Akdeniz Journal of

Communication Studies

Peer Reviewed Journal

e-ISSN: 3149-9317

June 2026, (52): 45-68

Article Type: Research
Submitted: 06.01.2026
Revision Requested: 15.02.2026
Last Revision Received: 18.02.2026
Accepted: 14.05.2026

Generative Use Of Artificial Intelligence In Advertising: Youtube User Sentiment Analysis Through Coca Cola 'The Holiday Magic Is Coming' Commercial

Nida Biçer[1]

Emine Özen Okat[23]

Citation (APA 7): Biçer, N., & Okat, E. Ö. (2026). Generative Use Of Artificial Intelligence In Advertising: Youtube User Sentiment Analysis Through Coca Cola 'The Holiday Magic Is Coming' Commercial. *Akdeniz Journal of Communication Studies*, (52), 45-68.

Abstract

Purpose: The rapid development of artificial intelligence, particularly generative artificial intelligence (GenAI), has significantly transformed the advertising industry. Multimodal GenAI systems capable of producing text, audio, images, and video have introduced new forms of creative experimentation. Within this transformation, audience responses play a crucial role in shaping how brands and professionals adopt and integrate GenAI into advertising practices. Accordingly, understanding the affective orientation reflected in audience discourse toward AI-generated advertisements has become an emerging research area. The primary objective of this study is to examine the sentiment distribution of viewer responses to a GenAI-produced advertisement.

Design/methodology/approach: The research analyzes user comments on Coca-Cola's "The Holiday Magic Is Coming" commercial, which was presented as generated with artificial intelligence. A total of 7,233 YouTube comments were collected and examined using MAXQDA PRO 2024 through automated sentiment analysis and complementary word frequency analysis.

Findings: The findings indicate that viewer responses are not predominantly positive. Neutral sentiment constitutes the largest proportion of comments, while positive sentiment remains comparatively limited. The results suggest that audience discourse is oriented not only toward the narrative content of the advertisement but also toward the technological and ethical implications of GenAI use.

Research limitations/implications: In expressions containing irony and sarcasm, the discrepancy between lexical units and their context limits the accuracy of dictionary-based analyses. Due to this limitation, the findings should be interpreted as a statistical reflection of semantic indicators rather than as a complete semantic inference.

[1] Master Student, Ege University, nidabicer@gmail.com, ORCID: 0009-0000-4866-3266
[2] Assoc. Prof. Dr. Ege University, ozen.okat@ege.edu.tr, ORCID: 0000-0002-9503-3993
[3] Corresponding author

Practical implications: We propose a human-centered approach to AI integration in advertising. Framing generative AI as a collaborative tool that augments human creativity—rather than as an autonomous creator—may help mitigate perceptual resistance through transparent communication, ethical considerations, and an emphasis on creative intent.

Originality/value: Overall, the study contributes to advertising research by linking large-scale sentiment analysis to discussions on authenticity, emotional resonance, and human–AI collaboration in creative production.

Keywords: Generative Artificial Intelligence, Advertising, Sentiment Analysis, Audience Response

Introduction

With the continued advancement of generative artificial intelligence (GenAI) models and their integration into the advertising sector, new questions have emerged concerning both the opportunities and the risks associated with AI-assisted creative production. While GenAI offers advantages such as time and cost efficiency, scalability, and idea generation, it also raises concerns related to job displacement and the perception that algorithmically generated outputs may lack the originality and authenticity traditionally attributed to human creativity (Haenlein & Kaplan, 2019; Koçyiğit & Darı, 2023; Schultz, 2016; Sun et al., 2024) (Ünal & Kılınç, 2024; Yastıoğlu, 2023)

Research examining the impact of artificial intelligence on creativity-driven domains has yielded mixed results. Elgammal et al. (2017) found that participants were often unable to distinguish AI-generated artworks from human-produced works (Elgammal et al., 2017) Similarly, Rebelo et al. (2022) reported that AI-transformed videos were sometimes perceived as more creative than non-transformed ones (Rebelo et al., 2022). Conversely, other studies argue that AI-generated works are not evaluated as equivalent to human-created art in terms of artistic value and authenticity (Hong & Curran, 2019). These findings suggest that audience perception of AI-generated creative content remains contested and context-dependent.

In the field of advertising, audience discourse surrounding AI-generated campaigns has gained increasing attention. Existing studies indicate that AI-supported advertising strategies may be positively received in certain contexts, particularly among younger audiences (Çavus & Yilmaz, 2024; Sarı, 2023). Other research reports favorable evaluations of perceived advertisement quality when AI tools are employed in production (Çeber & Çeliker, 2024). Additionally, sentiment-based analyses of social media discussions have found generally positive reactions toward the adoption of AI in advertising practices (Wu et al., 2022)

However, empirical research systematically examining large-scale user-generated discourse on fully AI-produced advertisements remains limited. In particular, the affective orientation reflected in audience comments toward GenAI-generated advertising films has not been extensively analyzed through automated sentiment classification. Given the growing relevance of GenAI in advertising production and

the ongoing debates surrounding authenticity and creative attribution, further investigation into audience sentiment patterns is warranted.

Accordingly, this study contributes to the literature by analyzing the sentiment distribution of YouTube user comments on a GenAI-produced advertisement. By focusing on affective polarity reflected in user discourse rather than multidimensional attitudinal constructs, the research aims to provide empirical insight into how audiences emotionally position themselves toward AI-generated advertising content

1. Literature Review

Artificial intelligence (AI) systems are classified as narrow AI, general AI, and super AI in line with their stages of development. While narrow AI is designed to imitate human intelligence, general AI aims to produce outputs at the level of human capacity. Super AI, on the other hand, is considered the third generation of AI systems that have not yet fully developed. It is stated that these systems will represent the most advanced phase of AI, incorporating scientific creativity, general knowledge, and social skills along with consciousness not found in previous systems—and will surpass human intelligence (Karabulut, 2021).

AI has experienced three major waves of research: (1) the computational power of computers with limited processing capacity, (2) the development of artificial neural networks that operate similarly to the human brain but with enhanced computational ability, and (3) deep learning (Polat & Öcal, 2020). Although generative models trace back to the 1950s, with the development of Hidden Markov Models (HMMs) and Gaussian Mixture Models (GMMs), significant improvements in the performance of generative models did not occur until the emergence of deep learning (Cao et al., 2023; Knill & Young, 1997; Reynolds, 2015).

