

Destigmatizing Generative A.I. for Marketing Content Development

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Abstract. *Generative Artificial Intelligence (Gen AI) holds immense transformative power for multiple industries. Its proponents highlight its quality upscaling and greater productivity capabilities across multiple domains of human activity. Many companies have realized that they may need a comprehensive redesign of internal processes to harness the power of Gen AI. The latter sees multifaceted manifestations in the field of marketing content development where time to market and real-time analytics shape competitive advantage. In 2023 the philosopher Yuval Harari even claimed “AI has hacked the operating system of human civilization” through its capacity to generate text, sound and images. At the same time, AI content development are still in the early stage of their evolution, though the questions “what and how it is changing the landscape for people in the industry” continue to exhibit novel dimensions. Given this, the aim of this article is to delineate whether and to what extent AI generated marketing content can produce greater effectiveness of a communication campaign in comparison to human-generated content. We discover important implications for companies related to scale, level of creativity and effectiveness of marketing content. We also identify 6 key skill sets necessary to foster future activities related to marketing content development using AI: (1) design of strategic vision and planning of an entire campaign; (2) development of creative thinking; (3) data interpretation and analysis; (4) understanding the ethical context; (5) adaptability to new and emerging processes; (6) realizing the significance of Gen AI – human interaction.*

Keywords: AI, Gen AI, marketing content, content development, communication campaign.

Introduction

Artificial Intelligence (AI) content generation tools currently used in marketing communications are still in their early stages of development, yet this progress is extremely dynamic. This study is only relevant at the time of its execution and cannot envisage to what extent the use of AI in creative industries represents an opportunity or a challenge. In any case, the results can be used as path for existing opportunities and risks of using AI for marketing content. This, in turn, would allow guidelines formulation to improve the work of specialists in terms of (1) refining the quality and efficiency of content creation and (2) overcoming some of the risks associated with its use.

Our goals are related to the study of potential opportunities that AI-based marketing content generation tools have and the risks that their use may lead to at the time of the study. The main idea is to present the results of the capabilities of AI tools to automate creative processes in designing marketing content. These opportunities are studied based on the perception of target segments of AI-generated marketing content within a simulated campaign, which are compared with the perception of content created by specialists starting their professional careers within the same campaign. The main question is: “Can AI tools generate better quality marketing content without additional intervention, compared to content created by humans?”. In this regard, the main

aim of the study is to attest whether and to what extent there are differences in the perception of the quality of marketing content generated by AI compared to that created by specialists.

The accomplishment of the aim is associated with several main limitations: (1) only two AI tools are used for the generation of marketing content – Chat GPT, for generating ideas and verbal content for the designed campaign, and Midjourney – for creating images. In this sense, it is entirely possible that when using other AI tools, different results from those reported may be obtained; (2) the study is performed by the involvement of students from the "Digital Media and PR" undergraduate program of the University of Economics-Varna as authors of marketing content. It is entirely possible that if versions of content created by professionals with more comprehensive experience, different results may be obtained.

The results of the conducted study and the formulated conclusions can serve as pivot for future research in the field of implementation of AI tools in automating the creative processes for developing content, as well as for reformulating the context and features of the environment in which specialists – theorists and practitioners – work in this field.

Literature review of the application of A.I. in the marketing domain

Artificial intelligence has witnessed vast attention across various industries and academia. This is especially evident in creative industries where the deeply entrenched myth that it takes humans to produce works of art, music, design, etc. still resides. Yet, the profound transformations of AI (especially with the introduction of ChatGPT in 2022) have reshaped the concept that human input can be (almost entirely) substituted by AI. All that creates the notion that AI is gradually becoming a disruptor in the digital realm (Teubner et. al., 2023). Yet, the idea of this paper is not to introduce and critically discuss the technical principles of functioning of AI and Gen AI, but to present some of the most recent developments (including areas of application and opportunities for marketers) and to compare AI-generated with human-created content. In view of that, we delve into domains where AI is present and attempt to synthesize its effects on marketing content creation.

