

ANALYSIS AND ASSESSMENT OF BULGARIANS' ATTITUDES TOWARD THE USE OF ARTIFICIAL INTELLIGENCE IN ADVERTISING 1

Mayiana Mitevska, Prof. D.Sc.,

Plovdiv University "Paisii Hilendarski", Faculty of Pedagogy, Department of Psychology, Bulgaria

Denitsa Muchkurska

Plovdiv University "Paisii Hilendarski", Faculty of Pedagogy, Department of Psychology, Bulgaria

DOI: <https://doi.org/10.56293/IJMSSSR.2025.5843>

IJMSSSR 2025

VOLUME 7

ISSUE 5 SEPTEMBER - OCTOBER

ISSN: 2582 – 0265

Abstract: The rapid integration of Artificial Intelligence (AI) into marketing and advertising practices has raised important questions about consumer perceptions, trust, and acceptance. This study analyzes and evaluates the attitudes of Bulgarian consumers regarding the use of AI in advertising. The research explores how individuals perceive AI-driven personalization, automation, and content generation, as well as the ethical concerns associated with data protection and authenticity. Through literature review, survey data, and comparative analysis, the study identifies key factors that influence consumer acceptance, such as perceived usefulness, transparency, and trust in technology. The findings suggest that while Bulgarians recognize the efficiency and innovation potential of AI in advertising, concerns remain about privacy, manipulation, and the loss of human creativity. The results contribute to a better understanding of the cultural and social context of AI adoption in marketing and provide insights for advertisers and policymakers seeking to implement AI responsibly and sustainably.

Keywords: Artificial Intelligence, Advertising, Consumer Attitudes, Bulgaria, Trust and Ethics

Introduction

The integration of Artificial Intelligence (AI) into advertising communication is transforming the relationship between brands and consumers by introducing advanced personalization, efficiency, and interactivity. At the same time, the growing presence of AI raises significant concerns related to ethics, authenticity, and trust. Understanding consumer attitudes toward AI in advertising is therefore essential for evaluating both its potential and its risks in the Bulgarian context.

The aim of this study is to analyze consumer perceptions of AI in advertising communication, with a particular focus on trust and acceptance of such technologies. To achieve this aim, the research pursues several objectives: to provide a theoretical review of contemporary literature on the use of AI in advertising; to systematize the main AI technologies and tools currently applied in campaigns; to examine consumer attitudes toward AI-generated content; to assess the degree of trust audiences place in advertisements created or supported by AI; and to formulate conclusions and recommendations for the effective and responsible use of AI in advertising.

The object of the research is a sample of 154 adult respondents from different age groups and professional backgrounds. The study was conducted online and anonymously, with the questionnaire distributed through the researcher's professional and social networks. Participants were informed about the aims of the study and assured that their data would be used exclusively for academic purposes.

The working hypothesis assumes that, despite the rapid adoption of AI in the advertising industry, consumers remain generally skeptical toward its application, particularly in light of ethical dilemmas and questions of trust in

¹ Under the project DUECOS: "DIGITAL SUSTAINABLE SYSTEMS – Technological Solutions and Social Models for Ecosystem Sustainability" (DUECOS) BG-RRP-2.004-0001-C01, under item 3.4 of SNIIPR – D 23 PF-014, Creation and Development of a Center for Psychological Support – Center for Innovative Integrative Learning Models with Socially Assistive Robots – RoboPsy, led by Prof. Dr. Sc. Mayiana Mitevska.

AI-generated content.

The methodology is based on an original research instrument — a Questionnaire for Examining Attitudes toward the Use of Artificial Intelligence in Advertising. The sample includes 154 participants, of whom 32.5% are male and 67.5% female, which indicates a gender imbalance. In addition to the survey, the study also experimented with the use of AI tools — ChatGPT, Gemini, and Copilot — to generate visual materials incorporated into the questionnaire. These tools contributed to the creation of culturally resonant and psychologically meaningful images, such as the lion as a national symbol of strength and protection, which was intentionally used to explore the role of symbolism in shaping consumer perceptions. By combining empirical data collection with AI-generated materials, the research not only evaluates consumer attitudes but also demonstrates the practical application of AI in the development of advertising content.

