



THE 19TH EDITION OF THE INTERNATIONAL CONFERENCE
EUROPEAN INTEGRATION
REALITIES AND PERSPECTIVES

AI-Generated Content and Customer Engagement in Advertising: The Moderating Role of Customers' Attributes

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Abstract: Many businesses use AI-generated content in different work aspects. However, the impact of these contents on business success is still a vague issue. This research investigates the effects of AI-generated content on customer engagement in advertising focusing on moderating variables. The study aims to examine the relationship between content generated by artificial intelligence (AI) and its impact on customer engagement, emphasizing the importance of investigating this correlation for enhancing marketing effectiveness. Leveraging prior work on AI technology and customer engagement, the study adopts a qualitative approach to develop a conceptual model. The results highlight the pivotal role of AI-generated content in shaping customer engagement, particularly in advertising contexts. The study identifies product type, customers' age, customers' value, and customer innovativeness as crucial variables influencing moderately the relationship between AI-generated content and customer engagement. By empirically examining these moderating variables, businesses can tailor AI-generated content effectively to different customer segments, thereby enhancing customer engagement and marketing outcomes in the advertising landscape. The study contributes valuable insights to academia and practitioners by shedding light on the unique interplay between AI-generated content and customer engagement in advertising.

Keywords: AI-generated Content; Customer Engagement; Advertising; Moderating Role; Customers' Attributes

1. Introduction

Generative artificial intelligence (AI) represents a cutting-edge technology that leverages user-inserted prompts to generate fresh digital content, shaping a new landscape for advertising strategies (De Cremer et al., 2023). The rapid advancements in AI have catalyzed a significant digital evolution, giving rise to avatars, AI systems dedicated to content creation, and computer-generated environments that foster unparalleled levels of social connectivity (Ahn et al., 2022; Miao et al., 2022). Platforms like ChatGPT and DALL·E2 stand out for their capacity to produce engaging textual and visual content, empowering the creation of immersive and captivating materials tailored for diverse sectors, including the dynamic realms of advertising and marketing. This transformative shift enables more compelling interactions with consumers, particularly in the realm of advertising, where AI-generated content plays a pivotal role

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in enhancing customer engagement and amplifying brand messaging effectiveness (Rahman et al., 2023).

The growing enthusiasm surrounding AI-generated content stems from its widespread availability, user-friendly interfaces, rapid responsiveness, and the perceived quality of content generated, particularly within the realm of advertising and customer engagement. Platforms like ChatGPT and other generative AI tools are specifically designed to excel in content creation, making them invaluable assets in the realm of advertising and marketing. In the context of advertising, where the focus lies on captivating customers and enhancing marketing effectiveness, AI-generated content plays a pivotal role in crafting compelling narratives that resonate with target audiences (Hollebeek & Macky, 2019; Terho et al., 2022).

In the advertising and marketing world, the rise of digital marketing has highlighted the importance of content marketing for successful online campaigns (Baltes, 2015). Crafting original content for marketing can be expensive and time-consuming, requiring thorough research, data collection, and skilled writing to effectively engage audiences. The evolution of advanced natural language processing (NLP) models has introduced a new era of using artificial intelligence (AI) for content creation. These advanced NLP models allow AI to imitate human writing styles seamlessly, opening up new possibilities for creating various types of content tailored for advertising and marketing purposes (Schweidel et al., 2023).

The influence of AI-driven content creation is transforming diverse industries by streamlining tasks and facilitating efficient decision-making processes (Ameen et al., 2021). This evolution requires using a set of instructions to create written content, images, and videos tailored for various purposes, especially in advertising and customer engagement. Many sectors are increasingly adopting AI-powered automated content generation, specifically in marketing campaigns and customer service. In today's extremely competitive business landscape, customization has become a key factor. With AI technologies at the forefront, organizations could take advantage of customized content generated by data-based algorithms with regard to customers' behavioral patterns. (Aguirre et al., 2015). This personalized technique has gained significant traction across different sectors, such as retail and hospitality. By enabling the creation of engaging and tailored content, this strategy enhances the overall customer experience, especially within advertising and marketing endeavors.

With the increasing accessibility of AI-generated content, a growing number of businesses and marketing professionals are expected to adopt AI for content creation, aiming to enhance marketing effectiveness and reduce advertising costs. However, the impact of firms using AI-generated content (AIGC) on consumer engagement remains a significant concern, with limited research on the effects of AI-generated content on the engagement of customers that is still in its early stages. Will the integration of AIGC in advertising drive consumer engagement? What role do moderating variables such as product type, customers' age, customers' value, and customer innovativeness play in this process? These questions serve as the focal point of this study. We have developed a model to investigate the direct impact of AIGC on consumer engagement, distinguishing between the psychological and behavioral aspects of consumer engagement based on existing research. Furthermore, we have introduced a set of moderating variables into the model to explore whether the emotional tone of advertisements can influence the relationship between AIGC and consumer engagement within the advertising landscape.