Generative AI is largely considered a subset of AI that is capable of designing audio, video and even 3D content by utilizing existing data as a pivot (Fui-Hoon Nah et. al., 2024). Kaswan et. al. (2023) identify key developments, models, training methodologies and evaluation metrics of Generative A.I. According to Kshetri et. al. (2023) some of the most significant advancements include generating text, producing art and music, and marketing content personalization. In the next paragraphs we will emphasize on the areas of application and marketing content creation.

Areas of application in marketing

In recent years, the development of AI has been taking place at such a rapid pace that it is not uncommon to see AI tools used in the training of students in marketing and advertising programs (Yang, 2023). According to Yang, future specialists must be prepared to use these tools in the planning and design of such campaigns, including advertising content. In this regard, ethical issues are discussed, such as the possibility of bringing together inaccurate information in an unethical way into generated advertisements (Huh et. al., 2023).

Another major area in which the prospects for the use of AI systems are discussed is marketing research. Some scholars attempt to establish a nexus between consumer insights and marketing strategy together with harnessing the power of Generative AI to analyze the relationship between value, skills, preferences, and their place in the marketing function of organizations (Cillo & Rubera, 2024). Others identify the opportunity to use the already collected customer data to design real-time personalization according to individual preferences (Sahloul, 2024). Still others

accentuate on creating insights based on data analytics (for example Gen AI can be used to better detect customer behavior and on that basis – to make forecasts). This way companies can predict actions of their clients and design bespoke strategies (Robbert et. al., 2023).

Lately, the use of artificially generated samples (also known as silicon samples or synthetic datasets) in marketing research has been discussed (Sarstedt et al., 2024). The latter argue that AI-generated “artificial samples” can support the initial stages of research, especially with regard to the formulation program and, in particular, the initial testing of research hypotheses.

In conclusion, the main areas of application of Gen AI in marketing can be synthesized into: marketing and advertising program creation, marketing research and generating insights, real-time personalization, prediction models, and testing of research hypotheses.

Gen A.I. tools in advertising

The use of Gen AI in the field of advertising, and in particular in that of advertising creativity, can be defined as a “hot topic” in the last two years, especially since Gen AI tools have become publicly available to practitioners and non-practitioners. It is argued that after the launch of ChatGPT, all fields of social life have been impacted, but to the greatest extent – the one of advertising (Huh et. al., 2023). Moreover, the question of whether the entry of AI into the field of advertising creativity will put an end to human-created content is receiving vast attention, as generated advertising setups achieve a higher degree of effectiveness (Singolda & Heitmann, 2024).

In any case, however, the entry of AI into the advertising field is drastically changing the industry and the processes of creating marketing content. In their study, Huh, Nelson and Russell identify 4 areas of advertising practices that AI is fundamentally changing that reveal new opportunities and the need for future research. These are: (1) the user experience of advertising exposures, (2) the social and political implications associated with the accuracy of generated content, (3) the analytical understanding of working with data and algorithms, and (4) the functioning of the advertising industry as a whole (Huh et. al., 2023, p. 478). In this regard, the advertising industry perceives AI as a means of improving efficiency, generating new ideas, developing preliminary scenarios for advertising campaigns and refining the personalization of ads. At the same time, however, the facilitated development of advertising and marketing content, without the availability of specialized knowledge and skills, raises concerns about the future of creative processes in advertising (Li, 2019) and the place of humans.

