

The Effectiveness of AI-Generated Short-Video Advertising on Social Media

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Abstract. With the development of Artificial Intelligence Generated Content technology, it has been applied to various industries. Meanwhile, many advertisers utilise AI technology to post advertisements on social media and gain much attention from industry professionals and consumers. Although current research has illustrated consumers' perceptions towards AI-generated advertising, perceptions towards different advertising forms have not been investigated. This research discusses the effectiveness of AI-generated short-video advertising on social media. The results find that credibility and trustworthiness are the most important criteria for AI-generated ads' quality. Also, results show that the effectiveness of AI-generated short-video ads varies based on different situations. AI-generated short-video ads are suitable for low-risk, high-entertainment industries, including fashion or cosmetics, but not for those that need high-trust industries, such as finance and medical. Therefore, the research suggests that advertisers should increase credibility by relying on official social media accounts with creative content and choosing appropriate industries for AI technologies.

Keywords: AIGC, Short Video Advertising, Social Media.

1. Introduction

Artificial Intelligence Generated Content (AIGC) refers to content created by advanced generative AI technologies, enabling the production of diverse content types in a short amount of time. Driven by a massive demand and technological advances, many AIGC products have been invented by professionals. Since the emergence of tools like ChatGPT and DeepSeek, AIGC is increasingly used not only for scientific research but also in everyday life, including academic studies and various work scenarios. Advertisers and agencies are also utilizing AI in advertising, integrating it into every stage of the production process, from mining consumer insights and optimizing ad placement to evaluating campaign effectiveness and creating advertising messages.

In parallel, social media has become a crucial platform for marketing, and many companies are capitalizing on AI to produce engaging messages, images, and videos for social media, achieving cost and time savings and generating high returns. The increasing popularity and usefulness of advertisements created by AI have captured the interest of numerous academic researchers. Recent investigations have started to examine how individuals perceive and react to AI-generated content and advertisements. Chen et al. suggest that consumers generally have positive attitudes toward AI-generated advertisements, especially those that feature agentic appeals [1]. However, when users recognise content as AIGC, they may exhibit negative attitudes and evaluations [2].

Despite the growing number of studies on AIGC in advertising, existing studies primarily focus on general AIGC and AI-generated ads. Scant research has specifically examined AIGC formats such as video on social media. As a result, this study intends to address this deficiency by concentrating on AIGC short video advertisements across social media channels. Specifically, this study investigates how users perceive AI-generated short video ads, their credibility, and key attributes of AI-generated short video ads, such as their creativity, authenticity, and informativeness, and how these perceptions influence their behavioural intentions, including brand attitude and purchase intention. Furthermore, this research explores how the design and content of AI-generated short video ads can be modified and improved to enhance user engagement and achieve better advertising outcomes. This study contributes to the current literature by providing a detailed perspective on the

effectiveness of AIGC video advertisements and presenting actionable recommendations for marketers to utilise AI in their social media advertising strategies.

2. Key Features of AIGC

As AIGC has been utilized in various industries, such as entertainment, education, art, and advertising, it should have several features to meet those demands. According to Liu et al., AIGC has three key features, including cognitive, relational, and emotional competencies [3]. The first one pertains to the ability to process, store, and extract information. Wang et al. address that AIGC can generate intensive and low-cost content in a short time and also generate multimodal content at the same time [4]. For instance, AIGC tools could produce ad texts, videos, and background music to meet users' needs. The second one is that AIGC can communicate with users to fulfil their personalized requirements. The third one is that AIGC can catch users' feelings and build an emotional relationship with them. Then, it will respond differently based on users and fix its own emotional expression [3]. Although AIGC has its advantages, it also has incorrect information, privacy issues, and data leakage issues. Also, these data may show stereotype or training data within personal information.

3. Consumer Perception of AIGC

From what has been presented above, AI can generate different forms of content, from texts to videos. Current literature has discussed the various perceptions of AIGC users of other forms of content and information types.