Campaign Generated by ChatGPT

ChatGPT generated the idea for a campaign titled “The Lion Within You”, accompanied by the slogan “The Courage to Take Care of Yourself.” The central concept emphasized that the lion is not merely a symbol of strength and pride, but embodies calm and resilient confidence, the ability to lead and to rise, as well as the wisdom to step back when rest and recovery are needed. The campaign defined three primary goals:

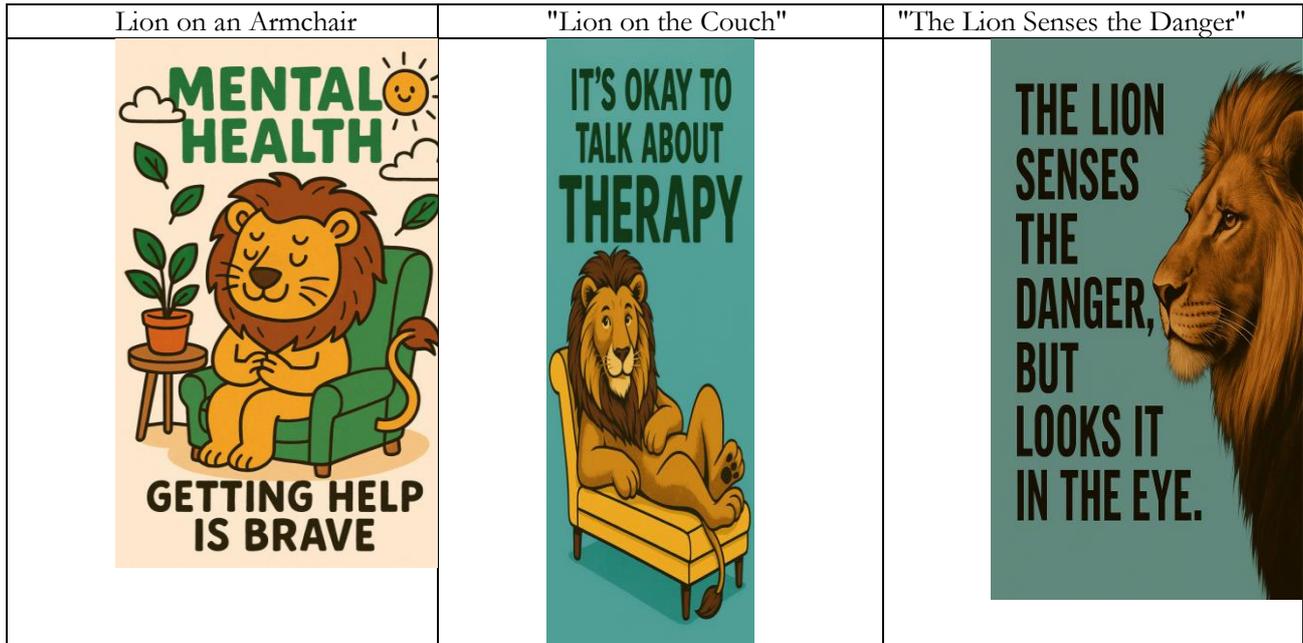
- To destigmatize mental health by reframing it not as a weakness, but as a sign of strength;
- To present mental health care as a courageous choice and an act of nurturing inner strength;
- To employ a national symbol to inspire trust and foster a sense of cultural connection.

The AI proposed ideas for visual and video content, including posters and social media designs. One prominent suggestion was an image where a human face and a lion’s face merge into one another. For the slogan, two options were suggested: “Courage is not about not feeling. Courage is about facing it.” or “Mental health is part of your strength.” Additional ideas for social media engagement included posts with the hashtag #LionWithinYou, where users would share personal stories of overcoming challenges, and visual cards with quotes such as: “Sometimes strength is in the tears,” “Even lions rest,” and “A true leader first takes care of themselves.” Another component involved collaboration with therapists and psychologists through short video reels addressing questions such as “What does it mean to be strong in 2025?”