In any case, however, it can be argued that such alternative approaches to creating advertising content hold huge potential and need to be explored more thoroughly. There are (still) dispersed opinions that the use of Gen AI can revolutionize the processes of creating marketing content (Heitmann, 2024). The author comments on the relationship between the quantity and quality of the marketing content created in the processes of individualizing ads. He claims that the more the content, the lower the quality (Heitman, 2024, p. 12). Meanwhile, there are also opinions that the use of AI-generated marketing content can have negative effects over the attitude towards the brand (Sands et. al., 2024). In fact, the cited study concerns a specific niche – namely the use of AI-generated advertising characters. In the four separate studies conducted, the researchers found that customers perceive the generated advertising characters in a negative way precisely because of the ways of overexposing the cultural and social features. Such studies show another important trend – that consumers tend to perceive marketing and advertising content generated by AI differently (as long as, of course, they can distinguish them from each other). It is argued that this type of (“synthetic”) content has the potential to radically change the marketing and advertising landscape in the next decade (Arango et. al., 2023). In the experiment they conducted, consumer

reactions to the use of synthetic content in the context of a charity fundraising campaign were tested. The results show negative reactions and a decrease in the tendency to donate funds among respondents who are aware that the advertising characters (children) are generated by AI.

Other researchers define synthetic ads as a product resulting from automated AI processes (Campbell et al., 2022). The focus of this study, however, falls on consumer perceptions of generated advertisements, which are examined in five main areas – (1) perceived plausibility, (2) perceived creativity, (3) perceived persuasiveness, (4) recognition of Gen AI advertising content, and (5) information value. The authors thereby reach several main conclusions. The first is that the more complex and precise the Gen AI interventions are, the more the advertisement is perceived as plausible and creative. On the other hand, high levels of perception of (1) and (2) lead to an increase in the persuasiveness of the content communicated to the audiences. At the same time, it is pointed out that the higher the perceived plausibility, the more difficult it is for the audience to recognize that the advertisement is generated, not created. And ultimately, the more creative an advertisement is, the more persuasive it is, which in turn leads to increased awareness of the brand (Campbell et al., 2022, pp. 27-30). In fact, based on the results of the cited study, we can arrive at one important conclusion. The five criteria for evaluating advertising content proposed are related to its qualitative and marketing characteristics. Thus, through (1), (2) and (4) one can assess the ways in which the audience perceives the formal characteristics of the advertisement, such as style, precision of production, etc., while through (3) and (5) – its functions as an advertising stimulus aimed at achieving marketing and communication goals, such as persuasion and awareness.

If we were to summarize the literature sources in review, several trends related to the use of Gen AI in creating marketing/advertising content can be identified. First, the use of Gen AI within the creative processes is an increasingly widespread practice. Secondly, AI is significantly improving efficiency. Thirdly, there may be different perceptions of human-created and AI-generated content. If we look for the intersections between the trends outlined above, we need to more thoroughly delve into whether Gen AI is capable of producing independent creative ideas without undergoing training for each individual task. However, whether, placed in such a role, Gen AI would do better or worse than a marketing specialist is a question that remains to be investigated.

Methodological premises, validity and reliability testing

We have involved undergraduate students from our "Digital Media and PR" program at UE-Varna. A specific initiative of the HEI, related to its positioning as a "green university", was chosen. Although there are a number of successful activities and programs via which the HEI implements its positioning strategy, for this study only the campaign aimed at reducing the ecological footprint of the production of single-use plastic water bottles by providing free use of a range of water dispensers in the two buildings of the university is selected. In this way, each of the respondents falls within the target audience of a similar simulated campaign, in which the Facebook page of the HEI is chosen as the media channel. The task on which the teams of students worked, as well as the GenAI tools, was related to creating content for the HEI's Facebook page with 2 main goals of the campaign – (1) to position the HEI as "green university" and (2) to stimulate the use of drinking water dispensers. The assignment also includes a limitation on the visual elements used, with their number reduced to 3 – a disposable cardboard cup, 2 blank sheets of paper and a third element that can be chosen at random. After creating the images, the teams are tasked with creating text with the same goals. The criteria for evaluating the different proposals cover the main areas in which the 2 types of content are tested with a sample of the audience (Figure 1). The other versions of generated content are created through a series of tasks (prompts), with the GenAI initially being

introduced in the context of the simulated marketing campaign, by specifying the author of the message (UE–Varna), its positioning strategy, the media channel and the characteristics of the audience. The conceptual model below summarizes the main constructs and effects:

