THE INFLUENCE OF GENERATIVE AI AND DIGITAL CLONES ON CONSUMER TRUST AND ETHICAL PERCEPTION IN ADVERTISING

ABSTRACT

|  |
| --- |
| Digital clones and generative AI have become ground-breaking technologies in the advertising industry because they provide increased customisation, allowing companies to produce highly targeted ads that speak to the tastes of specific consumers. The extensive usage of AI and digital clones creates serious questions with customer trust and ethical attitudes in advertising, notwithstanding the possible advantages. With an emphasis on the roles of authenticity, transparency, and manipulation, this study investigates how these technologies affect customer views. The study emphasizes that although AI-generated ads are typically accepted when they seem genuine and transparent, there are worries about their realism, particularly when digital clones are employed, which can cause unease and damage credibility. Compared to older generations, who frequently link such content to privacy threats and data manipulation, younger consumers tend to show higher levels of trust in AI-driven advertisements. The ethical consequences of utilizing AI and digital clones in advertising are also covered in the paper, with a focus on the necessity of precise regulations to protect consumer privacy and prevent the use of these technologies to trick or manipulate customers. According to the findings, advertisers must put transparency and ethical responsibility first in order to preserve consumer confidence, even while AI offers a potential way to improve customer engagement.In order to overcome these obstacles, the paper ends with suggestions for legislators and advertisers that support moral behaviour that upholds consumer rights and fosters authenticity. |

*Keywords: Advertising Transparency, Consumer Trust, Ethical Perceptions, Digital Clones, Generative AI*

1. INTRODUCTION

In the advertising industry, generative AI and digital clones have become ground-breaking technology. Algorithms that can generate text, graphics, and even video material using patterns discovered in massive datasets are referred to as generative AI (Storey et al., 2025). These technologies allow marketers to produce dynamic and hyper-personalized content at scale, as demonstrated by models such as ChatGPT, DALL·E, and MidJourney (Patil et al., 2024). Digital clones, such as AI-generated virtual people or avatars, on the other hand, enable marketers to produce realistic representations that may interact with customers directly. The use of these AI-powered avatars in advertisements is growing; they can be completely artificial brand ambassadors or influencers that resemble people (Allal-Chérif et al., 2025).

Advertising practices are changing significantly as a result of the integration of these technologies. In the past, human designers created ads, and their inventiveness and budget were constrained (Dwivedi et al., 2020). However, advertisers can now provide highly customized content based on user choices by using AI. Generative AI technologies can predict consumer behaviour and create messages that are more likely to resonate with particular audiences by continuously learning from data including browsing history, social media activity, and previous purchases (Gupta et al., 2024). This change improves targeting precision and decreases the need for manual content generation, which increases advertising's effectiveness and efficiency. Furthermore, the use of AI in digital marketing platforms such as social media and e-commerce allows for real-time content adjustments, ensuring that consumers receive ads that are timely and relevant to their immediate needs (Haleem et al., 2022).

As AI and digital clones continue to develop, their role in advertising becomes more central, opening new avenues for creativity and consumer engagement. Marketers are now able to automate tasks like A/B testing, copywriting, and customer segmentation, which traditionally required significant human input (Patil et al., 2024). However, this shift also introduces new challenges that demand careful consideration of ethical implications. While these technologies enhance the capacity for hyper-targeted marketing, they also raise questions about consumer autonomy, privacy, and the authenticity of the advertising content itself.

It is now more crucial than ever to recognize consumer trust and ethical perceptions in advertising. Customers' trust in ads, especially AI-driven ones, can be affected by how open, sincere, and kind advertisers are when using these technologies, as they grow more conscious of how AI can influence their online experiences (Gao et al., 2023). Because AI-generated content has the potential to make it difficult to distinguish between simulation and reality, marketers need to exercise caution to prevent their messaging from losing consumers' trust.

Significant ethical questions are brought up by the expanding usage of digital clones and generative AI in advertising, which calls into question established marketing strategies (Al-Busaidi et al., 2024). Questions concerning authenticity, transparency, and consumer manipulation arise when AI is able to produce content that imitates human creativity or produce lifelike synthetic individuals. Although these technologies provide unmatched advantages in terms of engagement and customisation, they also make room for unethical advertising content, algorithmic biases, and invasive data collecting. A further layer of complexity is added by the ethics of employing AI to produce content that users would not detect as artificial, since this could cause mistrust or feelings of manipulation (Mennella et al., 2024).