3.1. Cognitive Perception

Cognitive perceptions mean the credibility and trustworthiness of AIGC, which is the most fundamental perception. Li and Yang indicate that information type and content category influence users' perception [5]. To be specific, profit content generated by AI, such as advertising, is less convincing than non-profit content [5]. These conflicts occur based on how consumers consider different content. Based on the Elaboration Likelihood Model (ELM), individuals perceive information as significant due to its processing via the primary pathway mechanism [6]. The profit information is related to an individual's core profits; therefore, it will stimulate consumers' central route process mechanism. As a result, individuals evaluate this information deeply, which has an impact on their perception. According to consumer research done by IAB, 52% of consumers still have negative attitudes toward AI-created ads, especially younger consumers who are Gen Z [7]. They consider those ads created by AI, or even brands using AI, to be inauthentic or fake.

3.2. Affective Perception

Affective perceptions pertain to the attitude and feelings of consumers toward AIGC or AIGC factors. Consumers will like or dislike AIGC or feel noisy or bored about it. For instance, consumers are sensitive to ad creativity. Some people prefer AI-generated content because of its creativity, and some consider that the content lacks human characteristics. They consider these AI-generated ads to be boring, noisy, and confusing and less engaging than traditional ads [8]. Besides, consumers' upset attitude has a bad impact on brand image [8]. AI-generated videos with high quality are less effective, and too realistic audio or video will lead to the uncanny valley effect, making the audience uncomfortable [9].

3.3. Behavioural Perception

Behavioural perceptions relate to consumers' behaviour or engagement intention after seeing AI-generated ads. According to Obilo et al., consumer brand engagement only contains behavioural dimensions [10]. In social media ads, consumer engagement pertains to the number of likes,

comments, shares, and purchase actions. Chen et al. declare that when people recognise ads created by AI, their engagement intention will increase in short-form video [11]. In terms of enhancing consumer purchasing behaviour, AI-generated advertising content is more effective than that created by humans. AI can enhance the level of advertising creation through more balanced and dynamic creative combinations. Research shows that AI-generated content, due to its stronger creative appeal, will effectively promote sales growth [12].

Collectively, these studies outline critical perceptions of consumers towards AIGC, especially AI-generated videos and AI-generated advertisements. People currently remain sceptical about the authenticity and reliability of the content generated by AI. Not only the content of the news, but also the advertisements generated by AI are even more unbelievable, because these advertisements involve consumers' core interests. The primary criterion for people to judge whether the content generated by AI is good or not is whether it is creative, and the second is whether its content has the same characteristics as the content created by humans. If people think that the content generated by AI is highly creative, they will increase their trust in it. Of course, if the quality of the content generated by AI is too high and the sound or picture is highly realistic, it will cause people to feel uncomfortable. Further, when consumers trust AI-generated video ads and have great trust in them, they will share them on social media and develop a purchase intention for the products featured in the ads.

4. Mechanism of Short Video Advertising

With the rise of social media in various facets of life, short videos have gained prominence. The combination of short videos with social media platforms enriches the depth and clarity of information while increasing the efficiency of communication. This combination is also beneficial for marketing promotion and advertising.

Lou and Koh claim that the characteristics of social media ads significantly influence consumers' cognitive and affective involvement, which subsequently alters their attitude toward the ad's content [13]. Ultimately, attitude toward the content exerts a positive impact on brand attitude, purchase intention, and willingness to share the brand content, which is behavioural engagement. To be specific, Luo et al. found that three essential characteristics of short videos on social media are usefulness, ease of use, and entertainment, all of which have a positive impact on consumer trust [14]. Additionally, research on emotional effects suggests that an ad video story containing multiple emotions, such as a combination of happiness, surprise, and sadness, can increase consumers' buying intention [15]. Furthermore, Dong et al. conclude that if short video advertising aims to encourage consumers to like, comment, share, and purchase the product, the video should contain relevant content, brand-related information, good storytelling skills, and evoke consumers' emotional responses [16]. They also find that the release time of the video moderates the correlation between consumer behaviour and positive emotions. For example, an ad video released in the morning will make consumers more excited and get more views and likes than in the afternoon.

