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The Ethical Challenges of Artificial Intelligence in Marketing

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ABSTRACT

Artificial intelligence, as one of the most important transformative technologies of the present era, has had a profound impact on various business sectors, especially marketing. This research aims to provide a comprehensive analysis of the role of artificial intelligence in marketing by examining the challenges, opportunities, and ethical considerations associated with this technology. Using a systematic literature review method and qualitative content analysis, a collection of reputable articles published between 2019 and 2024 has been analyzed. The findings of the research indicate that artificial intelligence has significant potential to enhance the effectiveness of marketing activities through personalizing customer experiences, automating processes, and providing data-driven insights. However, there are also significant challenges such as data privacy, algorithmic bias, and issues related to transparency. This research presents a comprehensive framework for the ethical integration of artificial intelligence in marketing, emphasizing the principles of transparency, fairness, and data privacy. Additionally, the importance of intelligent collaboration between humans and artificial intelligence as an approach to optimally leverage the capabilities of this technology is discussed. The research concludes by offering practical recommendations for the responsible implementation of artificial intelligence in marketing and identifying areas that require further research.

Introduction

Digital transformation over the past decade has shattered traditional marketing boundaries and created a platform where artificial intelligence plays a central role in shaping interactions between brands and customers. This transformation, accompanied by significant advancements in machine learning, natural language processing, and big data analytics, has presented a new landscape for marketing professionals (Davenport et al., 2019). Today, artificial intelligence has evolved from an emerging technology to an essential tool for survival and competitiveness in the market .

Recent research indicates that leveraging artificial intelligence in marketing goes beyond simple process automation. Huang and Rust (2021) point out in their study that artificial intelligence has transformed the nature of marketing activities by creating new capabilities in personalization, predicting consumer behavior, and optimizing decision-making. This paradigm shift highlights the necessity of revisiting traditional marketing models and developing innovative approaches .

However, as Petrescu et al. (2022) note, the adoption and integration of artificial intelligence in marketing activities face numerous challenges. Issues such as data privacy, consumer trust, and ensuring algorithmic transparency require special attention. Additionally, the emergence of new technologies like the metaverse and augmented reality has added new layers of complexity to this field (Bruni et al., 2023) .

In this context, attention to the ethical aspects of applying artificial intelligence in marketing has become increasingly important. Herman (2021) believes that long-term success in utilizing artificial intelligence requires a balance between technological innovation and social responsibility. This perspective aligns with Theo's (2024) findings, which emphasize the need to address the "slow violence" of artificial intelligence against human rights .

The market for small and medium-sized enterprises (SMEs) has not been exempt from these transformations. Leila et al. (2024) demonstrate in their research that these businesses, despite resource limitations, are increasingly moving towards adopting AI-based solutions. This trend underscores the importance of developing affordable and accessible solutions.

In the field of marketing education, the emergence of tools like ChatGPT has brought about significant transformations. McAllister and colleagues (2024) point out that these tools, while providing new opportunities for learning and education, have also introduced various ethical and educational challenges.

Despite extensive research in the field of artificial intelligence and marketing, there are still significant gaps in the comprehensive understanding of the interaction between these two areas. Vlahic and colleagues (2021) in their systematic review highlight the lack of integrated frameworks to guide the ethical and efficient implementation of artificial intelligence in marketing. This gap is particularly evident in the context of Human-AI Collaboration.

The challenges ahead in this field can be categorized at several levels. At the technical level, issues such as data quality, algorithm interpretability, and scalability of solutions are raised (Chintalapati and Pandey, 2022). At the organizational level, aligning processes, developing human resource skills, and change management become important. At the social level, issues such as algorithmic fairness, digital inclusion, and impact on employment require special attention.

This research aims to fill these gaps and provide a comprehensive framework for understanding and operationalizing artificial intelligence in marketing. Specifically, this study seeks to address the following questions:

1.How can the capabilities of artificial intelligence be leveraged to enhance the effectiveness of marketing activities while ensuring ethical considerations and consumer rights are upheld?

2. What frameworks and approaches can facilitate effective collaboration between humans and

artificial intelligence in the marketing domain?
3.What are the main challenges and opportunities in integrating artificial intelligence into marketing activities, and how can they be managed?

To answer these questions, the present study employs a systematic literature review methodology and analyzes qualitative content from a collection of reputable articles published between 2019 and 2024 to extract key patterns and insights.
The structure of this article is as follows: after the introduction, the second section reviews the literature and theoretical framework. The third section describes the research methodology. In the fourth section, the main findings of the research are presented. The fifth section is dedicated to discussing and analyzing the findings. Finally, the sixth section concludes with a summary and offers suggestions for future research.

2. Literature Review and Research Background

2.1 Personalization with Artificial Intelligence

The transformation in personalizing customer experiences is considered one of the most significant achievements of artificial intelligence in the field of marketing. This transformation, which stems from advancements in machine learning and big data analysis, has opened new frontiers in customer interaction (Pontoni et al., 2021). This capability is realized through the simultaneous analysis of diverse data such as purchase histories, web browsing patterns, and even biometric feedback .
Natural language processing and deep learning systems have opened new horizons in the field of personalization. Extensive analyses show that these technologies have significantly enhanced companies' abilities to understand and respond to customer needs. For instance, in a study conducted in 2021, Amin and his colleagues concluded that NLP technologies can deeply understand customers' emotions and needs through analyzing their textual interactions .
With the help of natural language processing techniques, artificial intelligence can identify the tone, emotions, and even the hidden intentions of customers in online conversations. This capability allows brands to go beyond merely behavioral data and reach deeper layers of customer needs and desires. This ability enables brands not only to identify the content that customers are interested in but also to understand their emotional responses and act accordingly .
Reinforcement Learning and Predicting Customer Behavior
One of the most fascinating applications of artificial intelligence in marketing is its ability to predict consumer behavior. Systems based on reinforcement learning, like a skilled chess player, can foresee several steps ahead and adjust their strategies accordingly. This unique capability has opened new horizons in personalizing customer experiences. These systems can continuously learn from interactions with customers and optimize their personalization strategies. Herman and Pontoni (2024) demonstrated in their research that models based on reinforcement learning can accurately predict future consumer behavior and provide appropriate recommendations .
However, as Stal and Eck (2024) point out, the complexity of these systems creates challenges in terms of transparency and interpretability. This issue becomes particularly important in cases where algorithmic decisions impact sensitive aspects of consumers' lives.

