Repositório ISCTE-IUL

EXPLORING THE IMPACT OF DEEPFAKE ADVERTISEMENTS ON AD AVOIDANCE AND CONSUMER BEHAVIOR IN THE FASHION INDUSTRY

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ABSTRACT

As artificial intelligence (AI) continues to evolve, it has become increasingly challenging to differentiate between real and synthetic content, given the AI's ability to simulate human abilities. One such area of synthetic media that has gained significant attention is deepfakes, which involve manipulating and creating hyper-realistic imagery (Westerlund, 2019). Despite the possible relevance of deepfakes to marketing and their growing popularity, they are often portrayed in the media as a "phantom menace" (Westerlund, 2019). However, there is a lack of understanding about the potential benefits and malfeasance associated with deepfakes (Westerlund, 2019). Therefore, it is imperative to gain a comprehensive understanding of the implications of deepfakes in marketing theory and practice. To date, deepfakes have been studied in different fields with distinct research focuses, however, academic research has predominantly centered on three aspects of deepfake technology: refining algorithms for more realistic visual results, creating detection methods, and scrutinizing the potential societal effects of its use (Eberl, Kühn & Wolbring, 2022). Yet, little focus has been given to investigating the research prospects of deepfakes and their implications on brand communication. The objective of this study is to analyze the possible effects of deepfake ads on consumer actions and perspectives, with a specific focus on ad avoidance in the fashion sector. Advertising is a crucial and ever-evolving element of the fashion industry, and is essential to its growth. As a disruptive technology, Artificial Intelligence (AI) has opened up new possibilities for fashion marketers and advertisers to investigate (Rathore, 2019). Also, this study intends to bridge this gap by proposing that deepfake technology can offer significant value as an advertising tool.

Introduction

The phenomenon of deepfakes is growing steadily in sophistication and will eventually be undetectable to the untrained eye (Maras & Alexandrou, 2019. The two main factors driving their spread through social media are their increasing accessibility and believability, as deepfakes become easier to produce with customer-grade apps and more difficult to distinguish from authentic media due to their increasing sophistication (Kietzmann et al., 2020). The uses of deepfakes can be broadly categorized into two categories, namely, malicious, and beneficial. The malicious uses of deepfakes include the creation of fake

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news, fraud, identity theft, and others. Conversely, beneficial applications of deepfakes find their place in entertainment, education, healthcare, and others. Although the beneficial applications of deepfakes have proven revolutionary, malicious uses pose a significant threat to society (Kwork & Koh, 2020).

Limited research has explored the implications of incorporating deepfakes in advertising, particularly concerning its impact on the fashion industry and consumer behavior, specifically ad avoidance. Further investigation is required to understand the effects of generative technology on the fashion industry and its consumers.

Deepfake advertisement is an imminent reality for the future reshaping of the advertising industry (Campbell, Plangger, Sands, Kietzmann, Bates, 2022). Hence, it is crucial to carry out a comprehensive investigation into the potential impacts that this technology offers. Therefore, the primary objective of this research is to undertake a comprehensive investigation into the potential impact of deepfake advertisements on consumer behavior and perception, with a particular focus on ad avoidance within the fashion industry. The study aims to provide valuable insights into this emerging phenomenon and its implications for the future of advertising.

One of the most noticeable features of deepfakes is the generation of numerous content forms, such as merging, replacing, overlaying, or combining different elements. The term 'deepfake' refers to the domain within a larger field of synthetic media. While capable of producing convincing yet fake videos, images, and audio, this technology can be used for harmless and malicious purposes (Bateman, 2020; Maras & Alexandrou, 2019). By utilizing artificial intelligence to manipulate elements such as facial expressions, voice, and physical characteristics of an individual, deepfakes can create a sense of realism that can easily mislead people into believing they are authentic. This distinguishes it from other types of fake imagery (Whittaker et al., 2020).

In terms of advertising, the advertising landscape of the fashion industry has seen remarkable advancements, which has prompted fashion brands to adopt new and innovative approaches to showcase their brand image and effectively connect with their audience(Segal, 2023). This means that fashion brands must craft visually stunning, specifically tailored, and captivating ads that can gain an edge in the fiercely competitive market (Segal, 2023).

The fashion advertising field is a dynamic and essential aspect of the fashion industry, playing a pivotal role in its success. With the advent of artificial intelligence (AI) as a disruptive technology, novel opportunities have emerged for fashion marketers and advertisers to explore (Rathore, 2019). AI-powered technologies can optimize marketing strategies, customize customer experiences, and enhance overall satisfaction. Integrating AI technology into the fashion industry is expected to become increasingly common in the coming years. (Rathore, 2019).

