

The Impact of AI Generated Advertising Content on Consumer Buying Behaviour and Consumer Engagement in Online Shopping

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Abstract

The influence of AI-generated advertising material on customer engagement and online purchasing behaviour is examined in this study, along with the distinctions between human-generated and AI-generated advertising content. In order to find out how marketers and AI specialists view AI-generated advertising material, a qualitative approach was employed to answer the question of what distinguishes AI-generated advertising content for online shopping from human-generated advertising content. The influence of AIGAC on brands' sales volumes and competitive advantages is explained in detail in this study. Researchers interviewed creative directors and marketers to get their professional perspectives on the phenomenon. The study emphasises the significance of this new industry tool and how it helps with brand development, particularly with regard to brand communication tactics. This study investigates the differences This study explores the capabilities and precision of AI in advertising, specifically in relation to human emotions and feelings in online purchase. Lastly, this study was also finished by customer impression of AI. For consumer engagements and consumer buying behaviour in online purchasing, researchers discovered that AI-generated advertising content was more effective than human-generated advertising content. AI produces more creative ad combinations that are more vivid and well-balanced. Because AI-generated advertising content is so creative, researchers find that it will increase sales. The results of this study will give practitioners guidance for their upcoming brand communication, sales, and brand building plans. Guidelines for topic research can be obtained by future researchers.

Keywords: AI Generated Advertising Content, Consumer Engagements, Consumer Intentions, Human Generated Advertising Content, AI abilities, Emotions and Feelings, Online shopping.

I. INTRODUCTION

AI-driven content development is transforming industries by improving efficiency in creating advertising materials, such as text, images, and videos. This technology is particularly influential in marketing, where personalized content based on consumer behaviour enhances customer engagement and satisfaction (Ameen et al., 2021). However, ethical concerns arise, particularly regarding biases in AI-generated content and its potential impact on brand perception (Wu et al., 2023). While AI enables cost and time savings, it may lack the emotional depth and creativity that human-generated content providers, potentially reducing engagement (Ebrahimi & Fanaeepour, 2020). AI's role in personalization is crucial in competitive markets, but companies must address ethical sensitivities and ensure the content reflects diverse perspectives to avoid harming their brand reputation. This research aims to explore how AI generated content affects consumer perceptions, engagement, and online purchasing behaviour, while also addressing its ethical implications in marketing.

Literature Review

AI has become an essential tool across various sectors globally as businesses obtain innovative methods to boost their productivity and efficiency. The incorporation Artificial Intelligence into social media strategies have been especially transformative. AI has been employed for content creation, custom-made recommendations, chat-bots, image and speech recognition, and sentiment analysis (Biljman, 2023). This addition has headed to better efficiency and accuracy, enhanced audience targeting, superior customer service, and it also contribute in cost reduction. However, the starter of AI in content generation endeavors also poses possible troubles. De Cremer, Morini Bianzino, and Falk (2023) presents three situations: AI increasing human work to boost output, AI flooding the market with inexpensive matter that could possibly displace human made creative tasks. However, despite its advancements, concerns remain about the potential shortcomings of artificial intelligence for required content creativity (Blumer, 1969; Burgoon et al., 1978; Daft & Lengel, 1986). AI-generated content that is inappropriate or offensive to its audience can result in negative customer experiences. Furthermore, the reliance on AI algorithms for generating brand content poses limitations, as these algorithms depend on the quality of the training data (Burgoon et al., 1978). Creating ethical guidelines for the development of AI

generated content is imperative to mitigate these issues. Although AI technology holds significant potential to revolutionize marketing strategies and enhance customer service experiences, existing limitations must be addressed to fully realize this potential (Eppler & Mengis, 2004). Therefore, this analysis will delve into the ethical considerations of using automated technologies for creating textual data (Eppler & Mengis, 2004). It also points to brighten how these progresses disturb society's broader perceptions of technological effectiveness by measuring changes resulting from distinctive levels of user experience (Gerbner et al., 1994). In response to this, the research aims to advocate for a careful application of these techniques by examining potential challenges. By determining an outline for businesses to harness the benefits of AI while minimizing possible drawbacks, this study will provide a valuable input (Davenport et al., 2020). These findings will aid in optimizing customer experience tactics and promote the ethical and responsible use of AI technology to enhance user experiences (Eppler & Mengis, 2004). The start of AI in auto generated content creation has revolutionized many sectors, such as marketing, branding, software design, Graphic Design, entertainment, and interpersonal communications (Davenport & Mittal, 2022). AI technology has become invaluable assets for businesses, providing features including automated content generation, improved content quality, increased content diversity, and personalized content. Although this technology demonstrates potential in emulating human creativity, they still necessitate human intervention to refine AI-generated content, ensuring sensitivity to prompts and maintaining quality. The theory contributing to this study gap is Social Presence Theory (Short, Williams, & Christie, 1976). The theory proposes that creatives produced by humans evoke stronger emotional responses and greater engagement because of the social presence they convey. Studies show that customers tend to form stronger emotional connections with interactive experiences that involve human-created content. However, the effects of AI-generated material on consumer sentiments compared to human-developed content, and its overall impact on experiences, are still not well understood. The identified research gap pertains to “Cognitive Load Theory” (Sweller, 1994), which indicates that AI-generated content is clearer and more concise, thus decreasing intellectual struggle and increasing information processing. Despite extensive research on the cognitive effects of AI-produced materials, significant gaps stay regarding writing by any human resource. This raises questions about how the end user perceive cognitive weight in both cases AI and Human generated content, highlighting the need for advance investigation to wholly apprehend their impact on end user’s level of satisfaction and the experience he gone through in online shopping.

