclusion Criteria:**
  - Studies that are purely technical or computational in nature (e.g.: AI algorithms, neural networks) without discussion or implications for customer experience.
  - Opinion articles, editorials, or commentaries that are not supported by scientific methodology.
  - Research that discusses personalization in general without using an AI approach or that only focuses on the technological aspects without considering the impact on customers.

The application of these criteria aims to maintain the focus of the study on the contribution of AI in shaping customer experiences directly and measurably.

2.4. Synthesis Approach

After the literature selection stage is complete, the process is carried out narrative synthesis to organize and interpret the main findings from selected studies. The synthesis was carried out using a thematic approach based on two main dimensions:

1. Categorization by Industry:
   The literature is classified based on the industrial context in which the study was conducted, namely retail/e-commerce, banking and finance, health services, And hospitalityThis approach allows for cross-sector comparisons of how AI-personalization is implemented and the results achieved in each industry.

2. Identify Customer Experience Indicators:
   Each study was analyzed based on measured customer experience indicators, such as:

   - Customer satisfaction
   - Customer trust

- Emotional engagement
- Perceived personalization
- Customer loyalty
- Customer retention

Narrative analysis was conducted to identify common themes, fundamental differences between industries, as well as practical and theoretical implications from existing findings. This approach allows for a more comprehensive understanding of the factors that strengthen or weaken the impact of AI personalization on customer experiences across contexts.

3. RESULTS

3.1. Overview of AI-Personalization Techniques

Artificial intelligence (AI) has significantly transformed various domains through its personalized techniques, which can be broadly categorized into chatbots, recommender systems, dynamic content, and predictive modeling. These applications harness complex algorithms and machine learning frameworks to tailor experiences and content to individual needs and preferences. Chatbots serve as one of the foundational applications of AI for personalization. They utilize natural language processing and machine learning to provide customized responses and interactions with users. For instance, AI-driven chatbots have been shown to effectively promote health behavior changes by delivering personalized health interventions, thereby engaging users in their health journeys (Aggarwal et al., 2023). The ability of chatbots to learn from user interactions allows them to adapt responses over time, enhancing user engagement and satisfaction. Furthermore, research emphasizes the impact of AI on the tourism industry, where chatbots are employed to recommend personalized travel services (Gaafar, 2020), indicating a wide applicability of personalizing interactions through automated systems.

Recommender systems are integral in e-commerce, leveraging AI algorithms to analyze consumer behavior and preferences to deliver tailored product suggestions. They support businesses in enhancing customer engagement, satisfaction, and loyalty by predicting user preferences based on past purchasing behavior and activities (Raji et al., 2024). This mechanism not only drives consumer confidence but also influences market trends within the e-commerce sector. The integration of AI-powered personalization techniques enables organizations to sift through large datasets to understand user needs more effectively (Raji et al., 2024).

Dynamic content personalization involves the adaptation of user content based on real-time data analysis. AI technologies are pivotal in the educational sphere, where personalized learning systems analyze student data to dynamically adjust learning materials and paths based on individual performance and preferences. Such personalized educational interventions aim to optimize learning outcomes and enhance student engagement. The potential for improving personalized learning experiences through AI has gained substantial attention and indicates a shift towards more adaptive educational frameworks (Castro et al., 2024; Tapalova & Zhiyenbayeva, 2022). Lastly, predictive modeling is a crucial technique in various sectors, including healthcare where AI enhances the prediction of patient outcomes, and recommendations for personalized treatment plans are tailored based on individual health data (Li et al., 2025). For instance, AI applications in medical diagnostics allow for more accurate predictions of disease onset and treatment effectiveness, underscoring AI's role in fostering personalized medicine (Li et al., 2025). Such modeling techniques rely on extensive datasets to identify patterns and facilitate timely decision-making and intervention strategies. In summary, AI personalization techniques encompass a broad array of applications that significantly enhance user engagement by providing tailored experiences across different sectors. By leveraging machine learning, dynamic content adaptation, and predictive analytics,

AI fosters individualized interactions, whether through chatbots, recommender systems, or real-time content adjustments.

