Experience With Artificial Intelligence and Attitudes Towards Social Media Copywriting

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Abstract: Artificial Intelligence (AI) is one of the most discussed phenomena in social media marketing communications today. Its application offers extensive possibilities for streamlining the production of media and advertising texts, thus fundamentally changing the established methods of work of marketers. The present study investigates how individual experience with different AI technologies influences users' attitudes towards the prospectivity of AI in copywriting in the digital environment. Specifically, three areas of AI technologies were analysed: generative AI tools, natural language processing (NLP), and machine learning (ML). Data for this study was collected through quantitative research via an online questionnaire, with a total of 1308 respondents from different age and social groups. It was hypothesized that experience with these technologies would significantly influence respondents' attitudes towards the use of AI in marketing communications. Statistical analysis (chi-square tests and multinomial logistic regression) confirmed these hypotheses. Respondents who had direct experience with generative AI tools, NLP or ML technologies demonstrated statistically significantly more positive attitudes towards the application of AI in content creation. However, the overall frequency of use of AI technologies had the strongest effect on positive expectations. Thus, the results point to the fact that more interaction with AI increases trust and acceptance of its applications in marketing. The findings of the study have important implications for practice. Marketers and social media managers should emphasize actively engaging customers in interactions with AI technologies, which can increase their positive perceptions of AI-generated content. The paper also discusses the limitations of the research and suggests future directions for further study, recommending a combination of quantitative and qualitative methods to gain deeper insights. The study contributes to the academic debate on the importance of understanding consumer attitudes when implementing AI in digital marketing.

Keywords: Artificial Intelligence, Social Media, Copywriting, Generative AI Tools, Natural Language Processing, Machine Learning

1. Introduction

Over the last decade, social media has played an increasingly fundamental role in transforming the way we communicate, educate, do business, as well as political and social interactions. The use of Artificial Intelligence (AI) has played a significant role in this evolution, as technological advances have made it possible to create, analyse, and distribute digital content more efficiently than ever before (Elkhatat et al., 2023). One of the areas where AI is making significant inroads is in the field of marketing communications and media content, specifically copywriting. AI in copywriting can generate texts that are optimized to capture the attention of the audience, increase interactions, and maximize marketing effectiveness (Noy & Zhang, 2023). While the benefits lie primarily in automation, scalability, and the ability to efficiently analyse social media user behaviour, it simultaneously opens up a debate about the quality, originality, and credibility of the content generated in this way (Zachlod et al., 2022). In the context of social media and digital marketing, a popular AI tool is the use of generative AI tools. Generative AI tools provide automated communication interfaces on social media platforms, serving not only for customer support, but are also capable of personalizing marketing campaigns, capturing valuable data on customer behaviour, and targeting consumers with high precision (Kshetri et al., 2024). This aspect is in line with the intention to identify the implications of the use of social media in different social and economic areas. Other relevant areas of AI in the context of social media are Natural Language Processing (NLP) and Machine Learning (ML). NLP enables real-time analysis of social media users' attitudes, sentiment and trends, providing marketers with instant feedback on the content created (Arbane et al., 2023). Machine learning, in turn, provides efficient processing of the vast amount of data that users generate through their daily activity on social platforms, helping to predict trends and personalize communication strategies (Kang & Lou, 2022). Despite the many positive applications of AI in social media, there are concerns about potentially negative aspects such as digital manipulation, misinformation, or loss of authenticity in communication. In this context, it is imperative to explore consumer and practitioner attitudes towards the use of AI technologies in media and marketing communications, particularly in the context of social media (Ashtiani & Raahemi, 2023). The present study seeks to elucidate the link between social media users' past experiences with selected AI technologies (generative AI tools, natural language processing and machine learning) and their attitudes towards the future use of AI in marketing copywriting.

Based on the above, we set the following research question:

How does respondents' experience with AI technologies (generative AI tools, natural language processing and machine learning) influence their perception of the prospects for using AI in social media marketing copywriting?

From this research question, the following hypotheses were formulated:

H1: Experience with generative AI tools has a statistically significant effect on the perception of the prospect of using AI in marketing copywriting.

H2: Respondents' experience with natural language processing has a statistically significant effect on their perception of the prospect of using AI in marketing copywriting.

H3: Experience with machine learning has a statistically significant effect on perceptions of the prospect of using AI in marketing copywriting.