Methodology

With an emphasis on investigating the effects of AI-generated advertising material on consumer engagements and consumer buying intentions in online shopping, this study is grounded in a qualitative methodology of thorough interviewing. According to Creswell and Poth (2017), this method makes it easier to thoroughly examine complicated occurrences, which makes it ideal for exploring the many viewpoints on AI-generated advertising content in online purchasing. To guarantee a broad sample that includes people knowledgeable of AI technology and its advancements, participants were chosen at random from a wide range of demographic backgrounds depending on their interaction with AI. Four marketing and creative directors from both domestic and international businesses were cross-examined in the study. All of the participants were men, and their average age was 35. Prior to the interview, the researcher emailed the interviewee the questions. In order to gain a clearer understanding of the phenomenon, further sub-questions were asked during the interview. Ten minutes was the average length of the interview. The interviewee gave the researcher permission to utilise his perspective (interview) to draw conclusions about the topic under investigation.

Data Analysis

The researcher conducted in-depth interviews with each participant in an effort to investigate the phenomenon under investigation.

Theme: Acceptability of AI-Generated Advertising Content in Online Purchasing

Subtheme: Conceptually Strong, Technological Development, New Trends

How do you feel about stuff created by AI in online shopping? Because AI is a time-saving and cost-effective technology, a CMO was excited about its introduction into the sector.

For years, we spent millions of dollars creating advertisements in humanly. However, using AI today is extremely simple; it just depends on our resources as well as our time. (Participant 1) The balance and colour combinations impressed a creative director. AI-generated advertisements, in my opinion, have more vivid colours and ideas. When a human resource performs the same activity, he is unable to conceive of several ideas at once, and the colours he chooses are not as vivid and appealing as those provided by AI. When you write four items in a prompt to produce content for your burger brand, AI will incorporate all four into the advertisement, something that a human cannot do. (Participant 2) Another AI practitioner and specialist thought this technology was fascinating and helpful, but he was also concerned about the replacement of human resources as a result. A

recent development in online purchasing is AI-generated content, which is both intriguing and concerning, in my opinion. It's interesting because it's extremely sensible and sensitive, yet it's concerning for human resources. In the future, it might lead to unemployment. (Participant 3) A creative director responded that he thought this technology was really helpful. The globe and market are shifting towards technological use, and artificial intelligence is being used more and more frequently. Because of the advantages AI provides, people are now more interested in it. It has not only made things easier, but its rich data-based solution has also made individuals feel more confident. (Participant 4) Participants responded favourably to the use of AI in the advertising sector. They described how AI can help brands create content. According to one AI user and expert, AI is more sophisticated and practical than the human mind. AI, in their opinion, is the global market's future. It will take the place of humans in creating promotional content for internet retailers. It streamlines processes and saves time. Not only economical but also time-efficient.

An innovative addition to internet buying is AI-generated advertisements in online shopping.

Subthemes: Development of Technology: Relieving technology, acceptable technology, dream visualisation, and the use of vibrant colours do you believe artificial intelligence will revolutionise the creation of advertising content for online shopping?

The first marketer described how AI is used in all facets of life. He claims that the technology is groundbreaking. AI is therefore being applied in every industry, from advertising to medicine. And when it affects your health, it will have a favourable effect with no negative effects. Therefore, in my opinion, its benefits are the greatest and most innovative in online purchasing. (First Participant) The second participant claims that it is an industry revolution. This technology is more advanced than we could have ever imagined, he said. The short answer is that, while AI is revolutionary, that description alone does not adequately capture its influence. It will have a bigger influence than we could have ever imagined. Have you ever imagined that in a few seconds, artificial intelligence created the same scene in which a pink elephant is strolling through the streets of Lahore and a rickshaw is passing by? AI is more than just a revolution, in actuality. (Participant 2) This technology is likewise seen as groundbreaking by third marketers. Although its acceptance in our market is a little hesitant, people are increasingly moving in that direction. It is undoubtedly a revolutionary innovation. As you can see, every industry will not only use this technology but also depend on it. (Participant 3). The fourth participant claims that this device is a marvel of human ingenuity

and that it looks stunning. It is without a doubt a remarkable invention of the human imagination. Its use has no bounds. I have no doubt that AI will handle everything in the near future. (Participant 4) Everyone agrees that artificial intelligence is a revolutionary innovation. Not only did all of the participants agree with this, but they also described it as more than a revolution. Experts believe that everything is positive and moving forward, with no negative effects discovered thus far. We can't even begin to imagine the impact it will have. It has the capacity to see your dreams.