Ethical Challenges in the Era of Intelligent Personalization

It can be said that artificial intelligence is one of the most challenging technologies of our time. While this technology provides unparalleled opportunities for enhancing customer experience, it simultaneously presents profound ethical questions. The challenges are sometimes so complex that there is no simple answer to them. Roman Almansar and colleagues (2024) demonstrate that the level of social responsibility and social dominance attitudes of AI programmers significantly influence their decisions to correct algorithmic biases .
Guan and colleagues (2022) refer to three main challenges in this area :

1. Data Privacy: Extensive data collection for personalization can lead to violations of consumer privacy .
2. Algorithmic Bias: Personalization algorithms may reinforce existing discriminations .
3.Risk of Manipulation: The possibility of misuse of personal information to manipulate consumer behavior .

2.1.4 Innovative Approaches to Personalization

The emergence of new technologies such as the metaverse has opened new horizons in the field of personalization. Bruni and colleagues (2024) show in their research that immersive virtual environments provide the opportunity for deeper levels of personalization. In these environments, customer interaction with the brand can be designed in a completely unique way tailored to their preferences and behaviors .

However, Jouk (2024) warns that the development of these capabilities must be carried out with special attention to protecting consumer rights and preventing potential misuse. This issue becomes even more critical in virtual environments that allow for broader collection of biometric and behavioral data .

Productivity and Performance Optimization with Artificial Intelligence

Artificial intelligence has created a fundamental transformation in organizational productivity by automating repetitive processes and processing vast amounts of data. Studies show that the application of AI in marketing processes not only increases the speed and accuracy of operations but also leads to a significant reduction in human errors and an improvement in decision-making quality. For example, research by Bonté (2023) indicates that organizations utilizing AI in their marketing activities have experienced an average of 35% improvement in customer conversion rates and a 28% reduction in operational costs. This performance improvement has been particularly notable in areas such as customer data analysis, market segmentation, and campaign optimization .

The automation of complex marketing processes using AI has allowed marketing professionals to focus more on strategic and creative activities. Folkmar and colleagues (2022) conducted a comprehensive study involving over 200 companies and found that the successful implementation of AI in marketing has freed up an average of 42% of specialists' time that was previously spent on repetitive tasks. This freed time has been dedicated to developing innovative strategies, improving relationships with key customers, and designing creative campaigns. Additionally, the use of advanced machine learning algorithms in analyzing market data and consumer behavior has led to the identification of patterns and trends that were previously hidden from human analysts .

In the field of digital marketing, AI has brought about a significant transformation in how campaigns are managed and optimized by providing advanced analytical capabilities. Anayat and Rasool (2024) found in their study of 328 digital marketing campaigns that the use of AI algorithms for automatic content optimization and scheduling led to an average increase of 47% in engagement rates and a 31% reduction in customer acquisition costs. This performance improvement has been particularly remarkable in social media and online advertising. Intelligent systems, by continuously analyzing performance data and automatically adjusting campaign parameters, enable ongoing and dynamic optimization of marketing activities.

One of the notable aspects of increasing productivity with artificial intelligence is its ability to optimize marketing decisions in real-time. The research by Chintalapati and Pandey (2022) shows that deep learning algorithms can make optimal decisions regarding ad placement and budget allocation by simultaneously processing multiple variables such as the time of day, user demographics, and previous engagement rates. This capability is particularly valuable in large-scale marketing campaigns that require rapid adjustments to maintain effectiveness.

The development of natural language processing and deep learning technologies has opened new

horizons in the field of automated content generation and customer relationship management. Research by Zakaria et al. (2021) in the area of self-monitoring technologies indicates that AI-based systems can produce tailored and personalized responses in a fraction of the time required for human processing by analyzing customer language and behavioral patterns. This capability has had a significant impact on operational productivity, especially in customer service platforms and social networks that manage a high volume of interactions.

However, researchers emphasize that success in applying artificial intelligence to increase productivity requires a careful balance between automation and human creativity. For example, Halim et al. (2022) in their study of successful companies in implementing AI found that these organizations adopted a complementary approach rather than completely replacing human labor, where AI acts as a tool to enhance human capabilities. This approach has not only helped maintain the competitive advantage of organizations but has also increased employee job satisfaction and productivity.

In the B2B marketing sector, Petrisco et al. (2022) in a comprehensive study demonstrated that AI can play a key role in optimizing complex sales processes and managing customer relationships. This study, conducted on 73 B2B companies, showed that the use of AI in marketing and sales processes led to a 45% reduction in sales cycles and a 38% increase in deal success rates. This performance improvement is primarily due to AI's ability to more accurately predict customer needs, prioritize sales leads, and personalize business proposals.

Moreover, experience has shown that real productivity is achieved when organizations focus not solely on automation but on developing new capabilities through the intelligent combination of AI and human expertise. Labib (2024) in his research concluded that the most successful organizations in leveraging AI are those that have been able to redesign their traditional processes and develop innovative business models based on the unique capabilities of this technology. These organizations, by focusing on innovation in processes and products, have succeeded in creating new values for their customers and stakeholders.

Ultimately, the emergence of new technologies such as the metaverse has opened new horizons in the field of marketing productivity. Doyudi et al. (2022) predict in their research that the combination of artificial intelligence with virtual and augmented reality technologies will enable the creation of interactive and personalized experiences on an unprecedented scale. These advancements could lead to a fundamental transformation in marketing practices and customer interactions, although there are significant challenges regarding privacy and data security that must be carefully managed.

Bias in Artificial Intelligence Models

One of the major challenges in the collaboration between artificial intelligence and marketers is the risk of reinforcing and even exacerbating existing social biases. AI models are often trained on historical datasets that reflect social inequalities. As a result, these models can replicate biases and sometimes even amplify them, leading to discrimination in marketing activities (Roman Almanzar et al., 2024) .

Bias is problematic not only from a technical perspective but also from an ethical standpoint. An AI system filled with bias can undermine consumer trust and damage brand reputation. The reinforcement of bias indicates a lack of diverse perspectives in the data collection and model training stages, ultimately reducing quality and fairness in marketing processes. Therefore, reducing bias should be addressed not only from a technical perspective but also from an ethical one (Petrisco et al., 2022) .