3.2. Industry-Specific Findings

In the evolving landscape of various industries, the integration of artificial intelligence (AI) technologies has demonstrated distinct impacts across sectors such as retail, banking, healthcare, and hospitality. This synthesis explores industry-specific findings, underscoring the role of AI in enhancing key performance indicators, including conversion rates in retail, trust in finance, and patient satisfaction in healthcare. In the retail and e-commerce sector, recommender systems powered by AI significantly increase conversion rates by personalizing the shopping experience. These systems analyze user behavior, preferences, and purchase history to suggest products that are most likely to resonate with individual consumers, thereby enhancing user engagement and increasing the likelihood of transactions. Studies indicate that personalization through these systems can lead to higher customer satisfaction and retention, ultimately driving revenue growth in online retail environments (Shah & Chen, 2024; Al-Sofyani, 2025).

The banking and finance industries have also leveraged AI technologies to improve customer trust and security perceptions. AI-driven chatbots enhance customer service by providing instant responses, thereby streamlining banking processes and improving overall user satisfaction (El-Shihy et al., 2024). Moreover, the implementation of AI in fraud detection systems has been pivotal in enhancing security measures and preventing financial crimes, which in turn bolsters consumer confidence in digital banking platforms. Research shows that customers perceive AI-driven services as more reliable, leading to increased loyalty and a positive branding impact for financial institutions (Margam, 2024).

In healthcare, the use of AI presents a complex narrative; while AI applications such as virtual assistants and AI-driven care plans hold the potential to revolutionize patient management and access to care, ethical concerns surrounding data privacy and autonomy significantly impact user reception. A mixed response has been noted among healthcare professionals and patients regarding the deployment of AI in diagnosis and treatment planning. Studies emphasize the significance of transparency and ethical considerations in implementing AI technologies, as mistrust can arise from potential biases in AI algorithms, leading to hesitance in their adoption (Fatima et al., 2023; Kiseleva et al., 2022). Additionally, while AI enhances operational efficiency, it must be utilized judiciously to ensure ethical compliance and patient safety (Borra, 2024).

The hospitality and tourism industry showcases another facet of AI integration through behavioral personalization strategies that significantly enhance customer satisfaction and retention rates. AI systems analyze customer data to tailor services such as recommendations for activities, dining, and accommodations based on personal preferences. This highly personalized experience can elevate customer loyalty and retention, as studies indicate that personalized experiences lead to improved guest satisfaction (Susilo & Rahman, 2025; Quazi et al., 2024). As AI technologies continue to evolve, their capacity to enhance individual customer experiences is increasingly recognized as a vital factor in driving competitive advantage within this sector. In summary, across industries such as retail/e-commerce, banking/finance, healthcare, and hospitality/tourism, the integration of AI technologies offers significant potential to enhance various performance metrics. Each sector, however, faces unique challenges that must be addressed to fully leverage the benefits of AI while maintaining trust and ethical integrity.

3.3. Cross-Industry Comparison

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3.4. Common Challenges

In today's landscape, organizations face numerous challenges related to data privacy, customer trust, algorithmic bias, and regulatory compliance. These issues are interconnected, influencing how businesses leverage technology while adhering to regulatory frameworks.

1. **Data Privacy and Security Challenges**

Data privacy is a primary challenge, particularly in the context of big data analytics. The integration of big data technologies into business operations raises concerns about how personal information is collected and used. Effective approaches to ensure data privacy are crucial for maintaining customer trust and avoiding regulatory pitfalls. Purnamaningsih et al.

highlight the complexities associated with data privacy laws, emphasizing the need to balance security measures with innovation in an age defined by significant data generation and utilization (Purnamaningsih et al., 2024). Furthermore, the adoption of differential privacy models, as discussed by Ma et al., presents a viable method for safeguarding personal information within large datasets while ensuring data utility (Ma et al., 2023). This method provides a rigorous framework aimed at maintaining user privacy amid extensive data collection.

2. Customer Trust and Algorithmic Bias

Customer trust is significantly impacted by data privacy concerns. Organizations must cultivate transparency and foster confidence among users regarding data management. Algorithmic bias poses risks to fairness and equity in automated decision-making, with the potential for biased outcomes based on flawed algorithmic design, which can erode user trust and lead to reputational damage (Miglionico, 2020; Sekaran, 2024). The ethical deployment of algorithms and regular audits of these systems are essential to maintain trust and fairness (Pramanik et al., 2020). As companies increasingly rely on AI and machine learning for insights, it is paramount to ensure that these technologies are devoid of bias to uphold ethical standards.