2. Literature Review

AI-generated content plays a significant role in influencing customer engagement within the realm of advertising. Research studies have shown that AI-generated stimuli have a direct impact on customer engagement (Gao et al., 2022). Interactions with AI have been identified as a key factor in building customer trust, leading to increased engagement and loyalty (Chi & Nam, 2022). Additionally, AI technology has the potential to enhance interactions between customers, products, and services, ultimately boosting customer engagement levels (Yin & Qiu, 2021). The utilization of AI-driven customer analytics can also enhance customer engagement in retail settings through personalized recommendations and tailored offerings (Hossain et al., 2022).

In the context of content marketing, recent findings suggest that tools like ChatGPT can assist marketers in generating content more efficiently, potentially reaching a quality level comparable to that of human content creators (Rivas & Zhao, 2023). Another expert highlights that AI-generated content is not only quicker and cost-efficient but also possesses improved Search Engine Optimization (SEO) capabilities (Taylor, 2023).

While customer engagement is a common focus in marketing research, there remains a lack of substantial academic exploration dedicated to customer engagement as a distinct concept. The term "to engage" encompasses various definitions according to the Oxford Dictionary (1996), emphasizing actions such as employing, holding fast, binding by contract, entering battle, and participating, all suggesting a behavioral focus. In contrast to media engagement, we define Customer Engagement Behaviors (CEBs) within the context of a brand or firm from a behavioral perspective. Our characterization of CEBs underscores the behavioral aspects of customer-to-firm interactions.

Customer engagement is intricately linked with, yet distinct from, customer loyalty. The engagement process tracks the progression of loyalty over time by establishing connections between calculative commitment, affective commitment, involvement, and trust as customers evolve from initial exposure to a service brand to becoming loyal patrons of that specific brand.

Customer engagement signifies customers actively interacting with an organization through cognitive, emotional, behavioral, sensory, and social responses (Lemon and Verhoef, 2016). Customer engagement can be seen as a mental state or psychological process that promotes customer loyalty (Kumar and Pansari, 2016). Customer satisfaction is suggested as a customer-centric indication of customer engagement. Noteworthy research in the business area particularly in marketing and management implies that behavioral intentions and actions are driven by high levels of customer satisfaction (Bowen and Chen, 2001; Yuksel et al., 2010), ultimately influencing customer loyalty and retention.

Customer satisfaction with high-quality AI tools is expected to drive customer engagement. For instance, a concierge robot could engage in extended interactions with hotel guests (Rodriguez-Lizundia et al., 2015). Interactive experiences play a pivotal role in enhancing customer engagement within service organizations (Vivek et al., 2014). Customers' involvement will be increased when they experience pleasantly memorable interactions with AI tools. As a result, customers are motivated to actively engage with the organization's brand on social, emotional, and mental levels (Ullah et al., 2018).

3. Methodology

The current study aims to shed light on AI-generated content and its effects on customer engagement. For this purpose, following the four steps suggested by Webster and Watson (2002), and Watson and Webster (2020), a systematic literature review was conducted among major databases to find related

sources. These steps include finding review articles, going forward, going backward, and related articles. Based on a thorough review of the sources found in these steps, AI-generated content and its related effects on customer engagement and the moderating role of customers' attributes were extracted which will be presented and discussed in the following part of this study.

This research is situated within the interpretive paradigm. It is a developmental study that employs a qualitative approach, systematically reviewing previous literature to synthesize and build upon existing assumptions that have been tested and validated in prior research, in order to develop a conceptual model.

4. Conceptual Model Development

4.1. Connection between AI-Generated Content and Customer Engagement in Advertising

As stated by Harmeling et al. (2017, p. 316), Customer engagement refers to a customer's voluntary dedication of resources to a company's marketing activities, going beyond just monetary support. Customer engagement refers to activities such as liking social media posts, providing word-of-mouth recommendations, writing reviews, and giving feedback to the company (Harmeling et al., 2017; Meire et al., 2019; Pansari and Kumar, 2017). Customer engagement is crucial for businesses, as it can positively impact important business outcomes like marketing effectiveness, profitability, and sales. (Kanuri et al., 2018; Meire et al., 2019; Saboo et al., 2016). Numerous studies focusing on the areas of content marketing and social media content have explored and investigated how the content itself can influence and drive customer engagement (Hollebeek and Macky, 2019; Terho et al., 2022; Wahid et al., 2023). Given this research background and the impact of customer engagement on advertising performance, it becomes essential to investigate the correlation between AI-generated content and customer engagement in advertising.

4.2. Moderating Variables on the Relationship between AI-Generated Content and Customer Engagement in Advertising

4.2.1. Product Type and Consumer Engagement

Distinct product categories necessitate customized content approaches, according to research findings (Dessart, 2017). For high-involvement products, consumers actively seek detailed information, suggesting firms should provide content rich in relevant details (Barreto and Ramalho, 2019). Conversely, when it comes to low-involvement products, consumers are more responsive to visual content and may pay less attention to in-depth information (Barreto and Ramalho, 2019). This consumer behavior suggests that product types could influence the link between AI-generated content and customer engagement. For instance, a health food brand, known as a high-involvement product, posts on Instagram about product benefits for the skin, targeting consumers who value detailed information to reduce risks (Dholakia, 2001). If consumers learn that the Instagram content is AI-generated by ChatGPT, they might disengage due to concerns about potential inaccuracies and risks associated with misinformation (Pavlik, 2023). Additionally, AI-generated images may sometimes have imperfections (e.g., distorted hands). Content marketers using unmodified AI-generated images may face the challenge of disengagement from consumers of low-involvement products, who tend to prioritize visual elements. Content marketing researchers should explore these scenarios through empirical studies, examining how product characteristics (low vs. high involvement; hedonic vs. utilitarian) might moderate the impact of AI-generated content on customer engagement. This question informs the following hypothesis:

H1: Product type has a moderating role between AI-generated content and customer engagement.