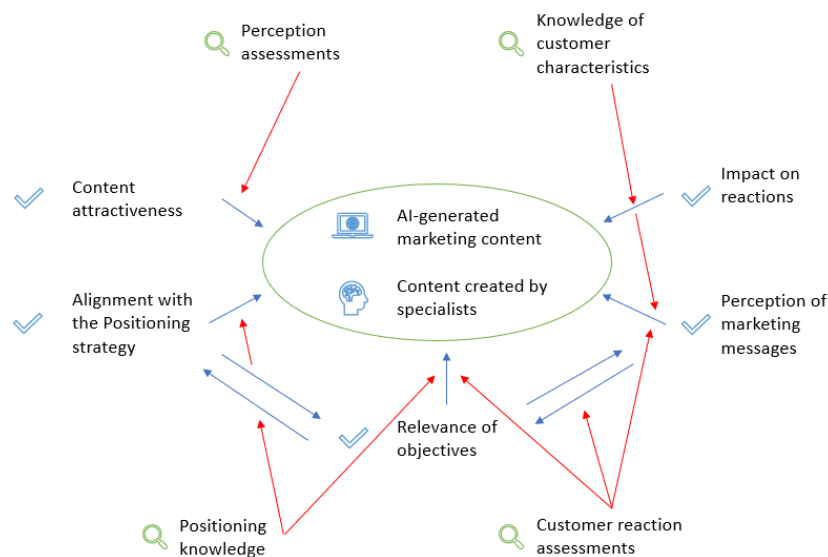


Figure 1. Conceptual model of the empirical study

Source: Authors' own research.

The comparison of the tested versions is carried out according to 2 groups of criteria – (1) the quality of the human-created and AI-generated content, and what is (2) its impact. Since quality is a complex and subjectively perceived construct, it is common practice to set some criteria that the compared objects must meet. In this case, for comparing the quality of the tested versions we use the variables from the McKenzie and Lutz scale (MacKenzie & Lutz, 1989). Arguments are rooted in our understanding that any marketing content has quality if it meets 3 conditions – (1) it must be understandable, (2) it must motivate desired change, and (3) it must be important to the audience. Since in the cited study these 3 variables were operationalized through the semantic differential scale, we decided to follow the same approach.

The data was collected in April 2023 and the sample includes 136 respondents. Of all respondents, 94% usually buy bottled water. The results of the distribution of answers on their drinking water consumption habits show 2 tendencies: (1) the purchase cannot be defined as an additional budget burden (Mean = 3.83); (2) 70% of the respondents usually use dispensers (Mean = 5.35), and for 80% of them it is important to drink water (Mean = 6.07). Based on this, it can be concluded that the use of dispensers is important for respondents and they perceive them as a valuable alternative to purchasing bottled drinking water. The majority of respondents - over 70% - perceive the university as "green" (Mean = 5.01), and its environmental initiatives - as important to them (Mean = 5.84). For 90% of participants, environmental protection is important (Mean = 6.09). At the same time, there is a strong belief that with their actions, they can contribute to environmental protection (Mean = 6.36). Moreover, the results of a correlation analysis shows that the belief that the use of water dispensers helps to protect nature shows moderate to strong relationships with the degree of importance of environmental protection. Based on the analysis, two conclusions can be drawn: (1) respondents are not indifferent to the provided alternative at the

HEI and that they are motivated to use them; (2) students perceive the HEI as “green” and demonstrate a high degree of involvement in its environmental initiatives.

Since it is difficult to include more than four testing options within a single study (due to the identity of the scales used to collect empirical data for each of these options and the automation of the response process for multiple stimuli), the most appropriate option for this study is to test a total of two pairs, or two variants of generated and two of created content, respectively. A test of reliability of the scales was performed using Cronbach's Alpha and Table 1 presents the values for each of the two scales for each of the four tested marketing content versions.