5. Fit or Misfit: AIGC VS Advertising Needs

From what has been outlined above, AI-generated content has its features triggering consumers to have cognitive, affective and behavioural feedback. Thus, it should be clarified if AI-generated short video ads could stimulate consumers to reach the same goal, especially on social media platforms.

In the short-video ads, consumers are expected to watch videos with clear information, brand-relevant content, and rich creativity. As mentioned above, AI technology can easily cater to these demands. AI tools can generate personalized videos with clear orders from advertisers in a short time. Besides, it can modify the content based on advertisers' instructions. To be specific, when a tourism company wants to release a short video advertising on TikTok, it can instruct an AI tool to generate an innovative video within 15 seconds with good storytelling and clear information. It can be

cartooning style or 3D style, which are creative and full of entertainment, catering to consumers' needs.

However, trust is still a fundamental factor that consumers are most concerned about, especially those highly connected to consumers' benefits. For instance, when an ad is used for medical products, consumers will be more suspicious about its content [17]. If a banker launches an ad, the ad may not succeed because bankers are less trusted than other people [18]. Further, consumers perceive AI-generated video as unreliable sometimes. Therefore, AI technology cannot meet consumers' demands. This conflict will lead to increasing distrust and have negative impacts on consumer engagement.

Further, the emotional aspect cannot match well. For advertisers they expect that ads can stimulate consumers' emotions and then have purchase intention. In contrast, many consumers perceive AI-generated video as boring and annoying. Also, those AI tools cannot fully generate humanised content, which means they cannot have human emotion as well. For example, consumers do not experience empathetic and guilty feelings in AI-generated charitable ads [19]. Thus, their donation intention tends to be prominently lower.

In summary, the effectiveness of AI-generated short video ads depends on the ad types and brands. If the ads are for tourism, cosmetics or pets, which are for fun and entertainment mainly, consumers may be attracted by creativity and entertainment. If the ads are for financial or medical products with high risks, the AI-generated short video cannot easily establish authenticity.

6. Suggestion

It is essential to build trust with consumers. As discussed above, trust is a critical factor. If consumers trust AI-generated videos, they are more likely to share, like and comment, even have purchase intentions. The most effective way is to use a reputational social media account to release short video ads. In contrast, smaller brands should avoid using AI-generated advertisements to prevent potential distrust. According to Source Credibility Theory, high levels of information source quality and credible source behaviour enhance message acceptance and foster trust in the brand [20]. Therefore, if the reputational brand account posts ads generated by AI, it can mediate the negative effects. Besides, emotional elements should be incorporated into AI-generated videos. Giving clear instructions to AI tools to generate content with multiple emotions, not only clear information about products. It means that a video should include a mix of happy, surprise and upset to evoke viewers' emotions in one story, which means the storytelling method is expected to be trained. This approach can stimulate emotional responses from viewers, thereby enhancing their purchase intentions. Furthermore, AI-generated advertisements should be applied to appropriate product categories. For products that need high credibility, it is advisable to avoid using AI exclusively or to collaborate with human creators to produce content, such as financial products and medical products. In addition, the release time of short video ads on social media should be considered [16]. Advertisers need to consider when to release short video ads based on the types of products.

7. Conclusion

To conclude, the present study discusses the feasibility of AIGC in social media short video ads with the support of the ELM theory and Source Credibility theory. It also summarises the features of AIGC and how users perceive it, and the mechanisms of short video ads. This study examines the effectiveness of applying AIGC in social media short video advertising, focusing on analyzing the characteristics of AIGC, consumers' perceptual responses to it, the mechanisms through which short video advertising relies on user feedback, and the points of alignment and misalignment between the two.

This study finds that AIGC offers considerable advantages in creative and diversified content, rapid production, and personalization, making it highly suitable for meeting the demands of short video advertising, which requires frequent updates and creative expression. However, limitations

remain in its ability to establish trust and evoke emotional responses among consumers, particularly in industries where credibility is important, such as finance and the medical industries. Audience scepticism continues to pose a significant obstacle to the effectiveness of AI-generated ads.

Future studies could investigate how AI-generated ads for different types of products and various cultural backgrounds influence consumers' perceptions. Studies can also focus on different age groups of consumers, enriching the theoretical framework and practical implications.

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