With the advancement of deep learning, the transition from AI to generative AI has accelerated. This transition first involved enhancing the fundamental capabilities of AI and subsequently making these capabilities applicable to creative and generative tasks. Owing to deep learning's ability to learn complex features from large datasets, AI has made a major leap in its generative capacities (Avcı, 2024)

Artificial Intelligence (AI) is a branch of computer science concerned with theories and methods for building machines capable of thinking and acting like humans. A subfield of AI, Machine Learning (ML), is a system that enables the training of models using input data. Deep learning, in turn, is a machine learning technique that employs artificial neural networks. Generative Artificial Intelligence (GenAI) is defined as a subset of deep learning, also utilizing neural networks. While general AI systems are designed to perform a wide range of tasks such as data analysis, pattern recognition, decision-making, and language processing, generative AI is specifically developed to generate new data, content, or ideas (Avcı, 2024)

Generative AI (GenAI) is a type of AI technology capable of producing diverse forms of content, including audio, text, images, and synthetic data. Generative AI models create new content based on

what they have learned from existing material. These models identify and internalize fundamental patterns and structures within training data and subsequently generate new data that shares similar characteristics and features (Sengar et al., 2025)

The transition from conventional AI to generative AI was critically shaped by the introduction of Generative Adversarial Networks (GANs) in 2014 and the development of Large Language Models (LLMs) (Avcı, 2024; Holger Harreis, 2023; Michael Chui, 2022) Following the emergence of GANs, other approaches such as Variational Autoencoders (VAEs) and diffusion-based generative models were developed to provide more detailed control over the image generation process and to produce higher-quality visuals (Cao et al., 2023).

The application of GenAI has expanded across a wide range of industries, highlighting its versatility and transformative potential. It has been used to create content that pushes the boundaries of creativity. Today, generative AI has initiated an unprecedented pace and scale of change, standing out not merely as an algorithm-driven system but as a concept of AI capable of undertaking multiple tasks—most notably creative ones—thereby marking a new milestone in the evolution of artificial intelligence (Yastıoğlu, 2023).

1.1. Generative Artificial Intelligence Model Architectures

Generative artificial intelligence (GenAI) is developed by training computer programs with billions of data samples, including text, images, and audio. Based on the knowledge acquired from existing content, GenAI generates new content. The process of learning from existing data is referred to as training, at the end of which a statistical model is constructed. When prompted, GenAI employs this statistical model to predict what an appropriate response might be and then produces new content. In this way, it learns the structure of the data and can generate new outputs resembling the data on which it was trained.

The most commonly used models in GenAI applications include Large Language Models (LLMs)—AI models designed to generate text-to-text conversational outputs, Generative Adversarial Networks (GANs)—a deep learning architecture, Variational Autoencoders (VAEs), and Transformer-based models. These models are capable of producing high-quality and coherent texts, images, and animations (Aydın & Karaarslan, 2023)

Table 1.

Comparison of Generative AI Model Architectures

Architectures	**Source**	**Generated Output**	**Input**	**Purpose**	**Core Technique**	**Output Control**	**Application Area**
Style Transfer	(Gatys et al., 2016)	New image combining content and style	Content image + style image	Transfer artistic styles to visuals	CNN-based feature map combination	Content and style can be selected separately	Art, design, photo editing
GAN (Generative Adversarial Networks)	(Goodfellow et al., 2014)	Realistic images, videos, sounds	Noise or conditional data	Generate realistic new samples	Competition between generator & discriminator networks	Prompt, conditional data, latent vector	Deepfake, art, image synthesis
Diffusion Models	Stability AI, 2022	High-quality visuals (e.g., DALL-E, MidJourney)	Noise (iteratively denoised)	Generate realistic visuals from noise	Reverse probability distribution	Prompt + guidance parameters	Photography, illustration, video generation
VAE (Variational Autoencoders)	(Kingma & Welling, 2013)	Visual and audio samples	Random vectors	Represent data in low-dimensional latent space and generate new samples	Encoder-Decoder architecture	Control in latent space	Audio/visual generation, data augmentation

Architectures	Source	Generated Output	Input	Purpose	Core Technique	Output Control	Application Area
Transformers	(Vaswani et al., 2017)	Text, images (e.g., BERT, GPT)	Text prompt	Generate text, follow instructions	Encoder-Decoder + attention mechanism	Prompt-based guidance	Text and image generation
LLM (Large Language Models)		Coherent text outputs	Text prompt	Natural language generation and processing	Transformer-based	Prompt engineering	Chatbots, text generation, customer interaction

1.2. Types of Generative Artificial Intelligence and Its Use in the Advertising Industry

The development of generative artificial intelligence (GenAI) has transformed the advertising industry by enabling personalized advertising, dynamic content generation, the use of voice and visual assistants, as well as the production of images and videos. The innovations that technological progress has brought, or is expected to bring, to the implementation of advertising practices have increasingly become the focus of academic inquiry (Anantrasirichai & Bull, 2022; Çeber, 2024; Deng et al., 2019) (Doğan, 2023; Huh et al., 2023). GenAI applications have provided powerful tools for advertising activities such as content and video production, offering advertisers an environment to create innovative and customizable content that fosters stronger connections with consumers (Çeber, 2024; Deng et al., 2019; Guo et al., 2021; Kietzmann et al., 2018; Vakratsas & Wang, 2020).

By integrating human creativity with artificial intelligence techniques, GenAI applications have transformed the advertising sector, bringing hybrid working methods to the forefront. In this context, the use of GenAI has created strong impacts in terms of efficiency, creativity, speed, contextualization, and the production of textual, auditory, and visual content (Coşkun, 2024; Çeber & Çeliker, 2024). Although GenAI technologies may not always yield perfectly accurate outputs, their ability to produce results close to user prompts or to generate creative ideas contributes significantly to the advertising industry. Accordingly, models that generate text, audio, images, and video are widely utilized throughout the stages of advertising production. Table 2 presents the definitions, examples of use, and key attributes of these models, along with their advantages and disadvantages.

Table 2.