Alongside these ethical issues, preserving customer trust has become more difficult due to AI's growing independence in content creation and marketing choices. Customers are more inclined to interact with information that reflects their values and feels genuine. However, there is rising fear that consumers may unintentionally be exposed to biased or highly compelling information as AI systems advance, undermining their trust in commercials. Advertisers now face a twofold challenge: how to employ AI to improve their ads while maintaining the ethics and transparency of their use of these technologies. As AI continues to influence the direction of digital advertising, it is more important than ever for organizations to find this balance.

This study seeks to investigate the influence of generative AI and digital clones on consumer trust in advertisements, with a particular focus on the ethical concerns these technologies raise in advertising practices.

2. LITERATURE REVIEW

Generative Artificial Intelligence (AI) refers to a subset of AI technologies designed to generate new content based on patterns learned from large datasets (Lv, 2023). These systems can produce a wide range of outputs, from text and images to videos, with minimal human intervention. The evolution of generative AI has been driven by advances in machine learning, particularly deep learning algorithms, which enable the generation of content that closely mimics human creativity (Williams etal., 2025). Over the years, generative AI has progressed from simple content creation tools to more sophisticated models capable of generating highly personalized advertising content. Notable examples include ChatGPT for text, DALL·E and MidJourney for image generation, and even AI systems that create video ads by combining text, images, and dynamic elements (Patil et al., 2024).

In advertising, generative AI is transforming how brands engage with consumers. One of its most prominent applications is content creation, where AI tools are used to generate personalized ads that align with the preferences and behaviours of individual consumers (Haleem et al., 2022). AI systems analyse vast amounts of consumer data, such as browsing history and social media activity, to craft highly targeted ads that appeal to specific demographic segments. These tools can also generate AI-driven videos and dynamic advertisements that adjust in real-time based on consumer interactions, creating more engaging and responsive ad experiences (Kumar et al., 2024). Additionally, the efficiency and scalability of generative AI make it possible for advertisers to run campaigns with greater precision while reducing costs associated with manual content creation.

Consumer responses to AI-generated material are currently being studied, and the results provide mixed signals. Personalized AI-driven advertisements have been shown in some research to boost customer satisfaction and engagement, but other studies raise questions about the content's veracity and capacity to influence consumer behaviour. Consumers' perceptions of transparency, perceived credibility, and their level of awareness of the artificial character of the advertisements all influence how widely AI-generated content is accepted (Baek et al., 2022; Gu et al., 2024; Kelly et al., 2022.

**2.1 Digital Clones in Advertising**

Digital clones are AI-generated replicas of human figures, often used as avatars or virtual influencers in advertising. These clones can range from lifelike avatars designed to represent fictional characters to virtual celebrities that resemble real human figures (Terziyan & Tiihonen, 2025). A prominent example of digital clones in advertising is the use of virtual influencers on platforms like Instagram and TikTok, where these AI-generated personas engage with followers, promote products, and even develop unique brand identities. Virtual celebrities, such as Lil Miquela, have gained significant popularity, attracted millions of followers and influenced purchasing decisions in a way that mirrors traditional celebrity endorsements (Brachtendorf, 2022; Moustakas, 2020; Shin et al., 2023).

The use of digital clones in advertising aims to increase engagement by offering consumers an interactive and personalized experience. These AI-generated figures can be tailored to match the preferences and aspirations of target audiences, creating a sense of familiarity and emotional connection. Virtual influencers can engage with users in real-time, respond to comments, and even create content based on trending topics, which enhances their relatability and appeal. Additionally, digital clones offer brands a unique advantage by providing a consistent, controllable presence that can be used across various platforms without the limitations that come with real human influencers (Terziyan & Tiihonen, 2025).

However, the rise of digital clones in advertising has sparked ethical debates. Critics argue that these virtual personas can deceive consumers into believing they are interacting with real individuals, potentially undermining transparency in marketing (Liyanaarachchi et al., 2024). Furthermore, the creation of digital clones raises concerns about the authenticity of the brand message and the manipulation of consumer emotions (Al-Busaidi et al., 2024). There are also issues related to data privacy, as digital clones often rely on personal data to enhance their appeal and effectiveness. These ethical challenges underscore the need for clear regulations and ethical guidelines when using digital clones in advertising.