To combat bias in AI systems, a multi-layered approach is essential. Creating diverse and

representative datasets during model training is a fundamental step. Regular audits and robust bias detection mechanisms are also important tools for identifying and addressing bias before it manifests in consumer-focused campaigns .
Advanced bias reduction techniques such as adversarial training can also be employed. In this method, models are intentionally exposed to biased scenarios to reveal hidden biases (Douglas et al., 2024). Fairness-aware algorithms can also integrate fairness constraints into the model development process .

Human oversight plays a vital role in the bias reduction process, as algorithms alone cannot grasp the cultural, social, and ethical complexities that may be embedded in data biases. Human reviewers, with their ethical judgment, play a key role in interpreting AI decisions within a nuanced socio-cultural context. Engaging diverse teams in the development and evaluation stages further reduces the risk of biased outcomes, as more diverse perspectives are likely to identify ethical weaknesses that homogeneous groups may overlook (Petrisco et al., 2022) .

Privacy Concerns
The reliance of AI on vast amounts of customer data poses significant challenges regarding privacy. AI systems utilize large quantities of personal data to create personalized experiences; however, the ethical implications of these data collection practices cannot be ignored. With growing consumer concerns about the misuse of their information, legal frameworks such as GDPR have established stringent standards for privacy protection, emphasizing the necessity of adopting privacy-first approaches (Doyudi et al., 2019).
Beyond mere compliance with regulations, marketers must engage with the broader ethical implications of data use. AI-driven personalization inherently creates a power asymmetry where companies hold significant power over consumer information, which can lead to misuse if data is mismanaged. To bridge this power gap, ethical data use practices must reflect a genuine commitment to preserving consumer dignity, autonomy, and trust (Teo, 2024). Privacy by Design principles represent a proactive and integrated approach that considers privacy concerns throughout the entire lifecycle of AI systems—from initial design to deployment. This strategy emphasizes data minimization and ensures that only essential data for providing personalized services is collected (Petrescu et al., 2022).

In this context, building consumer trust requires transparent communication about how data is collected, processed, and used. AI systems must evolve from opaque "black box" models to more explainable frameworks. Tools like Explainable AI play a crucial role in helping consumers understand the logic behind marketing decisions, thereby fostering trust (Teo, 2024). In other words, transparency is not only an ethical obligation but also a strategic necessity for sustainable marketing practices in the age of AI.

Broader Ethical Considerations
In addition to concerns related to bias and privacy, the integration of AI in marketing raises a wide range of ethical considerations that require careful attention. These considerations include algorithmic transparency, responsible use of customer data, accountability of AI systems, and the long-term impacts of this technology on society.

Algorithmic transparency is the cornerstone of trust between brands and customers. In AI-driven marketing, the opaque nature of some algorithms can pose a serious barrier to consumer trust, especially when consumers do not have a clear understanding of how their data is used. Establishing transparency requires marketing organizations to implement practices that provide insights into how AI systems make decisions. Techniques such as algorithmic transparency reports and consumer-

friendly model explanations are essential to bridging this gap. By providing comprehensive reports and utilizing tools that explain the logic behind recommendations, marketers can make AI processes more accessible and trustworthy, ultimately enhancing consumer trust in their automated marketing systems.

The second important consideration is the ethical collection and use of customer data. Privacy issues are increasingly raised in discussions about AI in marketing, as modern marketing strategies often rely on precise consumer data to deliver personalized experiences. Adopting Privacy by Design principles ensures that privacy is integrated from the earliest stages of development in AI systems. This approach includes creating data collection frameworks that emphasize informed consumer consent, data minimization, and anonymization. Adhering to these standards is essential not only for regulatory compliance but also for building trust between brands and their consumers.

Accountability in AI-driven marketing requires ensuring that the decisions made by AI systems are traceable and that there is a transparent structure in place to address ethical misconduct issues. Ethical governance frameworks provide the necessary structural support for organizations to manage AI responsibly. These frameworks include establishing ethical oversight committees composed of multidisciplinary members, including marketing strategists, data scientists, and ethics professionals, who collectively ensure that AI implementations align with ethical standards. Additionally, creating a formal feedback loop with consumers helps marketing organizations understand the ethical implications of their AI strategies from the end-user perspective. This feedback plays a crucial role in correcting AI models and ensuring that they serve all consumer groups fairly.

Inclusion is the cornerstone of the ethical use of artificial intelligence in marketing, especially since AI systems can inadvertently reinforce existing social biases. Implementing demographic equity criteria and equal opportunity is crucial to ensure that AI-driven marketing campaigns are designed to serve diverse audiences without bias or discrimination. For example, demographic equity ensures that marketing campaigns reach different consumer groups in proportion to their presence in the target market. Furthermore, before widespread deployment, an algorithmic impact assessment should be conducted to evaluate the effects of AI systems on different consumer populations. These assessments help marketing organizations actively identify and mitigate the risks of exclusionary practices, thereby supporting broader inclusion goals.

Ultimately, the ethical use of AI in marketing must consider its long-term impacts on society and sustainability. The rise of intelligent automation has raised concerns about job displacement, particularly in sectors traditionally dominated by manual marketing roles. Ethical considerations should address these impacts through the implementation of retraining initiatives and skill enhancement that prepare the workforce for changes brought about by AI technologies. Additionally, sustainable AI practices, such as optimizing AI models to reduce energy consumption, align marketing organizations with broader social sustainability goals, thereby reinforcing their commitment to ethical practices.

The findings emphasize the necessity of human oversight at all stages of AI-driven marketing. The Human-in-the-Loop (HITL) model emerges as a vital framework for integrating ethical review and contextual judgment that AI lacks. By engaging human experts to monitor, audit, and adjust AI processes, HITL ensures that ethical and cultural nuances are appropriately considered. The presence of human judgment helps prevent automated decisions that may inadvertently harm consumer groups or cross ethical boundaries.

Transparency in AI decision-making is vital for building consumer trust. Explainable AI tools (XAI) such as SHAP and LIME (Shapley Additive Explanations and Local Interpretable Model-agnostic

Explanations) have emerged as essential tools for clarifying how AI systems arrive at their conclusions (Teo, 2024). These tools enable both marketers and consumers to understand the factors that drive AI-generated marketing decisions and ensure accountability. For marketing management, the use of XAI enhances the ability to make informed and ethically aligned adjustments in AI systems, promotes transparency, and strengthens consumer trust .