3. Regulatory Compliance and Technological Advancements

With the rapid evolution of technology, regulatory compliance has become increasingly complex, particularly in cloud computing scenarios. Regulatory frameworks continue to evolve, requiring businesses to adapt dynamically to new compliance requirements (- et al., 2024). Technologies such as Regulatory Technology (RegTech) enable organizations to streamline compliance efforts effectively. For instance, the automation of compliance processes through AI and machine learning can significantly reduce operational burdens while ensuring adherence to various regulations (Firmansyah & Arman, 2023; Olawale et al., 2024). This adaptability is essential for organizations to meet current regulations and anticipate future compliance requirements.

Moreover, the unique challenges posed by algorithmic governance necessitate a comprehensive understanding of regulatory frameworks and technological innovations. Research by Firmansyah et al. underscores the role of RegTech in facilitating a more secure and compliant financial sector, enabling firms to operate efficiently within legal frameworks (Firmansyah et al., 2023). Therefore, businesses must embrace innovative solutions that enhance their compliance capabilities while addressing emerging risks associated with technological advancements. In conclusion, addressing the challenges of data privacy, customer trust, algorithmic bias, and regulatory compliance is crucial for organizations navigating the modern technological landscape. Employing innovative methodologies—such as differential privacy, RegTech solutions, and ethical algorithm design—can substantially mitigate these challenges. By prioritizing these aspects, businesses can foster trust among consumers, ensure compliance with regulations, and leverage Data Analytics effectively without compromising ethical standards.

4. DISCUSSIONS

4.1. Interpretation of Results

AI personalization plays a critical role in enhancing customer experiences across various industries. As elucidated by Yazdani and Darbani, there is an overarching consensus in the literature that AI significantly impacts consumer behavior, particularly in marketing contexts where personalized interactions are paramount (Yazdani & Darbani, 2023). Their findings correlate with those of Ai-Zhong and Zhang, who highlight the importance of AI-powered touchpoints during the customer journey and their effectiveness in marketing

engagement, asserting that effective AI applications can substantially enhance consumer satisfaction (Ai-zhong & Zhang, 2022).

Furthermore, customer trust and perceived usefulness are foundational elements of successfully adopting AI technologies. Frank et al. emphasize that trust in both the companies providing AI services and the autonomy of those AI systems critically influences consumer acceptance (Frank et al., 2023). This is supported by Ameen et al., who discuss how consumer trust, grounded in commitment and perceived benefits, mediates the relationship between AI implementation and enhanced customer experiences (Ameen et al., 2021). Additionally, Oyekunle et al. explore a conceptual framework that integrates psychological and organizational factors influencing customer confidence in AI systems, underlining the necessity for transparency and ethical considerations in AI deployment (Oyekunle et al., 2024).

Moreover, the increasing reliance on AI-driven tools, such as chatbots, further underscores the need for building trust. Murtarelli et al. discuss how relational variables, including trust and risk perception, significantly affect customer intentions to engage with AI technologies in the fashion industry (Murtarelli et al., 2022). This aligns with findings by Tussyadiah et al., which illustrate that cognitive trust formation is essential in contexts where consumers interact with intelligent machines, thereby affirming the importance of trust in AI's successful integration into consumer-facing services (Tussyadiah et al., 2020). In conclusion, leveraging AI for personalization not only enhances customer experiences but also requires a robust foundation of trust and perceived usefulness to foster consumer acceptance. The studies collectively support the idea that trust and the perception of AI efficacy are pivotal in determining success in the personalization of customer interactions through AI technologies.