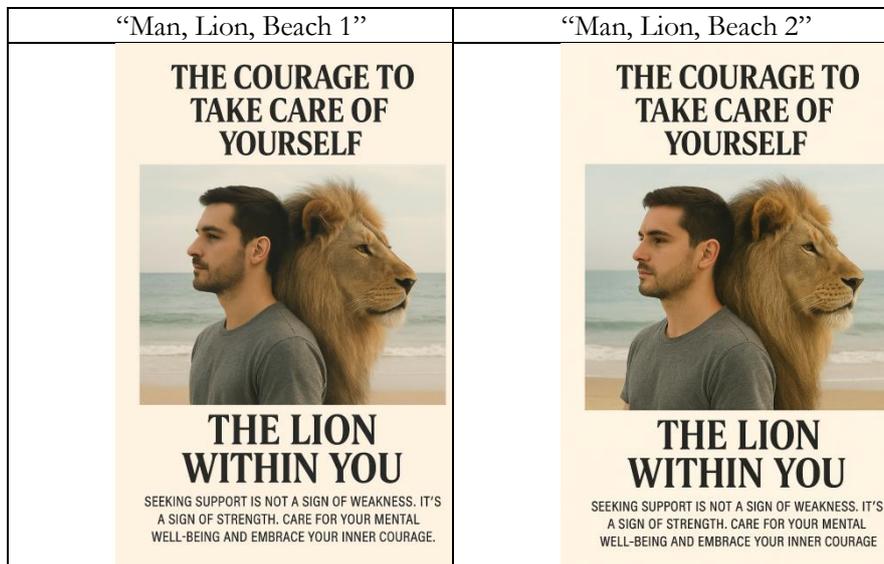
ChatGPT also developed campaign themes focused on specific mental health challenges. For burnout, the slogan suggested was “Even lions do not run constantly—they sometimes rest under the tree.” For anxiety, it proposed “The lion senses danger but looks it in the eye.” Regarding men’s mental health, an especially important theme, the message was “Silent lions also suffer.” In this campaign, the lion served as a metaphor for psychological resilience—not about the absence of fear, but the ability to continue despite it.

In the “Additional” category, the AI suggested incorporating folklore motifs such as lions from coats of arms, embroidery patterns, and ancient coins. It proposed creating a short animation where a lion and a human shake paw and hand, as well as integrating authentic stories of Bulgarians who had faced adversity and grown stronger. The system concluded by asking several follow-up questions to refine the campaign: “What should the visual identity of this idea be?”; “Should a storyboard for a video or poster be developed?”; or “Should texts for a social campaign with psychologists be prepared?” (OpenAI, 2023).

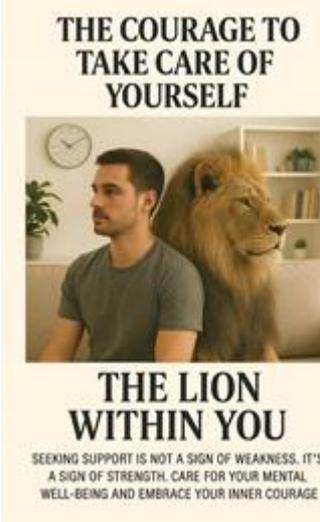
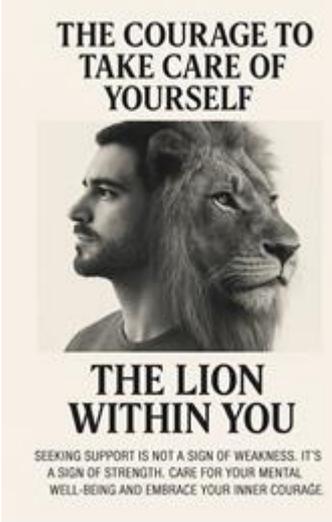
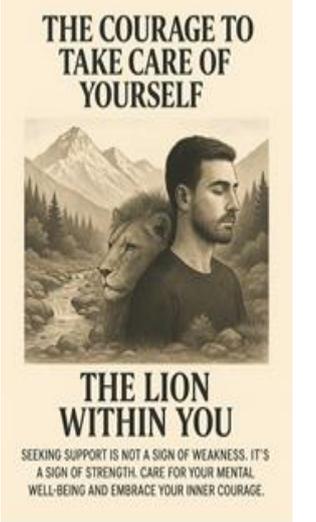
Following this, the author prompted ChatGPT to “create a visual identity that includes the image of a lion.” The AI generated the image “Man and Lion,” aligning with its earlier suggestion of merging a human face with that of a lion. The text appeared in English, as no specific language was requested. Subsequent prompts explored alternative variations. One instructed the AI to create “a more playful and creative style with the same messages,” resulting in the image “Lion in an Armchair.” Another prompt requested a realistic depiction of a lion in a similar style to the first image, generating “Lion on the Couch.” Finally, the author asked for an image emphasizing the theme “The lion senses danger but looks it in the eye,” which produced the image “Lion Faces the Danger.” Notably, the AI demonstrated difficulties with Bulgarian script, misplacing certain letters (e.g., writing “ЛБ” instead of “ЛЪ”) and incorrectly splitting words. As the language of the text was not specified, two of the images were generated with English captions, and the third with Bulgarian (OpenAI, 2023).