Generative AI Models in Advertising

Category	Definition/ Function	AI Models / Platforms	Advertising Use	Examples	Advantages	Limitations/Ethical Issues
Text-to-Text	Generates new text from text input	Chat GPT series, Gemini, Deep Seek, Copilot	Slogan creation, content production, strategy development	Aptamil advertising strategy; Quality Logo Products slogan research	Supports creativity, fast production, targeting with big data analysis	Originality is debatable; more research needed on consumer perception
Text-to-Speech	Produces natural voices from text	Respeecher, Resemble.ai, TTSOpenAI, Minimax, ElevenLabs	Voice ads, dubbing, brand voice creation	Spotify Ad Studio	Natural and emotional voices; low cost; personalization	Voice cloning ethical concerns; cultural disinformation risk
Text-to-Image	Generates visuals from text	Chat GPT, Midjourney, DeepAI, ImagineArt, Ideogram	Poster, logo, packaging design, social media content creation	Coca-Cola "Create Real Magic"; McDonald's "Perfect Fried Chicken"; Burger King "Million Dollar Whopper"; Heinz AI Ketchup	Fast production; cost advantage; diversity	Originality is debatable; lack of creativity in professional evaluations
Text-to-Video	Automatically generates video scenes from text	OpenAI Sora, Runway Gen-2, Pika Labs, Google Veo3	Social media ads; multilingual campaigns; 3D/VFX-supported commercials	Sütaş 50th anniversary ad; IKEA social media concept campaign	Personalized; fast; multilingual support	Visual flaws (naturalness issues); ethical risks

Deepfake (GAN/VAE-based)	Generates realistic faces/bodies/speech from existing visuals	Deepfake Studio, Reface, Impressions	Commercials using synthetic versions of celebrities	Ziraat Bank (Kemal Sunal); Aksigorta (Barış Manço)	Attention-grabbing; nostalgic effect	Naturalness issues (e.g., blinking); ethical risks

1.3. Thoretical Framework

The integration of generative artificial intelligence (GenAI) into advertising production necessitates a theoretical positioning within communication and advertising scholarship. Although GenAI enhances efficiency and scalability (Kietzmann et al., 2018; Vakratsas & Wang, 2020) advertising effectiveness fundamentally depends on authenticity, narrative immersion, and emotional resonance. Therefore, audience responses to AI-generated advertising must be interpreted beyond technological innovation and situated within established theoretical constructs.

1.3.1. Perceived Authenticity and Creative Attribution

Authenticity has long been recognized as a key determinant of persuasion and brand evaluation in advertising (Beverland, 2005; Napoli et al., 2014). Perceived authenticity refers to the extent to which audiences interpret a message as sincere, credible, and grounded in genuine creative intention. In advertising contexts, authenticity is closely associated with perceived human effort, artistic intentionality, and symbolic meaning.

When creative output is attributed to human agency, audiences tend to associate it with emotional labor and originality. Conversely, algorithmic production may shift evaluative focus toward technical execution rather than expressive intent. Research on AI-generated art demonstrates that knowledge of algorithmic authorship can influence perceived creativity and value judgments (Hong & Curran, 2019). Similarly, attribution theory suggests that the perceived source of a message affects evaluative responses (Kelley & Michela, 1980). Thus, in AI-generated advertising, audiences may evaluate not only aesthetic quality but also the perceived locus of creative agency.

Within this framework, reactions to AI-produced advertisements may reflect tensions between innovation and perceived loss of authenticity. The perception of “machine-made” creativity may reduce emotional attachment if audiences associate authenticity primarily with human intentionality.

1.3.2. Narrative Transportation and Emotional Conveyance

Narrative transportation theory posits that persuasion increases when audiences become cognitively and emotionally immersed in a story (Green & Brock, 2000). In advertising, emotional engagement and

narrative immersion significantly influence brand attitudes and recall (Escalas, 2004; Laer et al., 2014). Emotional conveyance is therefore central to advertising effectiveness.

AI-generated advertising introduces a potential disruption in narrative immersion. Even when visually sophisticated, content perceived as fully automated may hinder emotional transportation if audiences interpret it as lacking human expressiveness. As Huh, Nelson, and Russell (Huh et al., 2023) argue, AI advertising challenges traditional notions of creative authorship and emotional storytelling in the field.

Therefore, examining viewer responses through sentiment distribution provides insight into whether AI-generated advertisements activate emotional immersion or remain framed as technological demonstrations. A predominance of neutral or negative sentiment may indicate reduced narrative transportation and emotional resonance.

1.3.3. Human–AI Collaborative Creativity

Contemporary creativity research increasingly conceptualizes artificial intelligence not as a replacement for human creativity but as a collaborative partner (Vinchon et al., 2023). The human–AI collaboration framework suggests that creative outcomes emerge from interaction between algorithmic generative capacity and human curatorial, ethical, and narrative judgment.

In advertising, this collaborative perspective is particularly relevant. Vakratsas and Wang (2020) argue that AI can enhance advertising creativity when integrated strategically rather than deployed autonomously. Similarly, Kietzmann et al. (2018) emphasize that AI's value in marketing lies in augmenting—not substituting—human decision-making processes.

Public discourse surrounding AI in creative industries often includes concerns about labor displacement and dehumanization of artistic production (Sun et al., 2024). Consequently, audience responses to AI-generated advertisements may incorporate normative evaluations regarding fairness, employment, and ethical responsibility. Fully AI-generated campaigns may trigger skepticism, whereas campaigns framed as human-guided collaborations may preserve perceptions of intentional creativity.

1.3.4. Positioning the Present Study

Drawing on these theoretical perspectives, the present study situates sentiment analysis findings within broader debates on authenticity, narrative transportation, and human–AI collaboration. While attitude is traditionally conceptualized as a multidimensional construct encompassing cognitive, affective, and behavioral components (Ajzen, 1991; Eagly & Chaiken, 1993), this research focuses specifically on the affective dimension reflected in textual sentiment.

Thus, sentiment analysis is employed not as a comprehensive measurement of attitude but as an indicator of emotional orientation toward AI-generated advertising. By linking large-scale user comment

analysis to theoretical constructs concerning authenticity and creative attribution, the study contributes to emerging scholarship on the perceptual boundary conditions of GenAI in advertising.

2. Methodology

The rapid advancement of generative artificial intelligence technologies has significantly transformed advertising production practices. While AI-assisted systems provide advantages in efficiency, scalability, and content generation, their integration into creative processes raises important questions regarding audience perception and emotional reception.