**2.2 Consumer Trust and Ethical Perception in Advertising**

The foundation of successful advertising is consumer trust. Numerous elements impact it, such as the ad's perceived authenticity, the marketing process's transparency, and the extent to which consumers feel the advertisement aligns with their beliefs and interests (Lee & Jin, 2019). Building trust in advertising requires transparency, particularly when utilizing AI technology that people might not be able to see right away. Customers like knowing when they are interacting with automated content, therefore advertisements that openly reveal their usage of AI and digital clones are typically more trusted (Haleem et al., 2022).

Being genuine is essential to winning over customers. Positive attitudes and increased engagement are more likely to result from advertisements that feel authentic and reflect the values of the target audience (Papadopoulou et al., 2023). Artificial intelligence-generated content can occasionally be viewed as inauthentic, especially if it conflates real and fake content, especially when it uses digital clones or avatars. If customers think they are communicating with a non-human entity without their awareness, they could feel as though their trust is being betrayed.

The main ethical issues with AI in advertising are frequently bias, deceit, and manipulation. There are worries that AI could be exploited to take advantage of customer weaknesses because of how well it can customize material (Hermann et al., 2023). For example, AI algorithms that target people based on their behavioural data might occasionally go too far in manipulating them, especially when the content is intended to elicit strong feelings or sway judgments about what to buy without providing complete information. Moreover, biases in AI systems can exacerbate ethical issues by reinforcing prejudices or excluding particular populations from marketing campaigns (Akter et al., 2022). Addressing these moral dilemmas is essential to preserving customer confidence and guaranteeing ethical advertising practices as these technologies develop further.

Research on digital clones and generative AI in advertising indicates that these technologies have a great deal of promise to change how companies communicate with their target audience. More customisation is possible with AI-generated content, which makes advertising efforts more interesting and successful. Similarly, by providing relatable, interactive personalities, digital clones can boost customer engagement. But ethical issues continue to be a major obstacle. In order to prevent emerging technologies from undermining customer trust, concerns about authenticity, openness, and manipulation potential need to be addressed.

3. METHODOLOGY

In order to investigate the effects of generative AI and digital clones on customer trust and ethical attitudes in advertising, this study employed a secondary research technique, evaluating industry reports, scholarly articles, and existing literature. This study offers a thorough overview of the technological developments in AI-driven advertising and the ethical issues surrounding it by combining the results from several reliable sources, such as peer-reviewed articles, white papers, and case studies. The analysis focuses on how consumer behaviour, advertising techniques, and ethical issues that emerge in the context of digital marketing are influenced by privacy laws such as the CCPA and GDPR.

4. RESULT AND DISCUSSION

The use of digital clones and generative ai in advertising has both positive and negative effects on customer trust. On the one hand, these technologies enable previously unheard-of levels of customisation, making material more engaging and targeted. However, their utilization calls into question transparency and authenticity, two important factors that affect consumers' trust in advertising. Empirical studies show that consumers prefer ads that explicitly reveal their ai-generated nature, which mitigates feelings of deception and promotes informed consent (baek et al., 2022). Varying levels of transparency from subtle disclosures to overt labelling, have differential impacts on trust; more explicit transparency generally correlates with higher trust scores and positive attitudes (kelly et al., 2022). However, too much information can overwhelm or confuse customers, which emphasizes the need for well-rounded communication techniques. As a result, advertisers need to create transparency policies that encourage candour while preserving the attraction and clarity of their messaging.

Customers' reactions to ai-powered ads vary, primarily based on how authentic the content seems and whether they are aware that ai is involved. According to research, people are less likely to trust advertisements that use artificial intelligence (ai) if the information is overly realistic or smoothly integrates with human-like figures (gu et al., 2024). Particularly when digital clones are employed as influencers, the unease that arises from dealing with hyper-realistic ai representations significantly contributes to the erosion of trust (gerlich, 2025). Nonetheless, certain customers are more receptive to ai-driven content, especially those in younger generations. When these ads match their past encounters and personal preferences, they are more likely to be trusted.