2. Methods

A quantitative research strategy was chosen for the purpose of the present research, which aimed to investigate the impact of respondents' experiences with selected AI technologies (generative AI tools, natural language processing and machine learning) on their perceptions of the prospects for using AI in social media marketing copywriting. This approach allows the relationships between variables to be systematically investigated and the stated hypotheses to be objectively tested through statistical methods (Liu et al., 2023). The primary data collection tool was a questionnaire that was created online. The survey was distributed online via Google Forms, using social media platforms, email invitations, and research group mailing lists. The questionnaire consisted of closed-ended questions that allowed for a clear definition of the respondents' attitudes, experiences, and opinions in relation to the topics of AI and its applications in marketing communications. The questionnaire was designed to contain simple, easy-to-understand questions and scales to minimize the possibility of ambiguous answers and to ensure high validity and reliability of the data obtained. The structure of the questionnaire included the following main areas of demographic data such as gender and age. Subsequently, it was the frequency and type of experience with AI. As well as experience with specific AI technologies (generative AI tools, natural language processing, machine learning), then attitudes towards the prospect of using AI in the field of marketing communications, specifically in copywriting, and an overall assessment of the impact of AI on future marketing communications strategies on social media. The research was conducted through random selection of respondents. The sampling method was chosen due to its effectiveness in online data collection, while allowing for reaching a wide target group of social media users with varying experiences with AI. The total research sample size was 1308 respondents, and after data checking and cleaning, between 1276 and 1308 valid responses were included in the final analyses, depending on the variable under study. The age structure of the respondents included those aged between 18 and 79 years, which ensured that the results were representative across a range of ages and experiences. The data obtained were processed and analysed using IBM SPSS statistical software. Chi-square test of independence analysis was used to test for relationships between categorical variables to determine the statistical significance of differences in respondents' opinions according to their prior experience with AI technologies (generative AI tools, NLP, ML) and AI-based copywriting perspectives. The significance level was set at $p < 0.05$ by default (Kwak, 2023). Subsequently, multinomial logistic regression was applied to assess the more comprehensive influence of the variables under study on the perceived prospectivity of AI in content marketing. Multinomial logistic regression provided a more detailed view of the interrelationships and enabled the identification of the most significant factors influencing respondents' attitudes towards the future use of AI in social media marketing communications. All relevant ethical principles were adhered to during the conduct of the research. Participation was voluntary and respondents were informed of the purpose of the research and the anonymity of their responses. The data collected was processed solely for the purposes of the above research and in accordance with the General Data Protection Regulations (GDPR).

3. Results

This section presents the results of a quantitative research study that aimed to verify the relationship between respondents' experiences with AI technologies (generative AI tools, natural language processing, machine learning) and their perceptions of the prospective use of AI in marketing copywriting. The results are structured according to each hypothesis, with interpretations added.

Table 1: Relationship between experience with generative AI tools and perception of AI in copywriting

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	59,877	1	<,001		
Continuity Correction[b]	58,894	1	<,001		
Likelihood Ratio	58,277	1	<,001		
Fisher's Exact Test				<,001	<,001
Linear-by-Linear Association	59,831	1	<,001		
N of Valid Cases	1308				

Chi-square analysis (Table 1) confirmed a significant relationship between respondents' experience with generative AI tools and positive perceptions of the prospectivity of using AI in copywriting ($\chi^2 = 59.877$; df = 1; $p < 0.001$). Respondents with experience with generative AI tools were more likely to have positive perceptions of the prospectivity of AI in content marketing. The result confirms hypothesis H1.

Table 2: Relationship between experience with NLP and perception of AI in copywriting

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25,000	1	<,001		
Continuity Correction[b]	24,148	1	<,001		
Likelihood Ratio	23,690	1	<,001		
Fisher's Exact Test				<,001	<,001
Linear-by-Linear Association	24,980	1	<,001		
N of Valid Cases	1276				

The results of the chi-square test (Table 2) showed a statistically significant relationship between respondents' experience with natural language processing (NLP) and positive perceptions of the prospectivity of AI in marketing copywriting ($\chi^2 = 25.000$; df = 1; $p < 0.001$). Respondents who had experience with NLP showed significantly more positive attitudes toward AI copywriting, which supports hypothesis H2.

Table 3: Relationship between experience with ML and perception of AI in copywriting

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	27,336	1	<,001		
Continuity Correction[b]	26,342	1	<,001		
Likelihood Ratio	25,635	1	<,001		
Fisher's Exact Test				<,001	<,001
Linear-by-Linear Association	27,315	1	<,001		
N of Valid Cases	1308				

The Chi-square test (Table 3) showed a significant association between respondents' experience with machine learning (ML) and positive evaluation of the prospectivity of using AI in marketing copywriting ($\chi^2 = 27.336$; df = 1; $p < 0.001$). Respondents with prior experience with machine learning showed greater optimism towards using AI in marketing copywriting, which supports hypothesis H3.