The primary aim of this study is to examine the affective orientation reflected in audience responses to advertisements created with generative artificial intelligence. Rather than measuring consumer attitude as a multidimensional construct encompassing cognitive, affective, and behavioral components, this research focuses specifically on the affective dimension manifested in textual expressions. Accordingly, automated sentiment analysis is employed to classify the emotional valence of large-scale user-generated comments.

By analyzing audience responses through sentiment distribution, the study seeks to reveal how viewers emotionally position themselves toward AI-generated advertising content and the featured brand**.**

2.1. Research Problem and Questions

Although the use of generative artificial intelligence in advertising is rapidly expanding, empirical research examining audience responses remains limited. In particular, the affective dimension of viewer reactions toward AI-generated advertising films has not been systematically analyzed using large-scale textual data.

Accordingly, the central research question is reformulated as follows:

RQ: What is the dominant sentiment distribution in audience responses to advertisements generated with generative artificial intelligence?

Sub-questions:

RQ1: What types of emotional responses emerge in viewer comments on the AI-generated advertisement?

RQ2: How is the featured brand positioned within the sentiment distribution of user comments?

RQ3: Which comments receive the highest engagement, and what evaluative orientations do they reflect?

In this study, viewer responses to Coca-Cola's "The Holiday Magic Is Coming" commercial were analyzed through sentiment classification using MAXQDA Pro 2024.

2.2. Data Analysis Tool

The dataset consists of 7,233 publicly available YouTube comments associated with the selected advertisement. Comments were collected between 13.06.2025 and 17.06.2025. Each comment was treated as a single unit of analysis.

Due to MAXQDA's technical limitation of uploading a maximum of 1,000 entries per file, the dataset was divided into seven separate files. Each file was analyzed independently under identical analytical parameters, and the results were subsequently aggregated.

Sentiment analysis was conducted using the automated sentiment analysis module integrated into MAXQDA Pro 2024. The system relies on predefined lexical dictionaries and polarity scoring mechanisms. It detects:

- Positive lexical markers
- Negative lexical markers
- Emoji-based affective indicators
- Negations and intensifiers
- Each comment was assigned a polarity score based on the density and co-occurrence of these markers.
- No manual recoding or post-hoc reclassification was performed in order to preserve methodological transparency and algorithmic consistency. Therefore, all sentiment classifications reflect automated lexical scoring.

2.3. Sentiment Analysis Approach

Based on polarity outputs, comments were categorized into six emotional states:

- Positive
- Partially Positive
- Neutral
- Partially Negative
- Negative
- No Emotion

The operational definitions are as follows:

Positive: Comments containing predominantly positive lexical indicators without significant negative counter-markers.

Negative: Comments containing predominantly negative lexical indicators without significant positive counter-markers.

Partially Positive: Comments containing both positive and negative markers, with a higher density of positive indicators.

Partially Negative: Comments containing both positive and negative markers, with a higher density of negative indicators.

Neutral: Comments lacking explicit polarity markers or consisting primarily of descriptive or discursive statements.

No Emotion: Comments composed of non-evaluative elements or minimal textual content.

This categorization reflects lexical sentiment polarity and does not represent a comprehensive attitudinal measurement.

2.4. Research Design

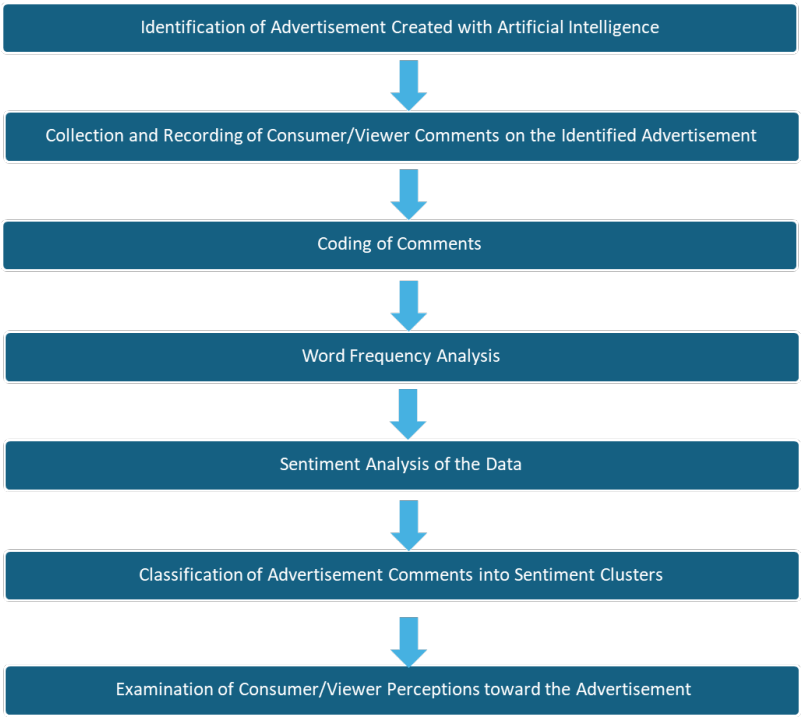
Within this framework, viewer comments on Coca-Cola's "The Holiday Magic Is Coming" commercial were descriptively analyzed through automated sentiment classification and complementary word frequency analysis in MAXQDA Pro 2024.

In addition to sentiment scoring, word frequency, word cloud, and word trends tools were employed. Stop-words were removed, and case normalization was applied to ensure consistency in frequency measurement.

The study adopts a qualitative-interpretive approach supported by automated text mining techniques. Sentiment distribution is interpreted as an indicator of affective orientation rather than as a full measurement of consumer attitude.

Figure 1:

Research Design



2.5. Scope and Limitations of the Research

This study focuses on viewer responses to a single AI-generated advertisement selected through purposive sampling based on engagement metrics.

Within the scope of the research, AI-generated commercials with the highest number of views and interactions on the video-sharing platform YouTube were examined. As a result of this review, Coca-Cola's advertisement "The Holiday Magic is Coming"—which received the highest engagement and viewership—was selected as the case study (see Table 3).

One limitation of dictionary-based sentiment analysis concerns irony and sarcasm detection. Comments containing humor or sarcastic expressions may be misclassified if lexical indicators (e.g., emojis or positive terms) contradict contextual meaning. As illustrated in Table 4, some critical or ironic comments were categorized as partially positive due to algorithmic polarity scoring.

Therefore, findings should be interpreted as indicators of lexical sentiment rather than full pragmatic meaning.

Table 3.