Table 1. Reliability of scales for perceived quality and impact of the tested content

Versions	1A	1B	1C	1D
Content quality scale				
Cronbach's Alpha	.785	.842	.874	.904
Content Impact Scale				
Cronbach's Alpha	.940	.962	.901	.875

Source: Authors' own research.

According to Table 1, the Cronbach's Alpha values for all scales indicate a high degree of reliability. The validity of the measurement was tested using confirmatory factor analysis. The content impact scale consists of three subscales. To check its validity, a confirmatory factor analysis using the principal components method and orthogonal rotation using the Varimax method with Kaiser normalization are performed. Three factors were specified - Factor 1 explains 38%, Factor 2 - 29% and Factor 3 - 19% of the variance. The performed reliability and validity tests of show that the applied methodology allows for further analysis of the data collected from the sample.

Results and discussions

To intersect the differences in the subjective assessments of the respondents for the tested content versions, the non-parametric Friedman test is applied. The results show that there are sufficient grounds to establish the presence of differences in the frequency distributions of the responses, through which the *quality* of AI-generated and human-created content is assessed (chi-square test value (3) = 27.344, $p < 0.001$). This necessitates conducting a post hoc test to determine where the differences in the distributions of the respondents' ratings in the sample reside. Based on the mean values of the ranks, it can be concluded that there are differences in the ratings of the content quality of 1B (Mean rank=2.27) and 1A (Mean rank=2.96), but for the remaining differences, it is necessary to conduct several Wilcoxon rank tests to test for the presence of pairwise differences. In this case, six Wilcoxon tests ($4 \times (4-1)/2$) are performed, using the Bonferroni correction for alpha when determining their statistical significance (Ganeva, 2016, p. 506). The tested relationships are 1A-1B, 1A-1C, 1A-1D, 1B-1C, 1B-1D and 1C-1D (Table 1). Then, the effect size (r) is calculated for each pair using the formula:

$$r = \frac{z}{\sqrt{N}} \quad (1)$$

According to Cohen's interpretation, values above 0.7 indicate an effect size much larger than typical, between 0.5 and 0.7 – large or larger than typical, 0.3 and 0.5 – medium, and between 0.1 and 0.3 – small or smaller than typical (Ganeva, 2016, p. 258).

Table 2. Differences in quality assessments of A.I.-generated and human-created content

Versions	<i>p</i> -value	<i>z</i>	<i>r</i>	Effect size	Identified differences
1A – 1B	0.000	5.188	0.45	Medium	Yes
1A – 1C	0.000	4.248	0.37	Medium	Yes
1A – 1D	0.000	3.996	0.35	Medium	Yes
1B – 1C	0.900	0.126	x	x	No
1B – 1D	0.612	0.508	x	x	No
1C – 1D	0.434	0.634	x	x	No

Source: Authors' own research.

The summarized results of the post hoc tests are presented in Table 3. As it can be observed, differences are found only between the assessments of the first version of the created content (1A) and the other three versions, and the size of the effect can be determined as medium. At the same time, in the assessments of the quality of the other three versions, the presence of statistical differences in the frequency distributions cannot be commented on. Based on the analysis in Table 3 it can also be concluded that the respondents distinguish the quality of the versions, but these differences cannot be explained by whether the content was AI-generated or human-created.

Table 3. Differences in impact assessments of A.I.-generated and human-created content

Versions	<i>p</i> -value	<i>z</i>	<i>r</i>	Effect size	Identified differences
1A – 1B	0.000	4.181	0.38	Medium	Yes
1A – 1C	0.000	4.042	0.37	Medium	Yes
1A – 1D	0.001	3.349	0.31	Medium	Yes
1B – 1C	0.057	1.902	x	x	No
1B – 1D	0.633	0.477	x	x	No
1C – 1D	0.088	1.705	x	x	No

Source: Authors' own research.