Subsequently, the idea was developed to create an image depicting a man and a lion on the beach. For this purpose, the following prompt was applied: "Create a similar image with these messages, but place the man on the beach by the sea, with a lion behind him." The result was the generation of Image "Man, Lion, Beach 1." As the outcome was deemed unsatisfactory, an additional prompt was submitted: "Please make the man's eyes more realistic, as they do not look good—whereas the lion's eyes are fine. Regenerate this image, please!" In response, the system produced Image "Man, Lion, Beach 2." (OpenAI, 2023)



Subsequently, Image 3, "Man, Lion, Mountain," was created based on Image 2, "Man and Lion," following the prompt: "I want you to generate a similar image that conveys the same messages, but also integrates national symbols such as mountains and springs, with the lion situated among them as a metaphor for the man's inner world." This image, together with Image 5, "Man, Lion, Office 2," was generated using one of my personal Google accounts. (OpenAI, 2023)

"Man, Lion, Office"	"Man and Lion"	"Man, Lion, Mountain"
		

The two images featuring a man and a lion at the beach (1.1. "Man, Lion, Beach 1" and 1.2. "Man, Lion, Beach 2") were based on Image 2, "Man and Lion," and were generated using a student Google account (stu2306467033@uni-plovdiv.bg). Building upon these visuals, the system generated Image 1, "Man, Lion, Office," which was selected for inclusion in the survey. From the same account, Image 5, "Man, Lion, Office 2," was also produced and will be discussed in greater detail on the following page.

The same profile was used to translate the text on the advertising poster. The artificial intelligence was prompted with the instruction: "Translate the message into Bulgarian and explain its meaning." The system returned the following text: "The Courage to Care for Yourself. The Lion Within You"; "Seeking support is not a sign of weakness. It is a sign of strength. Take care of your mental health and embrace your inner courage."

The explanation provided by the system stated: "This poster encourages individuals to view caring for themselves, and particularly their mental health, as an act of inner strength and bravery rather than weakness. The lion symbolizes this inner power—the confidence that each person carries within themselves, even during difficult times. The message inspires people to seek help when needed—whether from a therapist, a friend, or a loved one—and to understand that doing so represents a true expression of courage." (OpenAI, 2023)

In addition, Image 3, "Man, Lion, Mountain," was used as the basis for a subsequent prompt: "Create a similar image, but place the man and the lion at the same level, positioned on the beach." The objective of this instruction was to examine whether the artificial intelligence would generate an image resembling a pencil drawing, similar to the previous one. The result was Image 4, "Man, Lion, Beach." (OpenAI, 2023)

A further image was also generated based on Image 3, "Man, Lion, Mountain," with the prompt: "Create a similar image with these messages, but place the man in a therapeutic office, again with a lion behind him. Keep only the man and the lion, but change the background to a therapeutic office." The outcome was satisfactory and is presented as Image 5, "Man, Lion, Office 2." (OpenAI, 2023)