Multiple patterns show up when we analyse customer trust across demographic groupings. Customers between the ages of 18 and 34 are more likely to trust ai-generated material, especially when it is personalized for them and distributed via social media platforms (bunea et al., 2024; dwivedi et al., 2020; menon & shilpa, 2023). Younger consumers, especially those between 18 and 34 years old, tend to experience lower cognitive dissonance when engaging with ai-driven content due to their greater familiarity and comfort with digital technologies (bunea et al., 2024). This familiarity reduces perceived threat and scepticism. Conversely, older adults often experience unease and mistrust arising from the uncanny valley phenomenon, where hyper-realistic digital clones appear almost human but provoke discomfort due to subtle artificial cues (gerlich, 2025). This emotional response can disrupt trust formation and diminish advertising effectiveness. Conversely, older generations 35 and above express a higher level of distrust towards ai-driven ads, especially those featuring digital clones (mariano et al., 2020; salminen et al., 2024). They are more likely to perceive these technologies as manipulative or deceptive. This scepticism is often linked to concerns about privacy and the potential for ai to exploit personal data without proper consent. Additionally, educational background plays a crucial role in shaping trust levels. Consumers with higher levels of education tend to be more cautious about ai and digital clones, seeking transparency in how their data is used for targeted ads (benoit, 2025).

The level of technological sophistication in ai-generated advertising significantly influences consumer trust and ethical concerns. Advancements in natural language processing, computer vision, and real-time interactivity have enabled generative ai to produce content that is increasingly personalized and engaging (patil et al., 2024). For instance, conversational ai agents embedded in ads can simulate human-like interactions, fostering perceptions of intelligence and responsiveness (gu et al., 2024). However, these sophisticated capabilities may also amplify ethical apprehensions related to deception and manipulation, especially if consumers feel unable to discern between human and ai-generated content (gao et al., 2023).

Although there hasn't been much research on how much customers trust ai-driven ads based on gender, some. Research suggests that women might be more sensitive to privacy and authenticity concerns in ai-generated advertisements, which is consistent with general patterns in risk perception and reliability evaluations (moreno, 2024). In contrast, salminen et al. (2024), also found that men don't like ai-generated content implying that judgments of authenticity and trust may be influenced by gender in a modest but significant way. Furthermore, cross-cultural research shows that, in contrast to individualistic cultures where personalization is more easily accepted, consumers from collectivist societies, like those in east asia, frequently exhibit higher levels of scepticism towards ai personalization because of stronger communal norms surrounding privacy and social harmony (papadopoulou et al., 2023). The ethical reception of digital clones and generative content is influenced by these cultural factors, which also affect how transparency and disclosure are viewed. Global consumer acceptance and ethical compliance can be increased by including gender-specific issues and culturally sensitive approaches into ai advertising design.

**4.1 Ethical Perceptions of AI and Digital Clones**

The ethical concerns surrounding the use of AI-generated content and digital clones in advertising primarily revolve around issues of manipulation, transparency, and authenticity. Consumers are concerned that the use of these technologies could lead to the manipulation of emotions and behaviours, particularly when AI is used to craft personalized messages that exploit personal vulnerabilities (Kolar et al., 2024).

Transparency is another significant concern. Consumers expect to know when they are interacting with AI, yet many ads featuring digital clones do not make it clear that these figures are AI-generated (Gu et al., 2024). This lack of transparency can erode trust and contribute to the sense that advertisers are being deceptive. Many consumers feel that while AI can be effective in personalizing content, it should not be used in a way that misleads or exploits the consumer’s trust for commercial gain.

Additionally, concerns about data privacy and the potential for AI to perpetuate biases in advertising remain prevalent, as consumers worry that their personal data could be misused to create misleading or discriminatory content (Hanna et al., 2024). Generative AI's capacity to precisely customize evidence to each person's deficiencies raises the possibility of emotional exploitation, in which customers could be gently pressured into actions or purchases without their complete knowledge (Hermann et al., 2023). Furthermore, the widespread usage of personal information, frequently without express authorization, compounds privacy concerns, especially when that information is utilized for highly targeted advertisements that customers find bothersome (Liyanaarachchi et al., 2024). Because AI systems may inadvertently perpetuate preconceptions or deny particular populations marketing benefits, algorithmic biases make ethical issues much more difficult (Akter et al., 2022). Solid ethical frameworks and regulatory monitoring are necessary to address these issues and guarantee that AI technologies are applied responsibly in advertising situations.

**4.2 Comparative Analysis**

Comparing consumer perceptions of AI-driven advertisements to traditional human-driven ads reveals a striking contrast in trust and authenticity. Traditional human-driven ads, which feature real people, are generally perceived as more authentic and relatable by consumers. These ads align with consumers' expectations of seeing real human beings promoting products, which makes it easier for them to trust the messaging. This authenticity fosters stronger emotional connections between the consumer and the brand.