Similarly, the differences in the assessments of the versions of AI-generated and human-created content based on the data collected through the impact assessment scale are also examined. The results of the Friedman test show that there are sufficient grounds to establish the presence of differences through which the impact of AI-generated and human-created content is assessed (chi-square test value (3) = 26.175, $p < 0.001$). This again requires the conduct of a post hoc test to determine where the difference in the distributions of the respondents' assessments in the sample resides. Based on the average ranks, there are differences between the impact assessments of the first 1A (Mean rank=2.03) and the third tested variants 1B (Mean rank=2.81).

The results in Table 3 demonstrate that the respondents' assessments of the impact of the tested content are similar to those for the assessments of quality. Differences in the assessments of the impact of version 1A and the others can be commented on, as in the other 3 pairs such differences are not established. This confirms the conclusion already made that the differences in the subjective assessments of the respondents are not due to whether the content was human-created or generated by AI tools, but it can be attributed to other factors.

Discussion

The question of whether Gen AI can be considered as an alternative to hiring marketing graduates in the creative departments is wide open. Without accumulating sufficient data on both the development of GenAI and the attitudes and needs of the respective market, it is impossible to give a clear answer. In this sense, the more serious question that can be put in the focus of future research

is not whether, but where and in what areas in marketing content creation the use of Gen AI would be effective enough to be used as a solid alternative to human input. From the point of view of the findings and forecasts related to the development of AI discussed, two possible domains can be outlined. *The first possible domain* runs through the gradual replacement of people by AI in certain areas of marketing practice (e.g. automating marketing offers in digital channels). Since similar processes are observed in more and more fields of marketing activity, a usual extrapolation of data from such a trend would normally lead to the prediction that sooner or later in all areas human labor could be replaced by tools with AI. *The second domain* runs through the definition of the “human-machine” relationship as symbiotic. In such a relationship, there is no way to answer the question of whether “machines will replace people”, since the processes of creating anything rely on the distribution of roles in stages of the same process between specialists and AI tools. In this regard, we already considered that through AI tools, the work of specialists would become increasingly effective precisely because of the transfer of the “boring”/monotonous stages to AI.

Naturally, a third, intersecting point between the two already outlined domains is also possible. Even at the current stage of development of AI technologies, it seems completely logical to distribute different roles in the processes of creating marketing content. When designing an advertising campaign, a number of roles can be specified that are performed by different specialists – such as the copywriter, graphic designer, photographer, etc. within the entire process. From this perspective, the implementation of some of the stages can be “assigned” to GenAI tools, and others – to specialists. Which roles can be “conceded” to GenAI, however, is a question that requires further research not only into the capabilities of such tools and attitudes towards their use, but also into the reception of audiences of already fulfilled campaigns, where such application is observed.

Conclusions

Undoubtedly, the development of symbiotic relationships between people and GenAI hold enormous market potential in the field of marketing. In this course, however, it is good to take into account the challenges that these GenAI capabilities give rise to. Based on our findings, the following important conclusions and questions can be formulated: *First*. The automation of the creative process of marketing content through the capabilities of GenAI tools and minimizing human intervention shows the potential for automating the generation of such content, which is not inferior in quality and which can lead to similar effects when using marketing content created by teams of professionals at the beginning of their professional career. *Second*. The risks related to automating marketing content design may serve as the basis for future research: (1) the effects (positive and negative) of using GenAI tools in the practice of marketers and especially their impact on the development of human creativity, and (2) the need for a debate on where it would be most productive to design the intersections between avoiding dependence on working with such tools and increasing the efficiency of the work of specialists. *Third*. The opportunities and risks of using AI examined in this study can serve as a basis for automating the processes of generating marketing content, both in terms of designing algorithms and procedures that ensure their work.

Certainly, assessing the opportunities and risks of automating the processes of creating marketing content is a long and wide-ranging process and is not within the power of just one piece of research.

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