AI-generated emotional connection in online shopping advertisements

Subthemes: Algorithm modelling, psychological beliefs, and AI's comprehension of human behaviour

The researcher's next question was, "Do you think it is emotionally well connected?"

The first participant emphasised how AI has improved in terms of accuracy. He expressed a strong belief that AI creates emotionally engaging content for internet shoppers.

Indeed, it is closely related since it is a person's psychological belief and the feelings that go along with it. Additionally, it responds in accordance with our psyche. Keep in mind that the chat GPT-4 is responding today; it wasn't accurate before, but it's working rather well now. (First Participant) The second participant acknowledges, in part, that AI is emotionally intelligent. He supported his position with a few examples. It is the realisation that machines are incapable of comprehending and behaving in a human manner. However, I believe AI has also altered this mindset. Simply specify your needs and target audience, and it will produce emotionally engaging material for your online purchases. Write a prompt that asks you to make a delicious burger and include all the elements that will make it look good. (Participant 2) The third participant presents a constructive viewpoint on this. He claims that AI generates his results using up-to-date records, indicating that it is well-connected to internet commerce.

Indeed, it is well connected since AI uses data on human behaviour to gather its information. We can therefore claim that AI is able to comprehend our emotions. (Competent 3) Fourth the participant also discussed AI algorithm technology, which he said is closely related.

I want to explain how AI functions in order to respond to this query. Actually, the software is built on algorithms. It goes without saying that AI will comprehend emotions if the algorithm developers are aware of the human mind and emotions. (Participant 4) Regarding AI's emotional connectedness, every participant was fairly certain. One participant commented that it's a technology that

keeps getting better every day. The other participant concentrated on its application, which implies that the output of AI is entirely reliant on its user. Smart prompt writing by the user will result in more accurate

AI-generated advertising and online store customer interaction

Subthemes: AI improves consumer engagement, attractive content facilitates engagement, and a satisfied customer is an engaged online shopper.

The fourth question concerned customer engagement; the researcher sought to determine whether advertising content produced by AI affected online shoppers' engagement.

The participant concurs with the researcher's assertion that AI-generated content aids in customer engagement. When it comes to online engagement, for instance, we use apps like Daraz, Harid-o-Frog, or Shopping, which provide interaction. (First Participant) The second participant ranked AI-generated advertising material higher than human-generated content, indicating that AI-generated advertising content will receive more interactions. No comparison will be made. The third practitioner commends AI for its comprehension of consumer behaviour, which results in consumer engagement (Participant 2). AI creates material based on human behaviour, as we previously explained, which encourages interaction. (Participant 3) The fourth participant claims that AI produces more visually appealing material, which improves customer engagement. It's straightforward: where do consumers gravitate towards more appealing items? AI is considerably superior to human-generated material, particularly in social media content. Additionally, it improves engagement. (Participant 4) By producing more individualised, effective, imaginative, and powerful advertisements, AI-generated advertising content significantly increases customer engagement. AI's impact on advertising is expected to grow as it develops, offering more complex means of interacting with, engaging, and converting consumers. Businesses that successfully apply AI will be better able to satisfy the needs of contemporary consumers and see more success with online marketing.

AI-generated marketing rivalry and advertisements for online purchases

Subthemes: AI provides precise data analysis, AI provides product research, and AI provides insight into market rivalry

The researcher then enquired about market competition in an effort to find out how participants felt about AI's comprehension of market competitiveness in online buying.

Indeed, it gives businesses a competitive advantage in marketing. You see, it gives us the real market data. Additionally, it can share post data. Businesses that don't use AI will fall behind. (First Participant) To a certain degree, we can say that AI comprehends market completeness. Once more, it depends on how well the AI user provides instructions. AI will swiftly evaluate data from databases and display the outcomes we want when we shop online. (Participant 2) AI is undoubtedly aware of market competitiveness; in fact, it is a data game. Since AI is a data-driven technology, I completely agree that it can comprehend market competitiveness. (Participant 3) Look, this is a really significant question: market competitiveness is crucial to understanding what is happening in the online purchasing market when you begin working on marketing and branding development projects. Which brand do they intend to offer? These keys are simple. AI is an algorithm developed by humans; it can comprehend human emotions and provide information as required. I believe that in order to comprehend market trends, you must provide reliable analysis. Everything will be replaced by AI in the future. (Participant 4) The participant believes that organisations can get important insights and strategic advantages from AI's ability to understand and analyse market competition. Businesses can beat rivals and achieve sustainable growth by leveraging AI for competitive analysis, trend forecasts, sentiment analysis, pricing strategies, product creation, marketing, and sales techniques. One person wasn't certain that the results were accurate. He contends that without human intervention in online buying, AI will not be able to comprehend the complexity of market issues.