In contrast, AI-generated content and digital clones often face challenges related to credibility. Consumers are more likely to question the intentions behind digital clones, especially when they are not informed that the figure is AI-generated. Verisimilitude, or the likeness of AI-generated content to real human beings, plays a crucial role in shaping consumer trust. When digital clones are perceived as highly realistic, they can evoke feelings of unease, negatively impacting the trust consumers place in the advertisement. However, when the AI-generated content is perceived as more stylized or fantastical, it may be more readily accepted, as consumers can more easily differentiate it from real content and are less likely to feel deceived.

The perceived intelligence of AI-driven advertisements also plays a role in their reception. AI-generated ads that feature conversational AI or dynamic, personalized content are often viewed as more intelligent and innovative, yet may still be seen as less human-centred compared to traditional human endorsements. On the other hand, digital clones that replicate real people too closely may raise concerns about deception.

**4.3 Implications for Advertising Industry**

The possibilities and drawbacks of AI-powered marketing are demonstrated by a number of actual advertising campaigns. Through the successful integration of AI creativity and authenticity, Lil Miquela, a virtual influencer created by AI, has successfully engaged millions of followers on social media, promoting strong brand loyalty and consumer connection (Brachtendorf, 2022). On the other hand, advertising that over-relied on hyper-realistic avatars or neglected to disclose the usage of digital clones have encountered criticism, undermining consumer confidence and igniting ethical debates (Gu et al., 2024). For marketers seeking to strike a balance between innovation and consumer safety, these case studies present practical advice on the value of openness, cultural awareness, and ethical foresight in the use of AI advertising tools.

The findings also stress the necessity for marketers to carefully balance using AI technologies for personalization with preserving marketing's openness. Although AI-generated content has unmatched chances for focused advertising, its ethical application necessitates upfront consumer disclosure. Advertisers need to make sure that their use of AI-powered material and digital clones is genuine, open, and consistent with customers' expectations of truthfulness in advertising.

The advertising business must create moral standards that put customer trust first in order to overcome these obstacles. Concerns around data privacy, content manipulation, and misrepresentation of AI-generated information should all be covered by these rules. Additionally, marketers ought to understand how customer trust varies by demographic and adjust their AI-powered ads appropriately. Advertisers can leverage the full potential of generative AI and digital clones in their ads while preserving consumer trust by adopting openness and responsibility.

5. Conclusion

The impact of digital clones and generative AI on customer trust and ethical attitudes in advertising has been investigated in this study. The results show that whereas digital clones and AI-driven content have many benefits for customer engagement and customisation, they also pose major questions regarding transparency and authenticity. When AI-generated ads seem genuine and are clearly identified as such, consumers are more likely to believe them. However, excessively lifelike information might cause uneasiness, mistrust, and manipulation-related ethical issues, especially when it comes to digital clones.

The paper reveals that younger generations are more inclined to trust AI-generated ads, particularly when they align with their preferences and provide personalized experiences. On the other hand, older generations express more scepticism, often linking AI-driven content to privacy invasion and data manipulation. This age-related divide suggests that advertisers must tailor their strategies based on the demographic characteristics of their target audience.

Regarding ethical issues, the study emphasizes how crucial it is to be transparent when using AI and digital clones. The absence of explicit transparency regarding the usage of AI in commercials may result in false advertising and erode customer confidence. The broad use of AI-driven advertising is nevertheless hampered by ethical concerns like data privacy, algorithmic biases, and manipulation potential, all of which advertisers must carefully handle.

The secondary data used in this study, might not fully reflect real customer behaviour. Furthermore, the findings reached are predicated on the body of existing literature and might not entirely account for all new viewpoints on the changing landscape of AI-driven advertising.

6. Recommendations

Based on the findings of this paper, it is recommended that advertisers prioritize transparency when incorporating artificial intelligence (AI) and digital clones into their campaigns. Clearly informing consumers about the use of these technologies can help prevent deceptive practices and build greater trust. Additionally, adherence to ethical guidelines is essential to safeguard consumer privacy and avoid manipulative tactics. Furthermore, collaboration between policymakers and industry regulators is crucial in establishing regulations that uphold ethical standards in AI-driven advertising. Such efforts will contribute to sustained consumer confidence and reinforce brand authenticity over time.