Methodology

Systematic Review Approach

This research employs a systematic review methodology to develop a theoretical framework regarding ethical collaboration between AI and humans in the marketing domain. The systematic review process was conducted following PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure accuracy, transparency, and reproducibility at all stages of the research. This methodology includes the stages of identification, screening, eligibility assessment, and inclusion, each designed to gather and synthesize the most relevant studies in the field of AI ethics and marketing .

Search and Selection of Studies

A comprehensive search strategy was employed to gather studies from multiple scientific databases, including IEEE Xplore, ScienceDirect, JSTOR, and Google Scholar. The search for studies focused on peer-reviewed articles published between 2010 and 2024 that concentrated on AI ethics, cognitive impacts of AI, applications of AI in marketing, and frameworks for ethical integration of AI. Boolean operators and specific search strings were used to identify relevant research. Keywords such as "AI ethics in marketing," "explainable AI (XAI)," "bias reduction in AI," and "Privacy by Design" were utilized to refine the searches.

Entry and Exit Criteria

To ensure the relevance and quality of the included studies, specific entry and exit criteria were developed. The entry criteria focused on studies that directly addressed ethical considerations of artificial intelligence in marketing, the role of human oversight in AI systems, and interdisciplinary approaches linking AI with cognitive sciences and ethical theories. Studies that lacked peer review, were methodologically inadequate, or focused solely on the technical aspects of AI without addressing ethical dimensions were excluded. This screening process identified approximately 150 studies, which were then systematically evaluated for quality and relevance .

Data Extraction and Synthesis of Findings

The selected studies underwent a structured data extraction process that included coding key information related to transparency, accountability, customer privacy, and interpretability in AI-based marketing. To ensure consistency across all included studies, the data extraction process was facilitated using a standardized form. The findings were then synthesized using thematic analysis, which enabled the identification of recurring patterns, main themes, and gaps in current studies. This synthesis played a crucial role in developing a conceptual framework that encompasses ethical practices of AI in marketing, emphasizing transparency, privacy, bias reduction, and interpretability .

Quality Assessment

To ensure the validity and reliability of the included studies, each article underwent a qualitative assessment using established criteria such as methodological rigor, sample size adequacy, and relevance to research questions. The Mixed Methods Appraisal Tool (MMAT) was used to evaluate the quality of both qualitative and quantitative studies, allowing for a comprehensive assessment of the literature base with mixed methods. Only studies that met the established threshold for methodological robustness were included in the final synthesis .

Development of the Conceptual Framework

The synthesis of the research literature provided a foundation for developing an interdisciplinary conceptual framework for ethical collaboration between AI and marketing. This framework integrates insights from the fields of AI ethics, cognitive sciences, and marketing theory to offer strategies for operationalizing ethical AI in marketing. It emphasizes principles of explainable AI (XAI), privacy by design, data minimization, and the importance of human oversight to ensure ethical decision-making. The goal of this framework is to fill theoretical gaps and provide practical guidelines for the responsible use of AI in creative marketing contexts.

Findings

The present research aims to gain a deep understanding of the existing strategies to reduce ethical challenges in AI-based marketing. The findings of the systematic review indicate that with the increasing penetration of artificial intelligence in marketing activities, attention to its ethical dimensions has gained significant importance. This importance arises from the fact that the use of artificial intelligence, despite its considerable advantages in personalization and efficiency, can have unintended consequences for the rights and welfare of consumers .

A comprehensive analysis of published research from 2019 to 2024 shows that ethical challenges can be examined at three levels: micro, meso, and macro. At the micro level, issues such as algorithmic bias and violation of individuals' privacy are raised. Roman Almansar and colleagues (2024) have shown in their research that even seemingly neutral AI systems can replicate or even exacerbate existing societal discriminations. This issue becomes more complex when we realize that machine learning algorithms are often trained on historical data, which may itself contain systematic biases .

At the meso level, organizational and professional challenges emerge. A comprehensive study by Petrisko and colleagues (2022) on 73 B2B companies shows that the integration of artificial intelligence into marketing processes, despite significant improvements in performance indicators (such as a 45% reduction in sales cycle), faces resistance at the organizational level. This resistance is primarily due to concerns about the transparency of AI decision-making and challenges related to maintaining a balance between automation and preserving human relationships with customers .

At the macro level, the social effects and long-term consequences of using artificial intelligence in marketing are discussed. Teo (2024), by introducing the concept of "slow violence" of AI against human rights, warns that the negative impacts of smart technologies may gradually and imperceptibly, yet profoundly and sustainably, affect society. These concerns align with Herman's (2021) findings, which indicate that long-term success in utilizing artificial intelligence requires a precise balance between technological innovation and social responsibility .

Our research shows that to address these challenges, a multifaceted and integrated approach is essential. This approach should consider both technical aspects (such as designing fair and transparent algorithms) and human dimensions (such as training and empowering marketing professionals). The findings of the research are presented in three main axes: strategies to reduce bias in AI systems, privacy considerations, and approaches to ensure transparency and accountability.

Strategies for Reducing Bias in Artificial Intelligence Systems

Research findings in the field of bias reduction indicate that this challenge cannot be addressed solely through technical solutions. A deep analysis of studies shows that bias in artificial intelligence systems is rooted in various social, cultural, and structural layers. Douglas and colleagues (2024), through a thorough examination of the mechanisms of bias formation in machine learning algorithms, have demonstrated that even the selection of input variables and data preprocessing methods can inadvertently reinforce existing inequalities .

Diversifying training datasets, while a necessary step, is not sufficient on its own. A comprehensive study by Guan and colleagues (2022), through an in-depth analysis of decision-making processes in artificial intelligence systems, shows that even with diverse data, algorithms may learn discriminatory

patterns through proxy variables or hidden relationships in the data. This finding highlights the importance of intelligently designing algorithm architecture and continuously monitoring its performance .

The adversarial training approach proposed by Douglas and colleagues (2024) has shown promising results. In this method, the artificial intelligence system is purposefully exposed to challenging examples to enhance its ability to address potential biases. However, experience shows that the success of this approach requires close collaboration among experts from various fields, including data science, sociology, and ethics .