4.2. Theoretical Integration

In exploring AI's influence on consumer interaction and experience, the integration of established theoretical frameworks provides a structured lens to understand these dynamics. The Technology Acceptance Model (TAM) is particularly relevant in gauging user acceptance of AI technology, mediated by perceived usefulness and ease of use. Studies have indicated that the perceived helpfulness of AI systems crucially affects user engagement. Research shows that reliability in AI enhancing customer interaction experiences bolsters perceived usefulness, leading to higher user satisfaction and acceptance (Nguyen et al., 2021; Blut et al., 2021). Furthermore, an investigation into customer responses to AI chatbots highlights that when these systems are perceived as user-friendly, they significantly increase trust and satisfaction levels among users, reinforcing the essence of TAM's components (Nguyen et al., 2023; Yang, 2023).

Simultaneously, the Stimulus-Organism-Response (S-O-R) framework elucidates the cognitive and emotional dynamics that AI introduces into consumer behavior. In this paradigm, AI serves as the stimulus that provokes an organism's (consumer's) emotional and behavioral responses. For example, emotional reactions elicited by interactions with AI—such as trust or discomfort—can significantly influence behavior and intentions toward brands employing these technologies (Zhu et al., 2023; Mende et al., 2019; Chen et al., 2022). Notably, research identifies that customer emotions regarding AI, influenced by contextual factors such as familiarity with technology, can condition their loyalty and engagement levels with the brand. This aligns with findings that as customers interact with AI, their emotional responses dictate their behavior and engagement with the service (Barari et al., 2024; Libai et al., 2020).

Moreover, the concept of the personalization-privacy paradox emerges starkly in environments where sensitive customer data is processed. Customers often exhibit a desire for personalized experiences; however, they simultaneously express significant concerns regarding privacy and data security, leading to a complex socio-technical interaction (Li, 2024; Ghosh et al., 2024). This paradox significantly shapes consumer relationships with AI, where advanced AI systems utilize personal data to enhance customer experiences, but perceived threats to

privacy can undermine trust and engagement (Sardesai et al., 2024). Findings in the context of AI demonstrate that individuals are often willing to trade privacy for the perceived benefits associated with personalized services, complicating their behavioral intentions in a digital landscape (Hoffmann et al., 2016; Abhulimen & Ejike, 2024). In summary, the interplay of these theoretical frameworks—TAM, S-O-R, and the personalization-privacy paradox—provides a comprehensive understanding of how AI impacts consumer experiences. Users' acceptance is intricately tied to perceived usefulness and ease of interactions, while their emotional responses to AI as a stimulus greatly determine their behavioral outcomes. Moreover, the dichotomy between the desire for personalized service and privacy concerns continues to challenge marketers and technologists in creating responsible and effective AI solutions.

4.3. Implications for Practice

The findings of this study have important implications for practitioners across various industry sectors in adopting and optimizing AI-powered personalization as part of their customer experience improvement strategies. Given that the effectiveness of AI personalization is heavily influenced by the operational context and customer expectations in each industry, a generic or uniform approach is inadequate. Each sector requires a contextually tailored personalization strategy to accurately and meaningfully meet customer needs and preferences.

In the retail and ecommerce sectorCompanies are advised to adopt intelligent, real-time recommendation systems that can provide product suggestions tailored to customer purchasing behavior and interests. However, companies must also consider the potential for fatigue or saturation resulting from over-targeting, which can actually disrupt customer experience.For banking and financial services industry, an AI-personalization approach needs to focus on transparency and security in digital interactions. The implementation of AI-based chatbots, financial needs detection systems, and risk-profile-based financial product offerings must be designed ethically and reliably, as trust is a key component of the customer experience in this sector.

In the field of health servicesThe implementation of personalization requires greater caution because it involves highly sensitive data and involves decisions that directly impact an individual's health and safety. AI-based personal assistants or patient-preference-based care management systems need to be designed with the principle of ethics by design, which ensures patient data protection, informed consent, and transparency in automated decision-making.Meanwhile, in the sector hospitality and tourismAI can be leveraged to create highly personalized experiences through customized services, destination recommendations, and interactions tailored to customers' communication styles and cultural preferences. This approach must maintain a balance between innovation and customer convenience, while also considering local cultural values of privacy and respect.

In general, companies in all industries need to pay attention to contextual fit, namely the alignment between AI-personalization strategies and industry characteristics, customer demographics, and relevant ethical values. Integration of principles ethics by design into the entire cycle of design, development, and implementation of AI systems is an absolute requirement forThe personalization carried out is not only technically effective, but also sustainable and socially acceptable.