AI-generated advertisements and online shoppers' reactions

Subthemes: Content components, consumer perception, and better content, better response

How do consumers react to advertisements created by AI when they shop online?

A product for children and teenagers will be favourably received and responded to right away by middle-aged consumers, who will be in a 50-50 mode, while older consumers will be hesitant. (Participant 1) The advertisement content produced by AI is clearly understandable to all literate people. Every advertisement contains an AI component, as you can see. AI is used for the narrations, music, and voiceover. Customers thus find the advertisements entertaining and react favourably. (Participant 2) AI creates material based on customer impressions, which helps them relate to the advertisement and accept it. (Participant 3) Once more, the issue is one of procedure and customer approval. AI, in my opinion, is what internet shoppers need in terms of ads. Ads are clearly acceptable if they are well-written and address the needs of the consumer. (Participant 4) AI-generated ads often have a beneficial impact on consumer behaviour, leading to higher

conversion rates, improved customer experience, and increased engagement. Customers respond to and love AI-generated advertisements.

AI-generated Online Shopping Ads and Sales Volumes

AI can analyse post data, engagement affects sales, and database algorithms

What effect does AI-generated advertising content have on online retail sales volumes?

Businesses that use AI have a competitive advantage in the marketplace. Undoubtedly, their sales quantities have increased. (First Participant) I'll state that sales volumes are the outcome of all of my earlier responses. Online shopping will increase as a result of sales. (Participant 2) It goes without saying that the company's sales will rise if AI-generated content engages consumers. (Participant 3) Yes, adopting AI-generated advertising content increases a company's sales. (Participant 4) The interviews offered illustrate the benefits of AI-generated advertising content for sales volumes, emphasising improved sales success, enhanced targeting, and optimised ad spends, dynamic adaptation, improved conversion rates, data-driven insights, and consistency across channels.

Table 1
Thematic Analysis

Main Theme	Sub Theme
AI-generated content Acceptably	a) New Trending b) Technological Advancement c) Conceptually strong
AI generated Advertisement a revolutionary addition	a) Relievable technology b) Acceptable technology c) Visualize dreams d) Vibrant colour application
AI generated Advertisement emotional connection	a) Psychological belief b) AI understand Human Behaviour c) Algorithm Modelling
AI generated Advertisement and consumer engagement	a) Attractive Content helps in engagements b) AI enhance Consumer Engagement c) Engaged customer is a happy customer
AI generated Advertisement and market competition	a) AI gives accurate data analysis b) AI gives product analysis c) Market competition understanding
AI generated Advertisement and Consumer response	a) Consumer Perception b) Content ingredients c) Better content better response
AI generated Advertisement and Sales Volumes	a) Dada Base algorithm b) Engagement impact Sales c) AI has ability to analyse post data

Findings

This study explored the impact of AI-generated advertising on online shopper engagement and purchase intentions. Through interviews with four high-level marketers using AI, the research found that AI-generated content significantly enhances consumer interaction and sales. AI's speed, creativity, and ability to generate compelling visuals, copy, and market analysis were highlighted as key advantages. The study concluded that AI-driven ads, whether static or video, lead to higher engagement and quicker purchasing decisions, with AI's role in advertising expected to grow. AI's efficiency also allows for low-cost content creation, making it a valuable tool for marketers aiming to save time and reduce expenses.

Limitations

The exploratory investigation that was carried out has limitations. Its extremely tiny sample size is its main drawback. Second, there was a time constraint on finishing this investigation. Future studies should focus on diverse industries and enlarge the sample size.

II. CONCLUSION

The significance of AI-generated advertising material and its useful influence on customer engagement and purchase intention in online shopping were determined subjectively by this study. In response to RQ1, this study explains that AI-generated advertisements produce a favourable impression on consumers, which increases engagement and influences their online purchasing behaviour. Compared to human-generated ad content, consumers interact and purchase more after viewing AI-generated ads. Researchers come to the conclusion that AI will shape the advertising sector in the future. There are several time and financial advantages to using AI-generated advertising content. The study answers RQ2, which states that advertising content produced by AI will increase sales volumes and, eventually, build a solid clientele.

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