Information on the Advertisement Film Examined within the Scope of the Research

Brand	Video Duration	Advertising Campaign	Number of Views	Number of Comments	Number of Likes	Release Date	Research Period
Coca Cola	01:00	The Holiday Magic is coming	8,366,970	7,233	9,785	18.11.2024	13.06.2025 - 17.06.2025

Table 4.

Examples of Sentiment Analysis Limitations in The Research Process

Viewer Comments	Inference	Emotional State Classification
Filistin❤❤	Social Message	Positive
Pepsi is better’	Negative	Positive
Congratulations for ruining your brand	Negative	Positive
As artifical and soulles as the taste and nutritional content of your drink. Fitting advertisement.	Negative	Positive
My siste's power point better then coca cola adds	Irony	Positive
Genuinely might be one of the worst things i've ever seen in my life	Negative	Neutral

3. Findings

Today, technological development is advancing rapidly. The evolution and widespread adoption of artificial intelligence have brought significant changes to the functioning and implementation methods across all industries. As a global brand, Coca Cola, like many other leading corporations, closely follows technological advancements and actively incorporates artificial intelligence tools and generative AI applications into its advertising practices.

In this context, at the beginning of 2024, the brand produced its "Real Magic" advertising series using generative AI. Within the scope of this study, it was observed that in the commercial titled "The Holiday Magic is Coming", Coca Cola employed imagery such as its iconic polar bear, reindeer and sleigh representing Christmas, a black-and-white television evoking nostalgic celebrations, the Hubble telescope symbolizing technological progress, and Coca Cola delivery vehicles emphasizing accessibility from rural to urban areas (see: Figure 1). The brand appears to emphasize its image of being open to innovation while remaining faithful to its heritage by blending technological novelty with nostalgic icons and visuals. Furthermore, the advertisement contains no spoken dialogue; instead, it is accompanied by the jingle titled "The Holiday Magic is Coming".

Figure 2.

Selected Frames From Coca Cola's "The Holiday Magic Is Coming" Commercial

Table 5.

Consumer/Viewer Sentiment Analysis Table For Coca-Cola 'The Holiday Magic Is Coming' Commercial

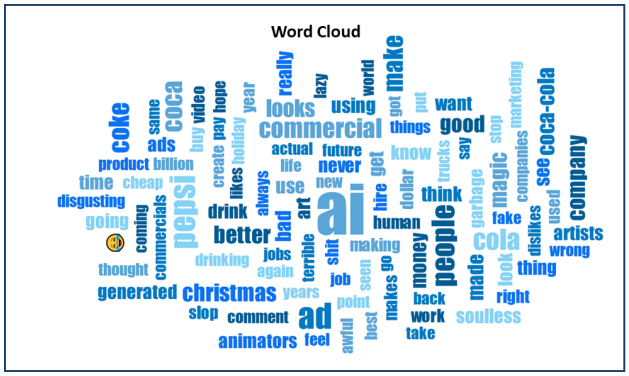
Emotional State	**Number of Emotional States**	**Percentage (%)**
Neutral	2053	28%
Partially negative	1475	20%
Negative	1201	17%
Partially positive	1151	16%
Positive	838	12%
No emotion	515	7%
TOTAL	7233	100%

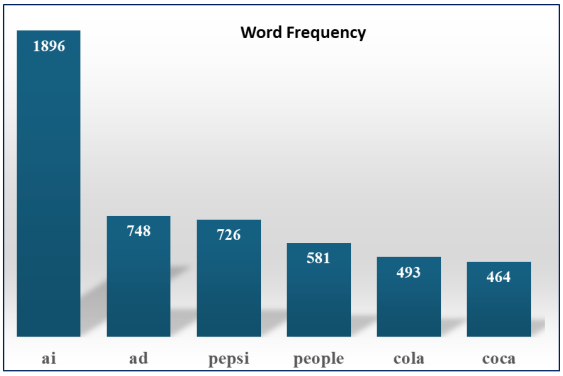
In the sentiment analysis of the Coca Cola commercial released via the YouTube application (Table 5), the neutral emotional state holds the largest proportion. The positive emotional state appears at the lower end of the table, accounting for only 12%. Within the scope of the sentiment analysis, it can be concluded that the consumer/viewer response to the advertisement produced with generative artificial intelligence is not predominantly positive.

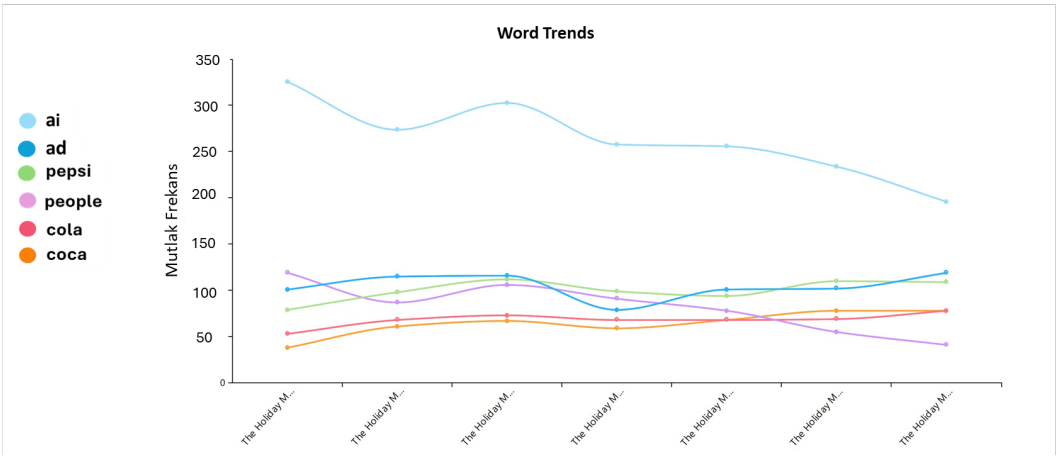
The word analysis charts (word cloud, word frequency, and word trends) of the Coca Cola "The Holiday Magic Is Coming" commercial are presented in Figure 2. According to the word analysis results, the term AI (artificial intelligence) ranks first in the word frequency table with 1,896 occurrences and appears as the most prominent word in the word cloud. In the word frequency ranking, ad (advertisement) and the competing brand Pepsi occupy the second position. It can be inferred from YouTube user comments that the frequent use of "AI" and "ad" reflects evaluations of the advertisement itself, whereas indicate a comparative positioning toward the brand.