The fashion industry's adoption of artificial intelligence (AI) is not merely a matter of operational convenience, but rather a transformative approach that mandates a paradigm shift (Rathore, 2019). In recent years, advertising has undergone a significant turn from content created and altered using only analog and digital tools to what is now referred to as synthetic advertising (Campbell, Plangger, sands & Kietzmann, 2022). Synthetic advertising is a highly advanced form of manipulated advertising generated or edited through artificial and automatic production and modification of data (Campbell, Plangger, sands & Kietzmann, 2022). This process relies on AI algorithms such as deepfakes and

generative adversarial networks (GANs) to automatically generate content that depicts a highly convincing yet fabricated version of reality (Floridi, 2018; Karnouskos, 2020; Kietzmann et al., 2020).

Deceptive media has evolved with the emergence of Deepfakes and GANs, which pose a significant threat to the trustworthiness of online information sources (Weikmann & Lecheler, 2023). In the absence of effective detention technology, even authentic images, videos, and audio recordings of genuine events can be potentially discredited as counterfeit, granting individuals a certain level of plausible deniability for any event captured (Whittaker, Kietzmann, Kietzmann & Dabirian, 2019).

The emergence of deepfake technology has opened a potential avenue for brands to create compelling and relatable content, which can help strengthen the bond between the brand and its consumers. When used responsibly, deepfake technology can be an effective tool to enhance the overall customer experience and foster brand loyalty (Whittaker, Letheren & Mulcahy, 2020). Additionally, the sophisticated capabilities of deepfake technology have enabled the development of extremely customized advertisements that can be precisely tailored to various demographic groups within a marketing campaign. This level of hyper-customization holds the promise of boosting sales and enhancing brand perception. Synthetic manipulation unlocks new possibilities for generating advertisements at significantly lower costs than traditional methods. However, advertisers are still in the early stages of understanding how this advanced manipulation may affect the efficiency of their advertisements. Nevertheless, it is crucial to exercise care to prevent any adverse effects such as heightened consumer wariness, privacy issues, and a sense of exposure (Campbell, Plangger, Sands & Kietzmann, 2022).

The proliferation of deepfakes is increasingly alarming as it poses a significant risk of discrediting factual information. As a result, it is essential to acknowledge the effectiveness of deepfakes as a tool for spreading misinformation and to take proactive measures to mitigate the damage they can cause (Chesney and Citron, 2019). The integration of this technological development, in conjunction with GANs, indicates the evolving nature of misinformation and represents a subsequent stage in the progression of fake news. In turn, this exacerbates the erosion of trust in online information.(Whittaker, Kietzmann, Kietzmann & Dabrian, 2020).

Furthermore, the consequences of deepfakes go beyond public perception, posing a significant threat to organizations and brands. This phenomenon adds to the weight of fabricated fake news reports targeting specific companies, raising the stakes of misinformation operations (Whittaker, Kietzmann, Kietzmann & Dabrian, 2020).

Purpose of the Study

RQ1: To what degree might highly manipulated advertising cause consumers to avoid advertisements in general as an information source?

RQ2: Are there specific visual cues or storytelling elements that affect consumers' perceptions of falsity in deepfake advertising?

RQ3:To what degree do consumers perceive deepfake advertisements in the fashion industry as less authentic than traditional, non-deepfake advertisements?

Backgroud and Conceptual Model

Recent literature has highlighted the significance of verisimilitude, creativity, and relevance as crucial constructs to comprehend how consumers react to ad manipulation. According to Campbell, Plangger, Sands & Kietzmann, (2022), Dodoo & Wen (2019), and Kelly et al. (2020), perceived verisimilitude, perceived creativity, and perceived relevance are the fundamental constructs that underlie the model. The present studies highlight the significance of comprehending the constructs of deepfake technology to better understand its impact on consumer behavior (Campbell, Plangger, Sands & Kietzmann, 2022).

Verisimilitude pertains to the extent to which a manipulated advertisement delivers honesty, realism, or persuasiveness to the customer. When consumers are unable to tell whether the content has been manipulated, they perceive it as an authentic representation of reality, increasing the efficacy of ad manipulation. A heightened level of perceived verisimilitude prompts consumers to process a manipulated advertisement as if it were a true portrayal, enabling proven persuasive processes inherent in advertising immersion (Campbell, Plangger, Sands & Kietzmann, 2022). It can be argued that a higher degree of verisimilitude in advertising can lead to a decrease in ad avoidance, thereby increasing the likelihood of consumers being persuaded by the advertisement. In other words, the extent to which an advertisement is similar to reality can influence its reception by the target audience. When an advertisement is more realistic, it is less likely to be perceived as an intrusion or disruption, and more likely to be viewed as informative and engaging (Campbell, Plangger, Sands & Kietzmann, 2022).