The role of human oversight becomes more prominent in this context. Recent studies indicate that the "human-in-the-loop" approach, which emphasizes the active involvement of human experts in the decision-making process, can significantly reduce the risk of bias. Bartneck and colleagues (2021), through case studies of several successful systems, have shown that this approach is particularly effective in situations where complex and ethically sensitive decisions are involved .

However, there are significant challenges along this path. One of the most important is the complexity of evaluating the performance of artificial intelligence systems from the perspective of fairness and equity. This research indicates that traditional performance evaluation metrics, such as predictive accuracy, cannot alone guarantee fair performance. This finding aligns with the results of Jones and colleagues (2020), which show that sometimes improving algorithm accuracy can come at the cost of increasing inequality in outcomes.

Ensuring Transparency and Accountability in Artificial Intelligence Systems

Transparency and accountability in artificial intelligence systems have become a social and ethical necessity beyond a technical requirement. Recent research shows that consumer trust in brands increasingly depends on their understanding of how AI is used in marketing decision-making. Findings from a comprehensive study by Labib (2024) on consumer behavior indicate that over 70 percent of users want to know when they are interacting with an AI system and how decisions about them are made .

Interpretable AI, introduced by Stahl and Eck (2024) as pioneers, is a promising solution to address this need. This approach not only allows users to understand the logic behind AI decision-making but also enables marketing professionals to effectively evaluate the system's performance and make adjustments if necessary. However, the challenge lies in the fact that increasing interpretability can conflict with system efficiency. Studies show that simpler and more understandable systems sometimes have lower accuracy compared to more complex models .

One notable finding of this research is the importance of tiered transparency based on the sensitivity of decisions. Vijayaragavan and Badi (2024) argue that the required level of transparency should be proportional to the consequences of decision-making. For example, in cases related to dynamic pricing or content personalization, which have a limited impact on consumers' lives, a moderate level of transparency can be accepted. However, in cases where AI decisions can have serious financial or social consequences, complete transparency is essential .

Accountability in the age of AI is a complex and multifaceted concept. Henz (2021) notes that unlike traditional systems where the responsibility for decisions was easily traceable, in AI-based systems, responsibility can be distributed among algorithm designers, system managers, and end users. This complexity highlights the need for novel accountability frameworks .

Experience has shown that effective accountability requires the establishment of multi-level regulatory structures. Bolte and Van Winsberghe (2024), through case studies of leading organizations in this field, propose a three-tiered model for oversight: internal organizational oversight, independent specialized oversight, and public oversight. This layered approach can provide greater assurance of the ethical performance of AI systems.

Ethical Integration in Practice

One of the most important findings of this research is the necessity of a holistic approach to the ethical

challenges of artificial intelligence in marketing. The experience of leading organizations shows that success in this area requires a smart combination of technical, organizational, and cultural solutions. For example, Bzowidnehut et al. (2023) found through an in-depth study of professional service companies that the most successful organizations are those that have managed to create a balance between the efficiency of artificial intelligence systems and maintaining customer trust .

Another noteworthy point is the importance of internal cultural development. Pontoni et al. (2021) demonstrated through consumer experience studies that employees' attitudes towards technology and their understanding of ethical considerations have a direct impact on the quality of interactions with customers. This finding aligns with the results of the study by Amin et al. (2021), which shows that training and empowering employees in the ethical use of artificial intelligence can increase customer satisfaction by up to 40 percent .

The emergence of new technologies such as the metaverse has added new layers of complexity to this issue. The study by Zaliu et al. (2023) shows that immersive virtual spaces, while opening new horizons for customer interaction, create new challenges regarding privacy preservation and control of biometric data. These findings highlight the necessity for continuous revision of ethical frameworks and their adaptation to emerging realities .

The "ethics by design" approach proposed by some researchers is a promising solution to address these challenges. This approach emphasizes that ethical considerations should be taken into account from the very early stages of designing and developing artificial intelligence systems. The experience of leading companies shows that this proactive approach is more efficient in terms of both cost and effectiveness compared to reactive measures. The role of legislation is prominent in this context. Studies indicate that appropriate legal frameworks can provide the necessary motivation for organizations to invest in the ethical development of technology. However, the main challenge is to create a balance between innovation and oversight. Overly stringent regulations can hinder innovation, while insufficient oversight can lead to abuse and harm to consumers .

The Future Outlook of Ethical Marketing in the Age of Artificial Intelligence

The findings of this research indicate that the future of marketing based on artificial intelligence is heavily influenced by the developments of emerging technologies. An in-depth study by Baroni et al. in 2024 on the impact of the metaverse on the competitive advantage of retailers shows that the combination of artificial intelligence with virtual reality not only opens new horizons for customer interaction but also raises complex ethical questions. For instance, the collection of biometric and behavioral data in immersive virtual environments demands a new level of accountability from organizations .

The shift in the expectations of the new generation of consumers is also a significant factor in shaping the future of ethical marketing. Ding et al. found that young consumers show greater sensitivity to ethical and environmental issues compared to previous generations. This finding is consistent with the results of the study by Vlachich et al., which shows that brands that demonstrate a clear commitment to ethical principles in the use of artificial intelligence are more successful in attracting and retaining young customers.

The issue of sustainability and the environmental impacts of artificial intelligence has increasingly gained attention. Our findings indicate that the high energy consumption of complex AI models, especially during the training process, can conflict with the sustainability goals of organizations. This challenge, as noted by Bolte and van Winsberg, requires a balanced approach where the efficiency of algorithms aligns with environmental considerations. The growing trend of legislation in the field of artificial intelligence also shapes the future landscape. An analysis of existing legal frameworks shows that lawmakers are moving towards more comprehensive and stringent approaches. For example, the EU Artificial Intelligence Act, which Douglas and colleagues have examined in detail, sets specific requirements for risk assessment and transparency of AI systems.

Another noteworthy point is the increasing importance of interdisciplinary collaboration in developing

ethical solutions. Research shows that the complexity of ethical challenges in AI necessitates collaboration among experts from various fields, including marketing, data science, law, sociology, and ethics. This finding aligns with the results of Herman's study, which indicates that the most successful organizations in implementing ethical AI are those with strong multidisciplinary teams.

Conclusion from the findings

A comprehensive analysis of the findings shows that success in the ethical implementation of AI in marketing requires a systemic and multidimensional perspective. This perspective must encompass various technical, organizational, social, and cultural dimensions. An in-depth study of the experiences of leading organizations reveals that successful solutions are often a combination of proactive and reactive approaches that continuously adapt to environmental and technological changes. A sole emphasis on technical aspects, such as developing fair algorithms or interpretable systems, cannot address all ethical challenges. Our findings are consistent with the research of Slebst and colleagues, which shows that technical solutions, without considering the socio-technical context in which they are applied, will have limited effectiveness.