4.3. Product Type and Consumers' Age

In their preliminary research, Sands et al. (2022) discovered that younger consumers exhibit greater openness to emerging technologies compared to older generations. Consequently, similar to their attitudes toward a variety of new technological advancements, younger age groups may hold more favorable views toward generative AI than older individuals. As a result, we can pose the following research question: Does customers' age influence the connection between AI-generated content and customer engagement? This question informs the following hypothesis:

H2: Customers' age has a moderating role between AIG content and customer engagement.

4.4. Product Type and Consumers' Value

Furthermore, Kreuzbauer and Keller (2017) proposed that products crafted by humans possess greater authenticity compared to those manufactured by machines. They also noted that consumers who prioritize authenticity tend to prefer products created by humans over those produced by machines. Building upon this observation, it is reasonable to assume that customers' focus on authenticity may have a detrimental effect on the impact of AI-generated content on customer engagement. Specifically, when customers value authenticity to a great extent, their engagement with AI-generated content may decrease due to the perceived absence of authenticity in such content. It is crucial to investigate this possibility with the following research question: Does customers' emphasis on authenticity moderate the relationship between AI-generated content and customer engagement? This question informs the following hypothesis:

H3: Customers' value has a moderating role between AIG content and customer engagement.

4.5. Product Type and Consumer Innovativeness

Consumer innovativeness, which denotes the tendency of consumers to embrace new products or services, can potentially interact with AI-generated content to influence customer engagement (Roehrich, 2004). Individuals who exhibit high levels of innovativeness tend to embrace new technologies, leading to a positive impact of consumer innovativeness on technology adoption (Lee et al., 2021). Building on this idea, due to the novelty of generative AI, highly innovative consumers are likely to engage more with AI-generated content than those with lower levels of innovativeness. The research question posed for this hypothesis is: Does consumer innovativeness moderate the relationship between AI-generated content and customer engagement? This question informs the following hypothesis:

H4: Customer innovativeness has a moderating role between AIG content and customer engagement.

Based on the above developed hypotheses the following conceptual model can be proposed.

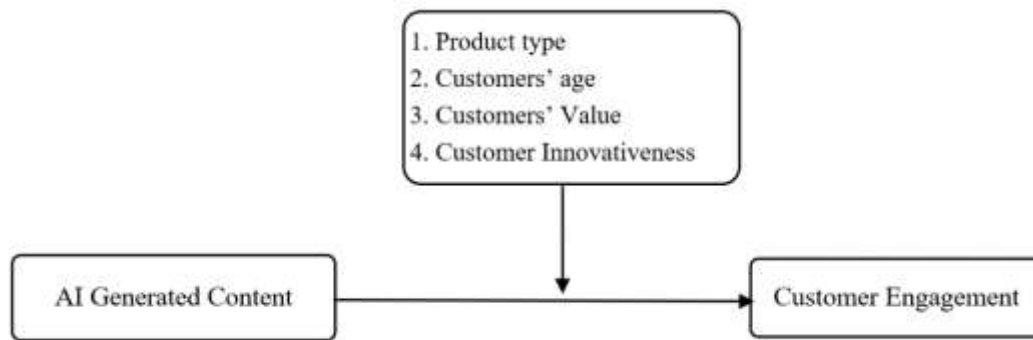


Figure 1. The Conceptual Research Model

5. Conclusion

This study underscores the critical role of customer engagement in business success, highlighting its impact on marketing effectiveness, profitability, and sales. It emphasizes the significance of investigating the correlation between AI-generated content and customer engagement to enhance marketing effectiveness and customer interactions.

The moderating variables identified, including product type, customers' age, customers' value, and customer innovativeness, play pivotal roles in shaping the connection between AI-generated content and customer engagement. Product type influences content strategies, with high-involvement products requiring information-rich content and low-involvement products favoring visual elements. Customers' age influences attitudes towards emerging technologies, potentially impacting their engagement with AI-generated content. Customers' emphasis on authenticity and consumer innovativeness also serve as key factors moderating the impact of AI-generated content on customer engagement.

By exploring these moderating variables empirically, businesses can gain valuable insights into how AI-generated content can be tailored to different customer segments effectively, ultimately enhancing customer engagement and marketing outcomes in the advertising landscape. Future research can focus on evaluating the proposed conceptual model in a real advertising environment and testing the hypothesized relationships in the model. The result can show how the model works and the robustness of the links proposed on it.

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