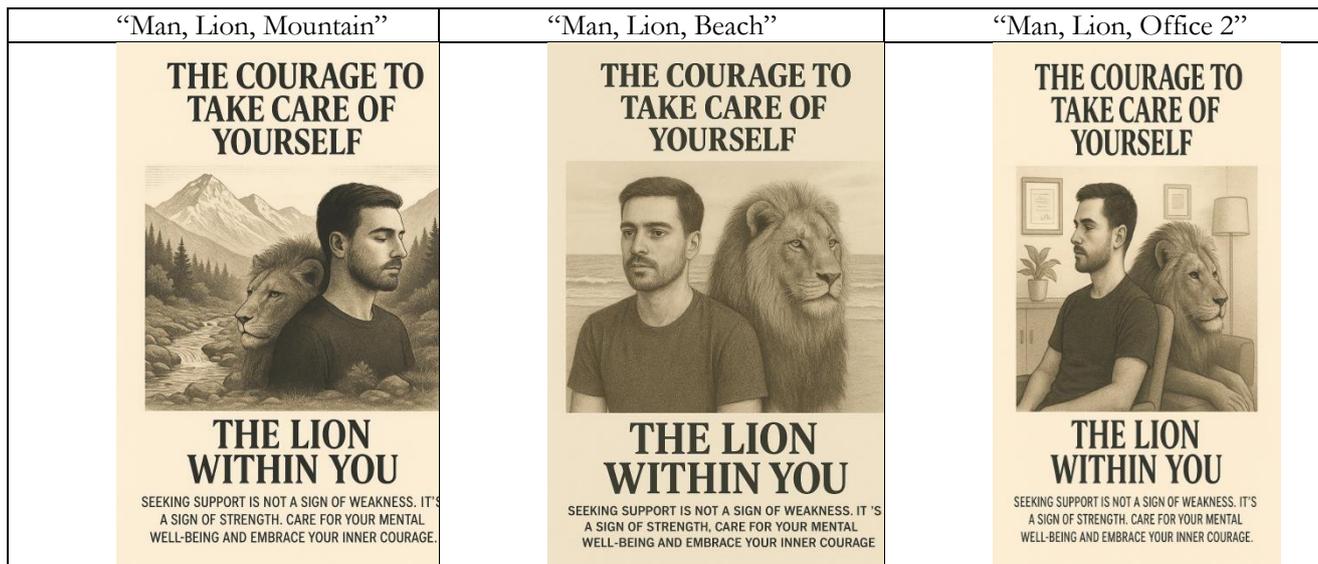


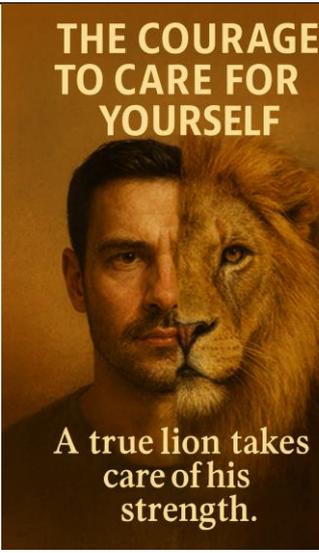
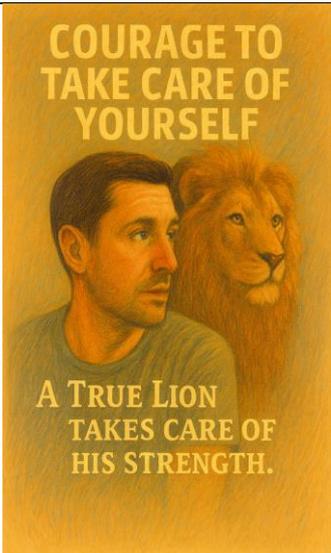
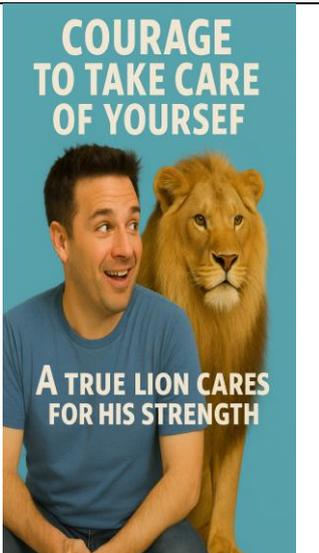
Image 4, “Man, Lion, Beach”, was generated using a personal Google account, together with another beach-themed image of a man and a lion, which was not included in the present study. From the same account, Image 2, “Man and Lion”, was also created. Different accounts were deliberately used in order to bypass the limitations imposed by ChatGPT on the number of images that could be generated within a specific time frame.

The images produced by ChatGPT demonstrate considerable diversity in terms of design, color palette, composition, and other stylistic aspects. The results indicate that the system is capable of producing advertising campaigns that incorporate contemporary visual trends and apply techniques of emotional persuasion aimed at engaging audiences.

A new chat session was subsequently initiated, in which the following prompt was provided: “Create an image based on the following advertising campaign, including the figures of a lion and a man.” The campaign developed by ChatGPT in the earlier session was inserted as a reference. The system responded with two clarifying questions: “Should the visual be designed as a poster (vertical) or as a social media post (square/ slightly vertical)?” A vertical poster format in a realistic style was specified, resulting in the generation of Image “The Courage to Care 1.”

A second prompt was then introduced: “I want the man to look sideways as if speaking to a therapist, with the lion positioned behind him, and let the style be artistic/illustrative.” This instruction generated Image “The Courage to Care 2.” Finally, a third prompt was provided: “Return to a realistic style, but make the poster humorous, lighthearted, and fresh.” This produced Image “The Courage to Care 3.”