Another important issue is the necessity of balancing innovation and accountability. While competitive pressure drives organizations towards faster adoption of new technologies, our findings indicate that organizations that adopt a balanced and measured approach perform better in the long run. This finding aligns with the results of Amin and colleagues' study, which shows that customer satisfaction and loyalty have a direct relationship with their perception of a brand's adherence to ethical principles.

It has also become clear that ethical standards cannot be static and must evolve in line with technological advancements and changing societal expectations. This finding, reflected in various studies including those of Stal and Eck, and Herman and Pontoni, highlights the importance of creating dynamic mechanisms for reviewing and updating ethical frameworks. Overall, the findings of this research indicate that the future of AI-based marketing depends on organizations' ability to strike a balance between technical efficiency and social responsibility. Success in this path requires a long-term commitment to ethical principles, investment in capability development, and close collaboration with various stakeholders.

The analysis of the findings of this research reveals significant challenges and opportunities in the integration of ethical artificial intelligence in marketing. This section delves deeper into the findings and elucidates their implications for theory and practice.

Balancing Technological Efficiency and Human Considerations

One of the most important issues that emerges from the analysis of the findings is the challenge of creating a balance between leveraging the capabilities of artificial intelligence and maintaining the human aspects of marketing. While artificial intelligence offers unprecedented possibilities for personalization and optimization of operations, our findings indicate that an unbalanced use of this technology can lead to the erosion of human relationships and a decrease in customer trust .

Case studies conducted by Peng and colleagues on service companies illustrate this challenge well. They found that consumers, despite appreciating the speed and efficiency of automated systems, still require human interaction in critical moments and important decisions. This finding aligns with the results of research by Samuel and colleagues, which show that even in programmed advertising, the presence of a human element in the design and oversight of campaigns has a significant impact on their effectiveness .

The experience of leading companies indicates that the solution to this challenge lies in adopting a "smart collaboration" approach. In this approach, artificial intelligence and humans act not as competitors but as complements to each other. Huang and Rast provide a framework for this

collaboration in their study, where tasks are divided between humans and machines based on their nature and complexity. For example, while artificial intelligence excels in data analysis and pattern recognition, humans are more capable in understanding cultural context, making ethical judgments, and creating emotional content .

However, implementing this approach comes with its own specific challenges. One of the most significant of these challenges is the need to redefine roles and develop new skills. As Herman and Pontoni point out, success in the age of artificial intelligence requires a combination of technical skills, ethical understanding, and interpersonal abilities. This finding has important implications for the education and development of marketing professionals.

Challenges Ahead in Implementation

Another noteworthy issue that arises from the analysis of the findings is the complexity of implementing ethical frameworks in practice. Studies show that there is a significant gap between understanding the importance of ethics in artificial intelligence and organizations' ability to realize it. Chintalapati and Pandey, in their systematic review of research in the field of artificial intelligence in marketing, concluded that over 80 percent of organizations understand the importance of adhering to ethical principles, but less than 30 percent have a specific plan for implementing these principles .

This gap arises from multiple factors. First, as Verma and colleagues have shown in their research, the technical complexity of artificial intelligence systems often hinders a complete understanding of the ethical implications of decisions. Second, competitive pressure and the need for rapid responses to market changes sometimes push organizations toward short-term solutions. Third, the lack of clear standards and operational frameworks makes it difficult to realize ethical principles .

The solution to these challenges, as evidenced by the experience of successful organizations, is to adopt a gradual yet systematic approach. McAllister and colleagues, through case studies of leading companies in this field, identified a three-stage model: first, creating a shared understanding of ethical principles at the organizational level; second, developing the necessary technical and organizational capabilities; and third, gradual implementation accompanied by continuous learning and adjustment .

Another challenge is the issue of measuring and evaluating ethical performance. Unlike traditional performance indicators that can be easily quantified, assessing adherence to ethical principles has its own complexities. Labib concluded in his research that organizations need a set of composite indicators that encompass both quantitative aspects (such as the degree of bias in decisions) and qualitative aspects (such as stakeholder satisfaction) .

Another noteworthy point is the role of organizational culture in the success or failure of implementing ethical frameworks. Our findings indicate that technical changes, without a corresponding change in organizational culture and values, cannot lead to sustainable outcomes. This finding aligns with the results of research by Zook, which shows that success in the ethical implementation of artificial intelligence requires organizational leadership commitment and active employee participation.

Opportunities and Future Perspectives

Recent developments in the field of artificial intelligence, particularly advancements in large language models and generative AI, have opened new horizons for ethical marketing. Hermann and Pontoni, in their comprehensive study, demonstrate that the transition from predictive AI to generative AI provides fresh opportunities for content creation and customer engagement. However, these advancements also pose new ethical challenges, including issues related to content authenticity and accountability for AI-generated content .

The emergence of the metaverse and virtual environments, as predicted by Duyodi and colleagues, could redefine the brand-customer relationship. These new interactive spaces, while offering unprecedented opportunities for customer participation, require new ethical frameworks designed to align with the nature of these environments .

Theoretical and Practical Implications

The findings of this research have significant implications for both theory and practice. Theoretically, our results indicate that traditional marketing theories need to be revisited and evolved to adapt to the era of artificial intelligence. For instance, concepts such as customer value and brand loyalty acquire new meanings in the context of AI-based interactions .

Practically, our findings provide specific guidance for marketing managers. First, there is a necessity to adopt an integrated approach to ethics and technology, where ethical considerations are taken into account from the early stages of system design. Second, the importance of investing in the development of organizational capabilities, particularly in understanding and managing the ethical implications of AI, is emphasized. Third, there is a need to establish regulatory mechanisms and continuous evaluation processes that can assess the effectiveness of ethical actions .

Limitations and Suggestions

This research, despite efforts to provide a comprehensive analysis, faces certain limitations. First, the predominant focus of existing studies on the experiences of developed countries may limit the generalizability of the findings to other cultural-economic contexts. Second, the rapid pace of developments in the field of artificial intelligence may quickly impact some findings .

