

# Content Creation with GenAI: Use Case on ClimaClic's Instagram Marketing

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**Abstract.** The availability of generative artificial intelligence (GenAI) tools has substantially increased, resulting in numerous positive impacts on the marketing sector. However, issues related to misinformation and deepfakes, biases and fairness, privacy, and ethical concerns, among others, have been highlighted. This research aims to examine the effects of utilizing GenAI for text, image, and audio creation in Instagram marketing. Employing the Customer Experience Tracking method, the study evaluated the differences between traditionally created and AI-generated Instagram Reels. The findings indicated that AI-generated content can garner higher levels of user attention, thereby enhancing brand interest. Negative effects such as mistrust or ethical concerns associated with AI were not substantiated in this study. These results suggest that companies can enhance their social media campaigns by integrating AI tools for content creation.

**Keywords:** Content Creation; CXT; GenAI; Instagram Marketing

## Extended Abstract

The recent widespread of ChatGPT and other GenAI tools has highlighted its vast array of use cases [1]. The emergence of large language models (LLMs) has made AI-powered user interfaces accessible to ordinary users, thereby increasing interest in the use of artificial intelligence [2]. In marketing, GenAI offers the potential to overcome productivity limits by increasing the quantity of content without sacrificing the quality and vice versa. GenAI can assist in generating high-quality content across various modalities, including text, images, and certain types of videos [3]. Nevertheless, the use of GenAI agents has also raised concerns about the challenge of differentiating between human and AI authorship and has renewed discussions about the significance of traditional human endeavors [4]. Also, companies are concerned about the brand reputation and the trust of consumers in the technology and brand. With this background, in this article we seek to answer the following research questions: *What impact does the use of AI-generated text, images and voice for Instagram content have on customers?* To answer this research question, a qualitative study using the at Offenburg University developed Customer Experience Tracking (CXT) method has been chosen. CXT integrates advanced technologies and novel research methods to pinpoint and assess consumer needs, enhancing product and service performance. Its innovative approach centers on merging established user experience measurement techniques with valid emotional response metrics during the purchasing journey.

The present use case is part of a collaboration between Offenburg University and BurdaDirect, which is a division of Hubert Burda Media, one of Germany's largest publishing houses. This

use case was developed for ClimaClic, a social lottery with focus on climate projects under BurdaDirect, as part of the applied marketing project within the Marketing Management course of the Dialogue Marketing and E-Commerce Master's Program at Offenburg University.

To address the presented research question, a qualitative research design was chosen. The aim was to analyze an existing Instagram Reel and create a new one using GenAI tools. The study comprised two main parts: (1) content creation with GenAI tools and (2) the evaluation and comparison of the two reels. For content creation, existing GenAI agents for text-, image-, and voice-generation were evaluated. Video generation was not pursued at this time due to limited alternatives. For the final reel, ChatGPT was employed to generate the storyboard, captions, and hashtags. Midjourney was used to produce a series of images, and Elevenlabs was utilized to create the voice-over. Both reel alternatives were tested in the Customer Experience Tracking Laboratory at Offenburg University. The methods used included eye-tracking, questionnaires, and in-depth interviews. Data from 14 participants was collected between May 27th and June 7th, 2024.

The CXT method enabled the evaluation of both Instagram Reels. For the traditional reel, participants noted that it was too short, and the message was unclear. They struggled to understand the connection between the images and the product, leading to confusion about the product offer and reduced trust in the brand. Regarding the AI-generated reel, most participants did not recognize that the text and images were AI-generated. The AI-generated text helped participants better understand the product offer. Although participants did not immediately perceive the use of AI for image generation, they found the images less appealing. The images featured a couple created with character references to place them in various settings, but the couple appeared older than the requested mid-forties age. Participants found the inclusion of a voice-over positive, initially not recognizing its artificial nature, though they later noted that the voice sounded somewhat unnatural. Comparatively, participants found the AI-generated reel's message and overall presentation more attractive.

This study offers a preliminary assessment of the use and implementation of GenAI in social media marketing of lotteries. Companies may find this information valuable as many are in the process of evaluating this technology. Consumer responses in a laboratory setting are an important consideration before deciding on implementation.

Nonetheless, the research has its limitations. To achieve a more comprehensive understanding of the acceptance and reaction to AI-generated content, additional testing is required. Furthermore, the number and variety of participants should be increased to cover different customer profiles of the brand.

## References

1. Tung, L. (2023). ChatGPT can write code. Now researchers say it's good at fixing bugs, too. *ZDNet*. (<https://www.zdnet.com/article/chatgpt-can-write-code-now-researchers-say-its-good-at-fixing-bugs-too>). Accessed: June 30, 2024.
2. Harjamäki, J., Rantanen, P., Lahtinen, D., Sillberg, P., Saari, M., Grönman, J., ... & Abrahamsson, P. (2024). The Report of 85 AI Tools: GenAI Content Production: Enhancing Repeatability and Automation with ChatGPT.
3. Heitmann, M. (2024). Generative AI for Marketing Content Creation: New Rules for an Old Game. *NIM Marketing Intelligence Review*, 16(1), 10-17.

4. Else, H. (2023). Abstracts written by ChatGPT fool scientists, 423-423 Nature, 613(7944). <https://doi.org/10.1038/d41586-023-00056-7>.