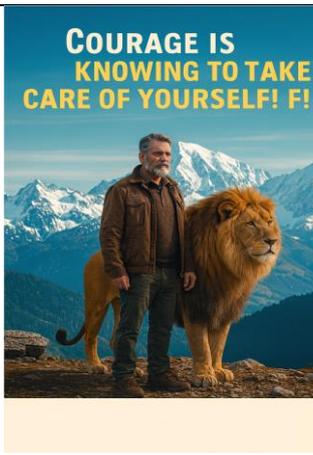
The generated visuals differ substantially from the earlier set, despite being created in ChatGPT and based on its own proposed campaign. This illustrates the system’s ability to generate a wide range of poster variations. Unlike the previous images, the system in this case rendered the textual content in Cyrillic, although spelling errors were present. Correct inscription was observed only in Image “The Courage to Care 2”, where an artistic/illustrative style had been explicitly requested. In the other two images, both generated in a realistic style, errors appeared in the Cyrillic text, with some characters incorrectly replaced by Latin letters (OpenAI, 2023).

“The Courage to Care 1”	“The Courage to Care 2”	“The Courage to Care 3”
		

Experiments were conducted with Google’s new artificial intelligence system – **Gemini**. The first image was generated based on image 2, “*Man and Lion*”, which was uploaded through the file input option, with the purpose of testing how the system performs when provided with a sample illustration (Google, 2025). Despite the presence of a reference image, the prompt did not specify that the faces of the man and the lion should blend. As a result, as seen in “*Man and Lion – Gemini 2.0*”, the model produced two separate faces.

The next instruction contained the following prompt: “*Generate an image of a man and a lion in the mountains, and let the message be ‘Courage is taking care of yourself!’ in the style of an advertising poster.*” The generated image was titled “*Man, Lion, Mountain – Gemini 2.0.*”

For the middle image, the prompt was: “*An image in which the man and the lion are situated in a therapy office.*” The result was “*Man, Lion, Office – Gemini 2.0.*” (Google, 2025). When it was not explicitly stated that the lion should be positioned behind the man, and insufficient conceptual information was provided, the artificial intelligence interpreted one figure as the psychologist and the other as the client.

“ <i>Man and Lion – Gemini 2.0</i> ”	“ <i>Man, Lion, Office – Gemini 2.0</i> ”	“ <i>Man, Lion, Mountain – Gemini 2.0</i> ”
		

The **Gemini 2.5 Pro** version was also tested, beginning with the following prompt: “*Generate an image of a man and a lion in the mountains, with the message ‘Courage is taking care of yourself!’ The style should resemble an advertising poster.*” To much surprise, the generated result was the image “*Man and Lion – Gemini 2.5 Pro,*” in which the lion was absent

and the message appeared in an unintelligible language, rather than in Bulgarian.

A subsequent prompt was formulated as follows: *“I want there to be a lion, and I want them to be in the mountains, but they are not there and there is no lion? Try again.”* Following this instruction, the language model produced the image *“Man, Lion, Mountain – Gemini 2.5 Pro.”*

For the intermediate image *“Man, Lion, Office – Gemini 2.5 Pro,”* the prompt included the clarification: *“That is much better, and now generate again in the same style an image of a man and a lion situated in a therapeutic office.”*

“Man and Lion – Gemini 2.5 Pro”	“Man, Lion, Office – Gemini 2.5 Pro”	“Man, Lion, Mountain – Gemini 2.5 Pro”
		

The next idea involved generating an image using **Gemini 2.0**, with the entire advertising campaign created by ChatGPT provided as the prompt. This resulted in the first image, *“Man and Lion – Gemini 2.0.”* For the second image, *“Man, Lion, Office – Gemini 2.0,”* the prompt specified: *“I want the man to look sideways as if speaking to a therapist, with the lion positioned behind him, and both situated in a therapeutic office.”* For the third image, *“Man, Lion, Mountain – Gemini 2.0,”* the request was: *“Now let the man and the lion be in the mountains.”* In this case, the decision was made not to include a textual message, as this language model does not handle Cyrillic script well and tends to produce errors (Microsoft, 2025).

In this instance, the language model independently generated the blended faces in the first image, based on the campaign. A more detailed prompt was intentionally formulated for the second image, given prior experience that if not specified, the model tends to place the man and the lion facing each other, which was not the intended message. Since no specific positioning was required for the third image, aside from the condition that they appear in the mountains, Gemini 2.0 placed the man and the lion side by side.