References

Akter, S., Dwivedi, Y. K., Sajib, S., Biswas, K., Bandara, R. J., & Michael, K. (2022). Algorithmic bias in machine learning-based marketing models. *Journal of Business Research*, *144*, 201–216. <https://doi.org/10.1016/j.jbusres.2022.01.083>

Al-Busaidi, A. S., Raman, R., Hughes, L., Albashrawi, M. A., Malik, T., Dwivedi, Y. K., Alawi, T. A., AlRizeiqi, M., Davies, G., Fenwick, M., Gupta, P., Gurpur, S., Hooda, A., Jurcys, P., Lim, D., Lucchi, N., Misra, T., Raman, R., Shirish, A., & Walton, P. (2024). Redefining boundaries in innovation and knowledge domains: Investigating the impact of generative artificial intelligence on copyright and intellectual property rights. *Journal of Innovation & Knowledge*, *9*(4), 100630. <https://doi.org/10.1016/j.jik.2024.100630>

Allal-Chérif, O., Puertas, R., & Carracedo, P. (2023). Intelligent influencer marketing: how AI-powered virtual influencers outperform human influencers. *Technological Forecasting and Social Change*, *200*, 123113. <https://doi.org/10.1016/j.techfore.2023.123113>

Baek, T. H., Kim, J., & Kim, J. H. (2024). Effect of disclosing AI-generated content on prosocial advertising evaluation. *International Journal of Advertising*, 1–22. <https://doi.org/10.1080/02650487.2024.2401319>

Benoit, M. (2025, April 18). Advertising, AI, and generational expectations: towards a Multi-Speed personalization? *ActuIA*. <https://www.actuia.com/en/news/advertising-ai-and-generational-expectations-towards-a-multi-speed-personalization/>

Brachtendorf, C. (2022). Lil Miquela in the folds of fashion: (Ad-)dressing virtual influencers. *Fashion Style & Popular Culture*, *9*(4), 483–499. <https://doi.org/10.1386/fspc_00157_1>

Bunea, O.-I., Corboș, R.-A., Mișu, S. I., Triculescu, M., & Trifu, A. (2024). The Next-Generation Shopper: A Study of Generation-Z Perceptions of AI in Online Shopping. Journal of Theoretical and Applied Electronic Commerce Research, 19(4), 2605-2629. <https://doi.org/10.3390/jtaer19040125>

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2020). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, *59*, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2020). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, *59*, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>

Gao, B., Wang, Y., Xie, H., Hu, Y., & Hu, Y. (2023). Artificial intelligence in advertising: advancements, challenges, and ethical considerations in targeting, personalization, content creation, and ad optimization. *SAGE Open*, *13*(4). <https://doi.org/10.1177/21582440231210759>

Gerlich, M. (2025). The Shifting Influence: Comparing AI Tools and Human Influencers in Consumer Decision-Making. *AI*, *6*(1), 11. <https://doi.org/10.3390/ai6010011>

Gu, C., Jia, S., Lai, J., Chen, R., & Chang, X. (2024). Exploring consumer acceptance of AI-Generated advertisements: from the perspectives of perceived eeriness and perceived intelligence. *Journal of Theoretical and Applied Electronic Commerce Research*, *19*(3), 2218–2238. <https://doi.org/10.3390/jtaer19030108>

Gupta, R., Nair, K., Mishra, M., Ibrahim, B., & Bhardwaj, S. (2024). Adoption and impacts of generative artificial intelligence: Theoretical underpinnings and research agenda. *International Journal of Information Management Data Insights*, *4*(1), 100232. <https://doi.org/10.1016/j.jjimei.2024.100232>

Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks*, *3*, 119–132. <https://doi.org/10.1016/j.ijin.2022.08.005>

Hanna, M., Pantanowitz, L., Jackson, B., Palmer, O., Visweswaran, S., Pantanowitz, J., Deebajah, M., & Rashidi, H. (2024). Ethical and bias considerations in artificial intelligence (AI)/Machine learning. *Modern Pathology*, 100686. <https://doi.org/10.1016/j.modpat.2024.100686>

Hermann, E., Williams, G. Y., & Puntoni, S. (2023). Deploying artificial intelligence in services to AID vulnerable consumers. *Journal of the Academy of Marketing Science*, *52*(5), 1431–1451. <https://doi.org/10.1007/s11747-023-00986-8>

Kelly, S., Kaye, S., & Oviedo-Trespalacios, O. (2022). What factors contribute to the acceptance of artificial intelligence? A systematic review. *Telematics and Informatics*, *77*, 101925. <https://doi.org/10.1016/j.tele.2022.101925>