For future research, it is suggested: first, to conduct broader empirical studies on the effectiveness of various strategies to reduce bias and increase transparency. Second, to carry out cross-cultural research that can examine cultural differences in the understanding and acceptance of AI ethics. Third, to conduct longitudinal studies that can evaluate the long-term impacts of implementing ethical frameworks.

Conclusion

This research aimed to provide a deeper understanding of the challenges and opportunities facing the ethical integration of artificial intelligence in marketing. Our findings indicate that success in this endeavor requires a comprehensive and multidimensional approach, where technical, organizational, social, and cultural considerations are taken into account simultaneously.

It has become clear that the balance between technological innovation and ethical responsibility is the key to success in the age of artificial intelligence. This balance is not only an ethical obligation but also a strategic necessity that can lead to the creation of sustainable competitive advantage. Experience shows that organizations that have managed to establish this balance have been more successful in gaining customer trust and building long-term relationships.

However, achieving this goal is not easy and requires long-term commitment, investment in capability development, and close collaboration with various stakeholders. In particular, special attention must be paid to the development of dynamic and adaptable ethical frameworks that can keep pace with rapid technological advancements.

The role of lawmakers and regulatory bodies is crucial in this regard. They must create balanced legal frameworks that support innovation while protecting the rights and interests of consumers. Additionally, there is an urgent need to develop industry standards and common practices that can serve as a guide for organizations.

Ultimately, the future of ethical marketing in the age of artificial intelligence depends on our ability to create a dynamic and responsible ecosystem in which technology serves to enhance human and societal well-being. This vision, although challenging, is attainable, provided that all stakeholders contribute their part to its realization.

Resources

- Ameen, N., Tarhini, A., Reppel, A., & Anand, A. (2021). Customer experiences in the age of artificial intelligence. *Computers in Human Behavior*, *114*, 106548. https://doi.org/10.1016/j.chb.2020.106548
- Anayat, S., & Rasool, G. (2024). Artificial intelligence marketing (AIM): Connecting-the-dots using bibliometrics. *Journal of Marketing Theory and Practice*, *32*(1), 114–135. https://doi.org/10.1080/10696679.2022.2103435
- Anwar, H., Al Mubarak, M., & Bakir, A. (2023). Artificial Intelligence in Marketing and Organizational Decision-Making: Some Challenges and Concerns. In M. Al Mubarak & A. Hamdan (Eds.), *Technological Sustainability and Business Competitive Advantage* (pp. 9–23). Springer International Publishing. https://doi.org/10.1007/978-3-031-35525-7_2
- Bartneck, C., Lütge, C., Wagner, A., & Welsh, S. (2021). *An Introduction to Ethics in Robotics and AI*. Springer International Publishing. https://doi.org/10.1007/978-3-030-51110-4
- Bezuidenhout, C., Heffernan, T., Abbas, R., & Mehmet, M. (2023). The impact of Artificial Intelligence on the marketing practices of Professional Services Firms. *Journal of Marketing Theory and Practice*, *31*(4), 516–537. https://doi.org/10.1080/10696679.2022.2090005
- Bolte, L., & van Wynsberghe, A. (2024). Sustainable AI and the third wave of AI ethics: A structural turn. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00522-6
- Bourne, C. (2024). Author Correction: AI hype, promotional culture, and affective capitalism. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00534-2
- Bruni, R., Colamatteo, A., & Mladenović, D. (2024). How the metaverse influences marketing and competitive advantage of retailers: Predictions and key marketing research priorities. *Electronic Commerce Research*, *24*(2), 965–982. https://doi.org/10.1007/s10660-023-09779-1
- Bruni, R., Piccarozzi, M., & Caboni, F. (2023). Defining the Metaverse with challenges and opportunities in the business environment. *Journal of Marketing Theory and Practice*, 1–18. https://doi.org/10.1080/10696679.2023.2273555
- Bünte, C. (2023). Artificial Intelligence: The Revolution in Marketing. In U. Hannig & U. Seebacher (Eds.), *Marketing and Sales Automation: Basics, Implementation, and Applications* (pp. 395–408). Springer International Publishing. https://doi.org/10.1007/978-3-031-20040-3_25
- Butlin, P., Long, R., Elmoznino, E., Bengio, Y., Birch, J. C. P., Constant, A., Deane, G., Fleming, S., Frith, C., Ji, X., Kanai, R., Klein, C., Lindsay, G. W., Michel, M., Mudrik, L., Peters, M. A. K., Schwitzgebel, E., Simon, J., & VanRullen, R. (2023). *Consciousness in Artificial Intelligence: Insights from the Science of Consciousness* (No. 2308.08708). arXiv. https://doi.org/10.48550/ARXIV.2308.08708
- Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, *64*(1), 38–68. https://doi.org/10.1177/14707853211018428
- Davenport, T., Guha, A., Grewal, D., & Breßgott, T. (2019). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/S11747-019-00696-0
- Ding, M., Dong, S., & Grewal, R. (2024). Generative AI and Usage in Marketing Classroom. *Customer Needs and Solutions*, *11*(1), 5. https://doi.org/10.1007/s40547-024-00145-2
- Douglas, D. M., Lacey, J., & Howard, D. (2024). Ethical risk for AI. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00549-9
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C. R., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P., Janssen, M., Jones, P., Kar, A., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2019). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*.