“Man and Lion – Gemini 2.0”	“Man, Lion, Office – Gemini 2.0”	“Man, Lion, Mountain – Gemini 2.0”
		

Using **Gemini 2.5 Pro**, a prompt containing the entire advertising campaign generated by ChatGPT was applied, resulting in the creation of the image “Man and Lion – Gemini 2.5 Pro.” For the second image, “Man, Lion, Office – Gemini 2.5 Pro,” the prompt specified: “I want the man to look sideways as if speaking to a therapist, with the lion positioned behind him, and both situated in a therapeutic office.” However, as can be observed, the lion was not placed behind the man but rather inside a wardrobe. The man is depicted looking forward instead of toward the psychologist, whose presence is indicated only by a visible hand holding a notebook. For the third image, the prompt was: “I want the man and the lion to stand side by side, looking in the same direction, and to be situated in the mountains.” The resulting image, “Man, Lion, Mountain – Gemini 2.5 Pro,” represents an acceptable version.

“Man and Lion – Gemini 2.5 Pro”	“Man and Lion – Gemini 2.5 Pro”	“Man, Lion, Mountain – Gemini 2.5 Pro”
		

Gemini 2.0 and Gemini 2.5 Pro (experimental) did not succeed in generating an advertising campaign under the same parameters applied to ChatGPT. Only a slogan, focus, and concept were produced, while essential components such as campaign goals, name, main idea, target audience, suggestions for social media, and examples of video content were absent.

In contrast, when an attempt was made to create an image with Microsoft’s Copilot, the system allowed for the generation of only one image. During the process, it was observed that the loading interface resembled that of Microsoft Designer, leading to the assumption that the images were generated through this platform. After logging into a personal account, it was established that the free version provided 15 credits per month, and prompts were required to be written exclusively in English.



The same prompts previously applied to Gemini 2.0 were tested; however, the resulting images lacked precision and required greater specificity. Microsoft Designer generated four versions per prompt, from which one was selected for inclusion in the comparative table. For the first image, the prompt was: *“I want a poster that features a man and a lion, their faces blending into each other, the theme being courage to go to therapy,”* which resulted in the image “Man and Lion – Copilot.” For the second image, “Man, Lion, Office – Copilot,” the prompt was: *“I want a poster that shows a man and a lion, with the lion behind the man and the man talking to a psychologist in front of him, and the two of them in a therapy room. The theme of the poster is: courage is taking care of yourself.”* For the third image, “Man, Lion, Mountain – Copilot,” the applied prompt was: *“I want a poster that features a man and a lion, looking in the same direction and in the mountains. The theme of the poster is: courage is taking care of yourself.”* (Microsoft, 2024).

Overall, this artificial intelligence demonstrated limited ability to generate persuasive campaign messages, even when working in English, in contrast to ChatGPT, which was more consistent in maintaining coherence across both visual and textual outputs.

Conclusion

The empirical part of the research confirms that audience perception of AI-generated advertisements largely depends on the quality of the visual content and the clarity of the message. At the same time, the issue of trust and ethical dilemmas remains highly relevant in the integration of AI into the advertising industry.

Hypothesis Summary

Main Hypothesis: Despite the increasing application of artificial intelligence in advertising, consumers remain cautious and skeptical, particularly regarding ethical concerns and the reliability of content.

Partially confirmed – there is interest and positive engagement with innovations, but trust remains limited, especially when technical weaknesses are evident.

Hypothesis on the effectiveness of different AI systems: ChatGPT generates more structured and coherent advertising campaigns compared to Gemini and Copilot.

Confirmed – ChatGPT demonstrates a comprehensive approach, while the other systems provide fragmented outputs.

Hypothesis on visual impact: Clear visual messages and symbolic elements (e.g., national symbols such as the lion) enhance audience trust and emotional engagement.

Confirmed – images of the man and lion in different contexts (beach, office, mountain) reinforce perceptions of courage, resilience, and authenticity.

Hypothesis on language barriers: Generative models encounter difficulties when working with Cyrillic script, which affects the quality of the final visual materials.

Confirmed – spelling errors and incorrect character rendering were observed across all systems (except ChatGPT in text-based output).