Table 4: Multinomial. Logistic regression

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
The Intercept	192,739[a]	,000	0	.
generative AI tools	219,923	27,185	2	<,001
language processing	194,335	1,597	2	,450
machine_suffusion	195,095	2,357	2	,308
frequency_ai	250,487	57,748	8	<,001

The results of the multinomial logistic regression (Table 4) showed a statistically significant effect of experience with generative AI tools ($p < 0.001$) on respondents' expectations of the impact of AI on marketing content. In contrast, experience with natural language processing ($p = 0.450$) and machine learning ($p = 0.308$) proved to be insignificant. The most significant factor influencing positive perceptions of AI perspectives in marketing communications was the frequency of use of AI technologies ($p < 0.001$).

4. Discussion

The results of the present research provide several valuable findings that add significantly to the existing debate on the use of AI in social media and marketing communications. The significance of the relationship between respondents' experiences with various AI technologies (generative AI tools, natural language processing, and machine learning) and positive evaluations of the prospect of using AI in marketing copywriting, suggests that direct interaction with AI technologies increases acceptance and positive perceptions of them. The confirmed relationship between respondents' experience with generative AI tools and positive perceptions of AI copywriting is in line with previous findings, which state that generative AI tools are an effective tool to increase users' positive attitudes towards AI in general (Bilquise et al., 2022). This may be due to the fact that generative AI tools allow users to experience direct interaction with AI, thereby reducing uncertainty and apprehension that often stems from lack of knowledge or lack of experience (Aggarwal et al., 2023). The analysis further demonstrated that respondents with NLP experience had a more positive perception of the prospect of AI in marketing communications. This finding is consistent with the arguments of authors who consider NLP technologies to be crucial for effective content personalization and communication on social media (Kshetri et al., 2024). The high level of personalization enabled by NLP may be a factor that leads to greater optimism in relation to the use of AI in content marketing. Similarly, experience with machine learning has been linked to a more positive perception of the potential of AI in marketing copywriting. The research findings are consistent with studies highlighting that ML significantly improves marketers' ability to predict customer behaviour and thus effectively optimise social media communications (Matz et al., 2024). On the other hand, a more detailed analysis using multinomial logistic regression showed that the impact of ML experience may be less direct and more strongly influenced by other factors, such as the overall frequency of AI use. The most striking result of the multinomial logistic regression is the identification of frequency of use of AI as the most significant factor influencing respondents' positive expectations of its future use in marketing. This finding confirms technology acceptance theory (Parvez et al., 2022), which emphasizes that the more frequently people are exposed to a technology, the more likely they are to begin to perceive it as useful, easy to use, and acceptable in the long run. On the other hand, the potential limitations of the findings need to be considered. The use of convenience sampling may limit the generalizability of the results, as the sample may not be fully representative of the overall population of social media users (Donaldson et al., 2022). Also, while the quantitative nature of the research allowed for statistical relationships to be verified, it did not provide deeper qualitative insights into the reasons and motivations behind respondents' attitudes. Despite these limitations, the paper makes an important contribution to the debate by providing new evidence of the positive impact of practical experience on the acceptance of AI in social media and marketing. For further research, we recommend the use of combined methodologies that could provide a deeper qualitative understanding of users' opinions and attitudes and thus enrich the discussion on the prospective use of AI in marketing communications.

5. Conclusion

The presented research analysed the relationship between respondents' experiences with specific AI technologies (generative AI tools, NLP, ML) and their attitudes towards the prospect of using AI in social media marketing copywriting. The results confirmed all stated hypotheses (H1, H2, H3) and showed that practical experience significantly increases positive perceptions of AI as a prospective tool for marketing content creation. However, the most significant factor of positive expectations turned out to be the frequency of use of AI technologies. From a practical perspective, these results suggest that social media firms should actively engage customers in interacting with AI technologies, which can increase their trust, positive attitude, and readiness to accept AI-generated content. From a theoretical perspective, the study supports the validity of technological acceptance in the context of AI and marketing communication. Future research should incorporate qualitative approaches to further explore users' views and motivations and should also consider broader socio-economic and cultural factors that may influence attitudes towards AI in different regions or segments of the population. Consistent with the theme that AI is likely to continue to play a key role in transforming marketing communications on social media, and that its effective use requires continuous building of trust and understanding among users.

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Ethics Declaration

This research did not require ethical approval. All participants provided informed consent for the use of their responses for research purposes.

AI Declaration

No AI tools were used in the creation of this paper.

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