Figure 3.

Word metrics charts: Word cloud, word frequency, word trends







The YouTube user comments generating the highest engagement for the Coca Cola "The Holiday Magic Is Coming" commercial are listed in Table 6. The comment with the highest engagement, "You're a multi-billion dollar company. Hire some animators," received 17,386 likes and 119 replies. This comment can be interpreted as an ironic reflection of concerns that the use of artificial intelligence may reduce costs for brands and companies while increasing unemployment. In the list of most-liked comments, evaluations that are detached from the emotional content of the advertisement and highlight its lack of realism are predominantly emphasized. Overall, an assessment of the most-liked and highly engaged comments suggests that the dominant sentiment toward the commercial is negative.

Table 6.

High Interaction Message Table in Youtube User Comments For Coca-Cola 'The Holiday Magic Is Coming' Commercial

Most Interactive Comments		
Comment	**Number of Comments**	**Number of Likes**
You're a multi-billion dollar company. Hire some animators.	119	17386
As an aspiring animator/concept artist, it's really disheartening to see companies do this,but it's nice to see the negative feedback on it. Gives me some hope.	113	8513
Guys, they had to make this with AI to give their CEO a Christmas bonus. Think of the poor billionaires, won't you?	81	4575
Coming from a billion dollar company like Coca-Cola, this is an AI embarrassment, and likely a deliberate marketing strategy.	56	8910
Imagine being so greedy that you make an AI generated commercial to save money even though you unironically have infinite money.	55	1353
No animators were employed in the making of this advertisement	54	3869
The irony of the "Real Magic" tagline at the end of a fake commercial.	50	12029
Of course a company which earned 46 billion last year has the gall to resort to AI just to save a minute smidge of their profits. How tragic.	43	4821
As a 3D artist it fills my heart with joy to see the general public spitting on the AI generated ad in the comments. 😊	41	3116
It’s wild how unnatural this whole thing looks and feels and yet these mega corporations insist upon it because of its “efficiency” which we all know is just code for being cheap.	40	3464
Nothing like celebrating the spirit of Christmas with the most soulless commercial possible.	39	8064
Ai is supposed to help people with their jobs, not to replace them Ai should never touch art, it's the only thing that should be 100% pure human creation	39	889

Conclusion

This study examined the affective orientation reflected in viewer responses to a generative artificial intelligence (GAI)-produced advertisement, focusing specifically on Coca-Cola’s “The Holiday Magic Is

Coming" commercial. Through automated sentiment analysis of 7,233 YouTube user comments, the findings reveal that viewer responses were not predominantly positive despite the promises of creativity and efficiency associated with GAI (Deng et al., 2019; Kietzmann et al., 2018).

First, the predominance of neutral sentiment within the overall distribution suggests that a substantial portion of the comments served informational, descriptive, or discursive purposes rather than expressing explicit emotional positioning. This pattern indicates that GAI may not have fully activated the narrative or emotional conveyance function of the commercial, as viewers appeared to frame their responses primarily within a technological evaluation context. The word analysis results—showing the term "AI" appearing 1,896 times and standing out prominently in the word cloud—further demonstrate that discussion concentrated more on the technology itself than on the narrative or aesthetic dimensions of the advertisement. Additionally, the frequent appearance of the competing brand "Pepsi" in the word frequency ranking suggests that the campaign triggered inter-brand comparisons, shifting part of the discourse toward competitive positioning rather than brand storytelling.

Second, the relatively low proportion of positive sentiment (≈12%) and the visibility of partially negative and negative clusters indicate that audiovisual narratives perceived as fully generated by GAI may struggle to meet expectations for authenticity, originality, and aesthetic satisfaction. The prominence of descriptors such as "soulless" and "fake" in highly engaged comments supports the argument that perceived human intentionality remains central to emotional resonance in advertising. These findings align with research emphasizing the perceptual risks of framing GAI as an autonomous creative actor (Hong & Curran, 2019) while supporting perspectives that advocate for human–GAI collaborative creativity (Bulut & Özdal, 2025; Vinchon et al., 2023).

Third, the high engagement of comments referencing employment, professional value, and corporate responsibility demonstrates that audience evaluations extend beyond aesthetic judgment. Sentiment patterns indicate that viewers incorporate normative considerations—such as workforce implications, fairness, and ethical responsibility—into their emotional positioning. In this sense, the reception of GAI-generated advertising appears to be filtered not only through narrative perception but also through broader societal debates surrounding artificial intelligence.

It is important to note that the findings reflect lexical sentiment polarity derived from automated classification rather than a comprehensive measurement of multidimensional attitudinal constructs." Sentiment analysis captures affective valence expressed in textual discourse, and therefore conclusions pertain to emotional orientation rather than multidimensional attitudinal structures.

Based on the sentiment distribution and thematic clustering observed:

1. Positive sentiment remains limited, neutral sentiment is dominant, and negative clusters are visible, suggesting that perceiving GAI as a solely autonomous creator may constrain its capacity to establish emotional connection.

2. The concentration of discourse around the term “AI” (1,896 occurrences) and the visibility of competitor brand references indicate that technological framing and competitive comparison overshadowed narrative immersion.
3. Employment- and ethics-related concerns formed a significant evaluative layer shaping the emotional reception of the advertisement.
4. The results suggest that human–GAI collaboration—combining human creative direction with algorithmic production—may enhance perceptual acceptance compared to entirely GAI-generated content.

From a managerial perspective, brands intending to employ GAI in advertising practices are advised to position AI as an assistive creative tool rather than an autonomous author. Transparent communication regarding human involvement, ethical considerations, and creative intention may mitigate perceptual resistance. Integrating nostalgic brand iconography with GAI-generated visuals may also reduce the perception of a purely technological showcase. Furthermore, continuous sentiment monitoring before and after campaign release can provide valuable feedback for adaptive communication strategies.

Methodologically, this study contributes to advertising research by demonstrating how large-scale automated sentiment analysis, combined with lexical frequency analysis, can illuminate emotional polarity and thematic framing in user-generated discourse. The findings highlight the importance of interpreting sentiment patterns within broader theoretical discussions on authenticity, narrative conveyance, and human–AI collaboration.