This study examined the application of artificial intelligence in advertising communication through a comparison of different generative systems (ChatGPT, Gemini, Copilot). The results indicate that ChatGPT stands out with its ability to generate consistent advertising campaigns, including goals, messages, visual concepts, and ideas for social media, while largely adhering to the parameters of the given prompts. In contrast, Gemini (2.0 and 2.5 Pro) and Copilot demonstrate significant limitations—producing only isolated elements such as a slogan or an image, but failing to offer comprehensive and well-structured campaigns. Technical weaknesses were also observed, including difficulties with Cyrillic text, incorrect positioning of visual elements, and a lack of contextual precision.

References

1. Alice, E. M., & Senft, T. M. (2013). Microcelebrity and the branded self. In J. Hartley, J. Burgess, & A. Bruns (Eds.), *A companion to new media dynamics* (pp. 346–354). Wiley-Blackwell.
2. Azaria, A. (2022). Artificial intelligence in marketing: Opportunities and challenges. *Journal of Marketing Technology*, 15(3), 45–59.
3. Bhargava, R., & Sundaram, S. (2021). Personalization in digital advertising through artificial intelligence: A user engagement perspective. *Journal of Interactive Marketing*, 56(2), 12–24.
4. Chaudhari, R. (2024). Artificial intelligence: Types and applications. *International Journal of Emerging Technologies*, 19(1), 33–47.
5. DeCordova, R. (1990). *Picture personalities: The emergence of the star system in America*. University of Illinois Press.
6. Drenten, J., & Brooks, G. (2020). Virtual influencers: More human than humans? *Journal of Digital & Social Media Marketing*, 8(1), 56–72.
7. Dyer, R. (1998). *Stars*. British Film Institute.
8. Ferrel, O. C., Hirt, G. A., & Ferrel, L. (2021). *Marketing strategy* (8th ed.). Cengage Learning.
9. Fraiwan, M., & Khasawneh, M. (2023). Visual ChatGPT: Expanding the multimodal capabilities of AI. *Journal of Artificial Intelligence Research*, 72(4), 222–236.
10. Google. (n.d.). Introducing Gemini: Google's multimodal AI model. Retrieved from <https://ai.google/>
11. Haleem, A., & Javaid, M. (2022). Applications of artificial intelligence in business management and marketing. *International Journal of Management Science*, 17(3), 101–118.
12. Hosseini, S., & Horbach, J. (2023). The role of AI in customer engagement: A systematic review. *Journal of Business Research*, 156, 113–128.
13. Jeffery, S. (2022). The history of artificial intelligence: From logic to deep learning. *AI & Society*, 37(2), 567–583.
14. Kelly, C. (2023, December). Coca-Cola's AI-powered marketing strategies. *Marketing Dive*. Retrieved from <https://www.marketingdive.com/>
15. Kelly, C. (2025, January). Inside Coca-Cola's AI innovation team. *Marketing Dive*. Retrieved from <https://www.marketingdive.com/>
16. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96.
17. Manning, C. D. (2020). Machine learning and artificial intelligence in modern contexts. *Annual Review of Linguistics*, 6, 11–33.
18. Marwick, A. E. (2013). *Status update: Celebrity, publicity, and branding in the social media age*. Yale University Press.
19. Microsoft. (n.d.). Introducing Copilot: Your everyday AI companion. Retrieved from <https://www.microsoft.com/>
20. Ray, P. P. (2023). Ethical implications of ChatGPT in digital marketing. *Journal of Ethics in AI*, 4(2), 67–83.
21. Rojek, C. (2001). *Celebrity*. Reaktion Books.
22. Sameer, A., & Baniyassen, H. (2023). AI in advertising: Enhancing targeting and personalization.

- International Journal of Marketing Studies, 15(2), 89–102.
22. Schulman, J., et al. (2022). Language models are few-shot learners: GPT-3 in practice. Proceedings of the NeurIPS Conference, 35, 112–124.
 23. Shieber, J. (2019, April 24). Brud, the company behind Lil Miquela, is now worth \$125 million. TechCrunch. Retrieved from <https://techcrunch.com/>
 24. Taski, N., & Dal, S. (2023). The rise of ChatGPT in academic and marketing contexts. International Journal of Information Management, 68, 102–118.
 25. The Coca-Cola Company. (2023). Create Real Magic: Coca-Cola and OpenAI partnership. Retrieved from <https://www.coca-colacompany.com/>
 26. Zaman, R. (2022). Emerging technologies in marketing: The role of AI, IoT, and blockchain. Journal of Strategic Marketing, 30(5), 443–460.
 27. Zhou, Q., & Nabus, T. (2023). DALL·E and the ethics of AI-generated visual content. Journal of Visual Culture, 22(3), 309–326.