Kolar, N., Milfelner, B., & Pisnik, A. (2024). Factors for customers’ AI use readiness in physical retail stores: the interplay of consumer attitudes and gender differences. *Information*, *15*(6), 346. <https://doi.org/10.3390/info15060346>

Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, *77*, 102783. <https://doi.org/10.1016/j.ijinfomgt.2024.102783>

Lee, J., & Jin, C. (2019). The role of Ethical Marketing Issues in Consumer-Brand Relationship. *Sustainability*, *11*(23), 6536. <https://doi.org/10.3390/su11236536>

Liyanaarachchi, G., Mifsud, M., & Viglia, G. (2024). Virtual influencers and data privacy: Introducing the multi-privacy paradox. *Journal of Business Research*, *176*, 114584. <https://doi.org/10.1016/j.jbusres.2024.114584>

Lv, Z. (2023). Generative artificial intelligence in the metaverse era. *Cognitive Robotics*, *3*, 208–217. <https://doi.org/10.1016/j.cogr.2023.06.001>

Mariano, J., Marques, S., Ramos, M. R., Gerardo, F. & de Vries, H. (2020). Too Old for Computers? The Longitudinal Relationship Between Stereotype Threat and Computer Use by Older Adults, Frontiers in Psychology, vol. 11, <https://doi.org/10.3389/fpsyg.2020.568972>

Mennella, C., Maniscalco, U., De Pietro, G., & Esposito, M. (2024). Ethical and regulatory challenges of AI technologies in healthcare: A narrative review. *Heliyon*, *10*(4), e26297. <https://doi.org/10.1016/j.heliyon.2024.e26297>

Menon, D., & Shilpa, K. (2023). “Chatting with ChatGPT”: Analyzing the factors influencing users’ intention to Use the Open AI’s ChatGPT using the UTAUT model. *Heliyon*, *9*(11), e20962. <https://doi.org/10.1016/j.heliyon.2023.e20962>

Moreno, F. R. (2024). Generative AI and deepfakes: a human rights approach to tackling harmful content. *International Review of Law Computers & Technology*, 1–30. <https://doi.org/10.1080/13600869.2024.2324540>

Moustakas, E. (2020). Virtual Influencers in digital Marketing: Innovative trend or passing fad? *Ae*. <https://www.academia.edu/44495640/Virtual_Influencers_in_digital_Marketing_Innovative_trend_or_passing_fad>

Papadopoulou, C., Vardarsuyu, M., & Oghazi, P. (2023). Examining the relationships between brand authenticity, perceived value, and brand forgiveness: The role of cross-cultural happiness. *Journal of Business Research*, *167*, 114154. <https://doi.org/10.1016/j.jbusres.2023.114154>

Patil, D., Rane, N. L., & Rane, J. (2024). The future of customer loyalty: How ChatGPT and generative artificial intelligence are transforming customer engagement, personalization, and satisfaction. In The Future Impact of ChatGPT on Several Business Sectors (pp. 48-106). Deep Science Publishing. <https://doi.org/10.70593/978-81-981367-8-7_2>

Salminen, J., Santos, J. M., Jung, S., & Jansen, B. J. (2024). Picturing the fictitious person: An exploratory study on the effect of images on user perceptions of AI-generated personas. *Computers in Human Behaviour Artificial Humans*, *2*(1), 100052. <https://doi.org/10.1016/j.chbah.2024.100052>

Shin, Y., & Lee, S. (2023). Issues of virtual fashion influencers’ reproduced bodies: a qualitative analysis based on body discourse. *Fashion and Textiles*, *10*(1). <https://doi.org/10.1186/s40691-023-00349-5>

Storey, V. C., Yue, W. T., Zhao, J. L., & Lukyanenko, R. (2025). Generative Artificial intelligence: evolving technology, growing societal impact, and opportunities for information systems research. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-025-10581-7>

Terziyan, V., & Tiihonen, T. (2025). Digital Cloning as a Self-Adaptive Multicriteria Optimization Process. *Procedia Computer Science*, *253*, 37–48. <https://doi.org/10.1016/j.procs.2025.01.067>

Williams, A., Hatfield, D., & Rawal, B. S. (2025). Artificial Intelligence Evolution: The rise of Generative AI. *SpringerLink*. <https://doi.org/10.1007/978-3-031-89063-5_36>