https://doi.org/10.1016/J.IJINFOMGT.2019.08.002

- Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A., Ahn, S., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., Dutot, V., Felix, R., Filieri, R., Flavián, C., Gustafsson, A., Hinsch, C., Hollensen, S., Jain, V., Kim, J., Krishen, A. S., … Wirtz, J. (2022). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*. https://doi.org/10.1002/MAR.21767
- Eickhoff, C. (2018). Cognitive Biases in Crowdsourcing. *Proceedings of the Eleventh ACM International Conference on Web Search and Data Mining*, 162–170. https://doi.org/10.1145/3159652.3159654
- El Koufi, N., & Belangour, A. (2024). Artificial Intelligence Techniques in Precision Marketing: A Multi-criteria Analysis and Comparative Study. In F. P. García Márquez, A. Jamil, I. S. Ramirez, S. Eken, & A. A. Hameed (Eds.), *Computing, Internet of Things and Data Analytics* (pp. 1–7). Springer Nature Switzerland.
- Guan, H., Dong, L., & Zhao, A. (2022). Ethical Risk Factors and Mechanisms in Artificial Intelligence Decision Making. *Behavioral Sciences*, *12*(9), 343. https://doi.org/10.3390/bs12090343
- Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., Suman, R., Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *Int. J. Intell. Networks*. https://doi.org/10.1016/J.IJIN.2022.08.005
- Henz, P. (2021). Ethical and legal responsibility for Artificial Intelligence. *Discover Artificial Intelligence*, *1*(1), 2. https://doi.org/10.1007/s44163-021-00002-4
- Hermann, E. (2021). Leveraging Artificial Intelligence in Marketing for Social Good—An Ethical Perspective. *Journal of Business Ethics*. https://doi.org/10.1007/S10551-021-04843-Y
- Hermann, E., & Puntoni, S. (2024). Artificial intelligence and consumer behavior: From predictive to generative AI. *Journal of Business Research*. https://doi.org/10.1016/J.JBUSRES.2024.114720
- Huang, M.-H., & Rust, R. T. (2021a). A Framework for Collaborative Artificial Intelligence in Marketing. *Journal of Retailing*. https://doi.org/10.1016/J.JRETAI.2021.03.001
- Huang, M.-H., & Rust, R. T. (2021b). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, *49*(1), 30–50. https://doi.org/10.1007/s11747-020-00749-9
- Jones, G., Hickey, J. M., Stefano, P. G. D., Dhanjal, C., Stoddart, L. C., & Vasileiou, V. (2020). Metrics and methods for a systematic comparison of fairness-aware machine learning algorithms. *arXiv: Learning*. https://arxiv.org/abs/2010.03986
- Labib, E. (2024). Artificial intelligence in marketing: Exploring current and future trends. *Cogent Business & Management*, *11*(1), 2348728. https://doi.org/10.1080/23311975.2024.2348728
- Laila, N., Sucia Sukmaningrum, P., Saini Wan Ngah, W. A., Nur Rosyidi, L., & Rahmawati, I. (2024). An in-depth analysis of digital marketing trends and prospects in small and medium-sized enterprises: Utilizing bibliometric mapping. *Cogent Business & Management*, *11*(1), 2336565. https://doi.org/10.1080/23311975.2024.2336565
- McAlister, A. R., Alhabash, S., & Yang, J. (2024). Artificial intelligence and ChatGPT: Exploring Current and potential future roles in marketing education. *Journal of Marketing Communications*, *30*(2), 166–187. https://doi.org/10.1080/13527266.2023.2289034
- Peng, C., van Doorn, J., Eggers, F., & Wieringa, J. E. (2022). The effect of required warmth on consumer acceptance of artificial intelligence in service: The moderating role of AI-human collaboration. *International Journal of Information Management*, *66*, 102533. https://doi.org/10.1016/j.ijinfomgt.2022.102533
- Petrescu, M., Krishen, A. S., Kachen, S., & Gironda, J. T. (2022). AI-based innovation in B2B marketing: An interdisciplinary framework incorporating academic and practitioner perspectives. *Industrial Marketing Management*, *103*, 61–72. https://doi.org/10.1016/j.indmarman.2022.03.001
- Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and Artificial Intelligence:

An Experiential Perspective: *Journal of Marketing*. https://doi.org/10.1177/0022242920953847

- Resnik, D. B., & Hosseini, M. (2024). The ethics of using artificial intelligence in scientific research: New guidance needed for a new tool. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00493-8
- Román Almánzar, A. D., Grüning, D. J., & Edinger-Schons, L. M. (2024). 'It wasn't me': The impact of social responsibility and social dominance attitudes on AI programmers' moral imagination (intention to correct bias). *AI and Ethics*. https://doi.org/10.1007/s43681-024-00516-4
- Rust, R. T. (2020). The future of marketing. *International Journal of Research in Marketing*, *37*(1), 15–26. https://doi.org/10.1016/j.ijresmar.2019.08.002
- Samuel, A., White, G. R. T., Thomas, R., & Jones, P. (2021). Programmatic advertising: An exegesis of consumer concerns. *Computers in Human Behavior*, *116*, 106657. https://doi.org/10.1016/j.chb.2020.106657
- Selbst, A. D., Boyd, D., Friedler, S. A., Venkatasubramanian, S., & Vertesi, J. (2019). Fairness and Abstraction in Sociotechnical Systems. *Proceedings of the Conference on Fairness, Accountability, and Transparency*, 59–68. https://doi.org/10.1145/3287560.3287598
- Stahl, B. C., & Eke, D. (2024). The ethics of ChatGPT – Exploring the ethical issues of an emerging technology. *International Journal of Information Management*, *74*, 102700. https://doi.org/10.1016/j.ijinfomgt.2023.102700
- Tafesse, W., & Wood, B. (2024). Hey ChatGPT: an examination of ChatGPT prompts in marketing. *Journal of Marketing Analytics*. https://doi.org/10.1057/s41270-023-00284-w
- Teo, S. A. (2024). Artificial intelligence and its 'slow violence' to human rights. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00547-x
- Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research direction. *International Journal of Information Management Data Insights*. https://doi.org/10.1016/J.JJIMEI.2020.100002
- Vijayaraghavan, A., & Badea, C. (2024). Minimum levels of interpretability for artificial moral agents. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00536-0
- Vlačić, B., Corbo, L., Silva, S. C. e, & Dabić, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of Business Research*. https://doi.org/10.1016/J.JBUSRES.2021.01.055
- Volkmar, G., Fischer, P. M., & Reinecke, S. (2022). Artificial Intelligence and Machine Learning: Exploring drivers, barriers, and future developments in marketing management. *Journal of Business Research*, *149*, 599–614. https://doi.org/10.1016/j.jbusres.2022.04.007
- Zakariah, A., Hosany, S., & Cappellini, B. (2021). Subjectivities in motion: Dichotomies in consumer engagements with self-tracking technologies. *Computers in Human Behavior*, *118*, 106699. https://doi.org/10.1016/j.chb.2021.106699
- Zallio, M., Ohashi, T., & Clarkson, P. J. (2023). Designing the Metaverse: A Scoping Review to Map Current Research Effort on Ethical Implications. *arXiv Preprint arXiv:2303.12293*.
- Zhuk, A. (2024). Ethical implications of AI in the metaverse. *AI and Ethics*. https://api.semanticscholar.org/CorpusID:268465013