A key limitation lies in the reliance on dictionary-based automated sentiment analysis, which may misclassify ironic or sarcastic expressions. Additionally, the study focuses on a single brand and platform due to the limited number of GAI-produced advertisements currently available. Future research may conduct comparative analyses between fully GAI-generated, human–GAI collaborative, and fully human-produced campaigns across multiple platforms. Incorporating neuromarketing methods and longitudinal designs may further enrich understanding of reinforcement effects and brand equity implications.

Acknowledgements

Ethics Committee Approval: Since no human factors were used as research subjects in this study, ethics committee approval is not required.

Publication Ethics: This study has been prepared in accordance with the rules stated in the “*Higher Education Institutions Scientific Research and Publication Ethics Directive*.” Additionally, the article has been scanned using plagiarism detection software (*Turnitin /iThenticate*), and no plagiarism has been detected.

CRediT Author Contribution Declaration: Conceptualization: A.N.S.; Methodology: A.N.S. & A.S.; Software: A.S.; Validation: A.N.S. & A.S.; Formal analysis: A.S.; Investigation: A.S.; Resources: A.S.;

Data curation: A.N.S.; Writing – original draft: A.N.S. & A.S.; Writing – review and editing: A.N.S. & A.S.; Visualization: A.S.; Supervision: A.N.S.; Project administration: A.S.

AI Use and Disclosure Statement: Authors should disclose the name of the AI tool used, its purpose, and the stage of the research or writing process in which it was applied. They must confirm that all AI-assisted outputs were reviewed and validated by the authors and that full responsibility for the accuracy, originality, and scientific integrity of the manuscript remains with them.

Conflict of Interest: The author(s) of the study, the institution(s) they are affiliated with, or their financial supporters do not have any direct or indirect financial, commercial, legal, or professional relationships/interests with other institutions or employees of these institutions that could influence the research.

Academic Financial Support: The study has not been supported by any academic financial support organization (TÜBİTAK, BAP, European Union, United Nations, etc.).

Author Declaration: The study has not been derived from any thesis and has not been presented at any congress/symposium/conference.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T

Anantrasirichai, N., & Bull, D. (2022). Artificial intelligence in the creative industries: a review. Artificial intelligence review, 55(1), 589-656. https://doi.org/https://doi.org/10.1007/s10462-021-10039-7

Avcı, E. (2024). Üretken Yapay Zeka ve Prompt Mühendisliği. Seçkin Yayıncılık.

Aydın, Ö., & Karaarslan, E. (2023). Is ChatGPT leading generative AI? What is beyond expectations? Academic Platform Journal of Engineering and Smart Systems, 11(3), 118-134. https://doi.org/https://doi.org/10.21541/apjess.1293702

Beverland, M. B. (2005). Crafting Brand Authenticity: The Case of Luxury Wines. Journal of management studies, 42(5). https://doi.org/ https://doi.org/10.1111/j.1467-6486.2005.00530.x

Bulut, Ş., & Özdal, M. A. (2025). Yapay Zekânın Grafik Tasarımda Yenilik, Özgünlük ve İşlevsellik Açısından Logo Tasarımı Üzerindeki Etkileri. Sanat ve Yorum(45), 53-61. https://doi.org/https://doi.org/10.47571/sanatyorum.1476104

Cao, Y., Li, S., Liu, Y., Yan, Z., Dai, Y., Yu, P. S., & Sun, L. (2023). A comprehensive survey of ai-generated content (aigc): A history of generative ai from gan to chatgpt. arXiv preprint arXiv:2303.04226. https://doi.org/https://doi.org/10.48550/arXiv.2303.04226

Coşkun, C. (2024). Sanat ve Tasarım Alanında Üretken Yapay Zeka Sistemleri. Art-e Sanat Dergisi, 17(33), 470-486. https://doi.org/https://doi.org/10.21602/sduarte.1480840

Çavus, S., & Yilmaz, M. (2024). The Effect of Artificial Intelligence Supported Advertising Films on Students: Cola-Cola Masterpiece Commercial Movie Example. Turkish Online Journal of Educational Technology-TOJET, 23(1), 153-162.

Çeber, B. (2024). Reklam ajanslarında yapay zekâ kullanımı: Sektör profesyonellerinin ChatGPT ve Midjourney deneyimlerine yönelik bir araştırma. Erciyes İletişim Dergisi, 11(2), 583-606. https://doi.org/https://doi.org/10.17680/erciyesiletisim.1439479

Çeber, B., & Çeliker, S. (2024). Tüketicilerin üretken yapay zekâ uygulamaları ile oluşturulan reklamlara yönelik algı ve davranışları üzerine bir saha araştırması. Akdeniz Üniversitesi İletişim Fakültesi Dergisi(47), 289-313. https://doi.org/https://doi.org/10.31123/akil.1539417

Deng, S., Tan, C.-W., Wang, W., & Pan, Y. (2019). Smart generation system of personalized advertising copy and its application to advertising practice and research. Journal of advertising, 48(4), 356-365. https://doi.org/https://doi.org/10.1080/00913367.2019.1652121

Doğan, T. G. (2023). Üretken Yapay Zekâ Ve Medyanin Geleceği. In İ. F. C. Eyüp Buark Ceyhan (Ed.), Yapay Zeka, Blockchain ve Nesnelerin İnterneti Kitap Serisi / Yapay Zekâ:Alan Uygulamaları-2 (Vol. 1). Nobel Bilimsel Eserler.

Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. Harcourt brace Jovanovich college publishers.

Elgammal, A., Liu, B., Elhoseiny, M., & Mazzone, M. (2017). Can: Creative adversarial networks, generating" art" by learning about styles and deviating from style norms. arXiv preprint arXiv:1706.07068. https://doi.org/https://doi.org/10.48550/arXiv.1706.07068

Escalas, J. E. (2004). Narrative Processing: Building Consumer Connections to Brands. Journal of Consumer Psychology, 14(1-2), 168-180. https://doi.org/https://doi.org/10.1207/s15327663jcp1401&2_19

Gatys, L. A., Ecker, A. S., & Bethge, M. (2016). Image style transfer using convolutional neural networks. Proceedings of the IEEE conference on computer vision and pattern recognition,

Goodfellow, I. J., Pouget-Abadie, J., Mirza, M., Xu, B., Warde-Farley, D., Ozair, S., Courville, A., & Bengio, Y. (2014). Generative adversarial nets. Advances in neural information processing systems, 27.

Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. Journal of personality and social psychology, 79(5), 701-721. https://doi.org/https://psycnet.apa.org/buy/2000-00920-003

Guo, S., Jin, Z., Sun, F., Li, J., Li, Z., Shi, Y., & Cao, N. (2021). Vinci: an intelligent graphic design system for generating advertising posters. Proceedings of the 2021 CHI conference on human factors in computing systems,

Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. California management review, 61(4), 5-14.

Holger Harreis, T. K., Roger Roberts, Kimberly Te. (2023). Generative AI: Unlocking the future of fashion. mckinsey.com. https://www.mckinsey.com/industries/retail/our-insights/generative-ai-unlocking-the-future-of-fashion

Hong, J.-W., & Curran, N. M. (2019). Artificial intelligence, artists, and art: attitudes toward artwork produced by humans vs. artificial intelligence. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 15(2s), 1-16. https://doi.org/https://doi.org/10.1145/3326337

Huh, J., Nelson, M. R., & Russell, C. A. (2023). ChatGPT, AI advertising, and advertising research and education. In (Vol. 52, pp. 477-482): Taylor & Francis.

Karabulut, B. (2021). Yapay zekâ Bağlaminda yaraticilik ve görsel Tasarimin geleceği. Elektronik Sosyal Bilimler Dergisi, 20(79), 1516-1539. https://doi.org/https://doi.org/10.17755/esosder.844536

Kelley, H. H., & Michela, J. L. (1980). Attribution Theory And Research. Annual review of psychology, 31(1), 457-501. https://doi.org/http://www.communicationcache.com/uploads/1/0/8/8/10887248/attribution_theory_and_research_-_1980.pdf

Kietzmann, J., Paschen, J., & Treen, E. (2018). Artificial intelligence in advertising: How marketers can leverage artificial intelligence along the consumer journey. Journal of Advertising Research, 58(3), 263-267. https://doi.org/https://doi.org/10.2501/JAR-2018-035

Kingma, D. P., & Welling, M. (2013). Auto-encoding variational bayes. arXiv preprint arXiv:1312.6114.

Knill, K., & Young, S. (1997). Hidden Markov models in speech and language processing. In Corpus-based methods in language and speech processing (pp. 27-68). Springer. https://doi.org/https://doi.org/10.1007/978-94-017-1183-8_2

Koçyiğit, A., & Darı, A. B. (2023). Yapay zekâ iletişiminde chatgpt: insanlaşan dijitalleşmenin geleceği. Stratejik ve Sosyal Araştırmalar Dergisi, 7(2), 427-438. https://doi.org/https://doi.org/10.30692/sisad.1311336

Laer, T. v., Ruyter, K. d., Visconti, L. M., & Wetzels, M. (2014). The Extended Transportation-Imagery Model: A Meta-Analysis of the Antecedents and Consequences of Consumers' Narrative Transportation. Journal of Consumer research,, 40(5), 797–817. https://doi.org/https://doi.org/10.1086/673383

Michael Chui, B. H., Helen Mayhew, Alex Singla, Alex Sukharevsky. (2022). The state of AI in 2022 and a half decade in review. mckinsey.com. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2022-and-a-half-decade-in-review#/

Napoli, J., Dickinson, S. J., Beverland, M. B., & Farrelly, F. (2014). Measuring consumer-based brand authenticity. Journal of Business Research, 67(6). https://doi.org/https://doi.org/10.1016/j.jbusres.2013.06.001

Polat, H., & Öcal, D. (2020). Çoklu Medyada Ayak İzlerini Sürmek: Büyük Veri ve Yönetimi. Dijital Reklamcılık, 99-130.

Rebelo, A. D. P., Inês, G. D. O., & Damion, D. V. (2022). The impact of artificial intelligence on the creativity of videos. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 18(1), 1-27. https://doi.org/https://doi.org/10.1145/3462634

Reynolds, D. (2015). Gaussian mixture models. In Encyclopedia of biometrics (pp. 827-832). Springer.

Sarı, B. (2023). Bir Tasarım Aracı Olarak Yapay Zekâ: Yapay Zekâ Tarafından Üretilen Reklamlara Yönelik Tüketici Tepkileri Üzerine Deneysel Bir Çalışma [Doktora, Ege Üniversitesi].

Schultz, D. (2016). The future of advertising or whatever we're going to call it. Journal of advertising, 45(3), 276-285. https://doi.org/https://doi.org/10.1080/00913367.2016.1185061

Sengar, S. S., Hasan, A. B., Kumar, S., & Carroll, F. (2025). Generative artificial intelligence: a systematic review and applications. Multimedia Tools and Applications, 84(21), 23661-23700. https://doi.org/https://doi.org/10.1007/s11042-024-20016-1

Sun, Y., Jang, E., Ma, F., & Wang, T. (2024). Generative AI in the wild: Prospects, challenges, and strategies. Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems,

Ünal, A., & Kılınç, İ. (2024). Üretken Yapay Zekâlarin İş Dünyasi Üzerine Etkilerine İlişkin Erken Dönem Bir Değerlendirme. Elektronik Sosyal Bilimler Dergisi, 23(90), 776-797. https://doi.org/https://doi.org/10.17755/esosder.1411805

Vakratsas, D., & Wang, X. (2020). Artificial intelligence in advertising creativity. Journal of Advertising, 50(1), 39-51. https://doi.org/https://doi.org/10.1080/00913367.2020.1843090

Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, Ł., & Polosukhin, I. (2017). Attention is all you need. Advances in neural information processing systems, 30.

Vinchon, F., Lubart, T., Bartolotta, S., Gironnay, V., Botella, M., Bourgeois-Bougrine, S., Burkhardt, J. M., Bonnardel, N., Corazza, G. E., & Glăveanu, V. (2023). Artificial intelligence & creativity: A manifesto for collaboration. The Journal of Creative Behavior, 57(4), 472-484. https://doi.org/https://doi.org/10.1002/jocb.597

Wu, L., Dodoo, N. A., Wen, T. J., & Ke, L. (2022). Understanding Twitter conversations about artificial intelligence in advertising based on natural language processing. International Journal of Advertising, 41(4), 685-702. https://doi.org/https://doi.org/10.1080/02650487.2021.1920218

Yastıoğlu, S. (2023). Üretken yapay zekânın işletmelerde kullanımı: Fırsatlar ve tehditler. Yönetim Bilişim Sistemleri İşletmelerde Dijital, 213.