Practitioners in marketing argue that increased creativity in advertisements helps to overcome consumer barriers, captures attention effectively, elicits favorable responses, and strengthens attitudes toward the promoted brand (Marra, 1990; Ogilvy, 1983; Rosengren, Dahlén & Modig, 2013; Zinkhan, 1993). A widely held belief in the advertising industry is that creativity is a necessary component for ad effectiveness (Kover, Stephen, & Goldberg, 1995), with some marketers explicitly linking ad creativity to its effectiveness (Kover, 1995). The impact of creativity on advertising effectiveness is a subject of debate. It is suggested that advertisements with a higher degree of creativity can reduce ad avoidance and, thus, increase the likelihood of consumers being persuaded by the advertisement. Studies show that creative advertisements are perceived more favorably and can increase purchase intent (Ang & Low, 2000). Moreover, they draw more attention and improve brand memory (Pieters, Warlop, & Wedel, 2002), and are significantly more memorable and elicit greater recall than less-creative advertisements (Till and Baack, 2005).

Dodoo & Wen (2019) and Kelly et al. (2020) identify ad relevancy as a critical antecedent. Previous study has shown that an increase in ad relevance correlates with a decrease in ad avoidance (Brinson & Britt, 2021; Dodoo & Wen, 2021; Jung, 2017; Kelly et al., 2010; Li et al., 2020). Increased perceptions of relevance are expected to make ads more successful (Campbell, Plangger, Sands & Kietzmann, 2022). It is contended that an increased degree of relevance in advertising can lead to a decrease in ad avoidance, consequently increasing the likelihood of consumers being persuaded by the advertisement. Advertisers often achieve this relevance by personalizing ads, resulting in greater persuasive power to change or reinforce attitudes, intentions, and behaviors (Aguirre et al., 2015; Mukherjee, Smith, and Turri, 2018; Tong, Luo, and Xu, 2020).

By combining these constructs and analyzing them with the relation to ad avoidance, hypotheses are created:

- H1: Greater perceived verisimilitude of a fake ad decreases ad avoidance.
- H2: Greater perceived creativity of a fake ad decreases ad avoidance.
- H3: Greater perceived relevance of a fake ad decreases ad avoidance.
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Methodology

In order to verify the hypotheses, an online experiment trial was conducted during the initial fortnight of January 2024. A sample of 78 individuals was collected in this study. These individuals were presented with a deepfake advertisement for Balenciaga x Breaking Bad and subsequently requested to scrutinize and respond to validated scales of each construct. Table 1 shows the scales used in the experiment.

Constructs	Adapted item	Scale	Authors
Perceived verisimilitude	The ad seems realistic. The ad resembles daily life tasks. The ad represents common, everyday situations.	Likert Scale (1 = Strongly Disagree to 7 = Strongly Agree)	Campbell & Reiman (2022)
Perceived creativity	In general, the ad was creative. In general, the ad was innovative. In general, the ad was clever.		Yang (2006)
Perceived relevance	The ad was relevant to me. The ad spoke to my concerns. The ad fits my needs well. The ad was important to me. The ad was related to something important to me.		Yang (2006)

Table 1. Constructs and adapted scales

Results

The results of this research show that two out of three hypotheses tested in this investigation are supported, namely: hypothesis 2 (perceived creativity → ad avoidance) and hypothesis 3 (perceived relevance → ad avoidance). However, hypothesis 1 (perceived verisimilitude → ad avoidance) is not supported. The results of the experiment may have been influenced by a variety of factors, including but not limited to the user experience, the content of the video displayed, and information overload. We must take into account these possible elements to gain a comprehensive understanding of the outcomes. Doing so will allow us to make informed decisions based on the results and to identify areas for improvement in future experiments.

This study undertakes an inquiry into the subject of manipulated advertising. The purpose of the investigation is to provide answers to two key questions that are central to this phenomenon. Firstly, the extent to which such advertising induces consumers to eschew advertisements as a source of information. Secondly, the specific visual cues or storytelling elements that impact consumers' perceptions of falsity in deepfake advertising. This research represents a small, yet promising, stride towards exploring the potential of

deepfake-generated content. The concepts, evaluations, ideas, and conceptual model advanced in this investigation can lay a solid foundation for future research in this emerging field.

Implications for Theory and Practice
The present study is subject to certain limitations that warrant consideration. Specifically, the stimulus video was selected based on fashion content and the perceptibility of deepfake-generated content. As a result, it may exclude deepfake content that is less obvious.
Theoretical implications: Firstly, the study provides a deeper understanding of deepfake advertisements and consumer behvior towards the creation and usage of this technology in ads. Secondly, it gives a more precise direction for future research. Thirdly, the study provides insights into what aspects of deepfake advertisement are useful and beneficial in the fashion industry.
Practical implications: Firstly, the study gives a better understanding about the features of deepfake advertisement for promotional success and how these features can affect ad avoidance. Second, the research results can help advertisers accurately measure customers' responses to their promotions.

Keywords: Deepfake, Deepfake-generated advertising, Artificial intelligence, Advertisement, Advertising, Fashion industry

REFERENCES

References available upon request