4.4. Limitations

Although this study makes an important contribution to the understanding of the role ofAI-powered personalization in improving customer experience, there are some limitations that need to be acknowledged. First, the focus of the literature reviewed is limited to English-language publications onlyThis has the potential to introduce linguistic bias and overlook important findings from studies in other languages that may represent local contexts,

particularly in non-English-speaking regions experiencing rapid growth in AI adoption.Second, the quality and methodology of the studies used in the reviewed literature varied significantlySome studies are exploratory in nature without a strong theoretical framework, while others use a more structured quantitative approach but are limited to a single sector or region. This variation complicates generalization and limits researchers' ability to draw universal conclusions. Furthermore, limited access to internal company data also hinders the ability to comprehensively evaluate the true impact of AI-based personalization strategies on customer experience metrics.

4.5. Future Research Directions

Based on the findings and limitations identified, there are several future research directions that can be developed to broaden and deepen the understanding of AI-powered personalization in the context of customer experience.First, there is a need to do cross-industry empirical study with a quantitative approach to test the causal relationship between AI personalization variables and customer experience indicators such as satisfaction, trust, and loyalty. Such studies will provide a stronger foundation for validating narrative findings and support the development of applicable predictive models.Second, it needs to be done development of a theoretical framework that integrates the key elements of AI personalization and customer experienceThis framework should be able to explain the dynamics of interactions between technology, users, and the industry context. Integrating models such as the Technology Acceptance Model (TAM), the Stimulus-Organism-Response (S-O-R), and the Customer Experience Framework will enrich the theoretical foundation of this study.Third, it is recommended to explore further the role of emotional and ethical dimensions in customer responses to AI-based personalization systemsIssues such as emotional fatigue, perceived manipulation, and data misuse are increasingly becoming major concerns for modern consumers. Future research needs to explain how customers' feelings of fairness, control, and transparency influence their perceptions and behaviors toward personalization.Finally, it is important to involve perspectives interdisciplinary in the development of future studies, including from the fields of consumer psychology, technology ethics, and human-computer interaction design, so that the approach to AI-powered personalization becomes more humane, relevant, and sustainable.

5. CONCLUSION

This research presents an in-depth study of howAI-powered personalization influence customer experience across various industry sectors, with a focus on cross-industry comparisons and identifying contextual dynamics that shape the success of personalization strategies. The findings suggest that while AI technology has enormous potential to improve customer relevance, efficiency, and satisfaction,the impact is not universal, but rather is greatly influenced by industry characteristics, customer profiles, and the regulatory and ethical environment who accompanies him.In sectors such as e-commerce and hospitality, customers tend to respond positively to proactive and interactive personalization, as they expect ease and speed in the decision-making process. Conversely, in more sensitive sectors such as banking and healthcare, expectations for trust, transparency, and data security are much higher, so personalization strategies must be designed with ethical risks and psychological impacts on users in mind.

This study emphasizes that to maximize the benefits of AI-powered personalization, organizations must develop a holistic approach.contextual, which takes into account industry-specific needs, as well as ethical, by prioritizing the principles of fairness, explainability, and privacy in technology design and implementation. A one-size-fits-all approach is inadequate in an increasingly complex and digitally differentiated business environment.Theoretically, this study contributes to the integration of the literatureAI in

marketing And customer experience, by opening up space for the development of new conceptual models that reflect the dynamic relationship between technology, customers, and industry contexts. The resulting findings also pave the way for further academic exploration of how AI systems can influence customer perceptions, emotions, and decisions through automated personalization processes.

From a practical perspective, this study provides a strategic foundation for stakeholders—including marketers, technology developers, and policymakers—in designing and evaluating personalization solutions that are not only effective in improving customer experiences but also socially and ethically responsible. Recommendations based on cross-industry analysis provide guidance for organizations navigating the challenges and opportunities in an era of digital transformation that increasingly focuses on individualization and interactivity.Thus, this study not only answers the question regarding the influence of AI-powered personalization on customer experience, but also provides a conceptual and practical framework for developing a personalization approach that is adaptive, customer value-oriented, and sustainable in the long term.

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