Research on the Impact of Artificial Intelligence Generated Content on Consumer Willingness

Wenjing Han[1*]

[1] School of Economics and Management, North University of China, Taiyuan, China

Abstract. This study explores the application effect of Artificial Intelligence (AI) generated content in hotel marketing. Using a 2×2 experimental design, the effects of artificial and Artificial Intelligence sources, product introduction and event promotion type copywriting on consumers' booking intention are compared. Through the data analysis of the questionnaire, it is found that there is no significant difference in the overall impact between AI copywriting and artificial copywriting, but consumers' trust in AI technology significantly affects their consumption preferences. Regression analysis shows that trust and acceptance of AI are important predictors of booking intention. This study shows that among Generation Z consumers, AI-generated content has a broad acceptance basis and provides a theoretical basis and practical suggestions for hotel brands to use AI for content production. At the same time, it also points out limitations such as sample limitations and situation simplification. Future research can further expand this topic by introducing real behavioral data and multi-level samples.

1 Introduction

As an important branch of the field of artificial intelligence (AIGC), such as ChatGPT, DeepSeek, Tencent Yuanbao, and other technologies, have been developed in recent years. Needless to say, AIGC has superior performance in natural language processing compared to traditional artificial intelligence. Technical compatibility and cost reduction are the main driving forces for enterprises to choose to apply generative artificial intelligence (AI) [1]. Artificial intelligence tools are specifically designed to excel in content creation, which makes them an asset in the advertising and marketing fields [2]. With the help of AIGC, enterprises can produce creative advertising copy, slogans, and poster designs that meet their needs [3]. Combined with the content generated by user big data analysis, it can also achieve highly personalized and accurate push. In the post-epidemic era, the thriving hotel industry was using AI to complete room type introductions, event copy, customer responses and other content, greatly improving marketing effectiveness and changing the way of customization, personalization, communication, prediction and innovation [4]. At present, AIGC is profoundly reshaping the field of content production and marketing copy. However, the large-scale introduction of AIGC technology has also aroused consumers' attention to its

* Corresponding author: hyunk709@gmail.com

authenticity, attractiveness, and professionalism. De Cremer, Morini Bianzino, and Falk mentioned that artificial intelligence can ensure that human work increases productivity. Artificial intelligence has put a large amount of low-quality content on the market, which may replace human creative work [5]. Consumers still have doubts about the acceptance and trust of AI-generated content. The language style and source of the copy may become key factors affecting consumers' emotional reactions and behavioral decisions. How to better use AIGC technology in the marketing field is still worth further discussion.

More and more companies realize that marketing copy is no longer just a tool for corporate self-promotion, but has become an important trigger for influencing consumer decision-making behavior. Although there are differences between different industries, relying solely on a general large language model to gain the favor of consumers will not result in a phenomenon of talking on paper, because AIGC technology is applicable in different situations. However, how to make good use of AIGC technology to enhance its marketing soft power is a problem [6]. This study focuses on the practical application of AI copywriting in the hotel industry. It combines the regulatory effect of consumers' attitudes towards AI, and examines the interaction between content type and content source, filling the current gap in empirical research in this field and having profound theoretical value. At the same time, this article also has strong practical guiding significance. This study can help hotel marketing and publicity personnel decide whether to increase the use of AIGC and when it is reasonable to use AIGC technology to assist their work.

The method adopted in this study is a 2*2 inter-group experimental design. The author uses the ChatGPT tool to generate two groups of marketing copywriting, namely product introduction copywriting and event promotion copywriting. The test subjects are randomly assigned through the experimental platform. Some subjects will be clearly prompted that the copywriting is generated by AI, while the other part will not be prompted. At the beginning of the questionnaire design, the subjects were informed that this experiment is to test the consumer's willingness to consume AI-generated copywriting and traditional manual copywriting. Therefore, this study calls the group that is not prompted the "manual group". In this way, the main effect and interaction effect of the two independent variables on the dependent variable are tested.

This study aims to explore the interaction between the source of copywriting and the type of copywriting on consumer preferences, that is, the impact of AI-generated and manually generated content and product introduction copywriting and event promotion copywriting on consumer preferences. At the same time, combined with the user's attitude towards AI, an in-depth analysis is conducted to reveal the key psychological mechanism that affects consumer willingness.

2 Literature review

The technology acceptance model emphasizes that users' acceptance of technology is mainly influenced by two factors: perceived usefulness and perceived ease of use. Once proposed, the model has been widely used to study consumers' attitudes towards emerging technologies and predict users' future behaviors [7]. This model is particularly applicable in the context of studying consumers' acceptance and willingness to purchase AIGC [8]. In the hotel copywriting scenario, whether AI-generated content is accepted often depends on whether consumers think it is useful and easy to understand. In other words, when AI is applied in the hotel service industry, consumers consider standards such as whether the information is accurate, whether the display is comprehensive, whether the language is clear, and whether the logic is reasonable. Taking the latest version of OpenAI, GPT-4, as an example, it is good at multilingual content and can meet the customization needs of different platforms, ensuring that hotels can effectively promote and communicate with the audience [9].

The audience's acceptance of information depends on the professionalism, credibility and attractiveness of the information source [10]. In recent years, the discussion of whether AI can serve as a "credible communicator" has become a hot topic. Artificial intelligence conversational systems, including voice assistants and chatbots, play a vital role in hotel marketing. They interact with customers to provide information and help, thus becoming an indispensable part of improving customer satisfaction [11]. Almeida and Ivanov also found in their 2024 study that when consumers are told that the content is generated by AI, their credibility in the content does not decrease significantly, and they are even more inclined to believe AI content in strictly structured situations [12].

Consumer empowerment theory is an important topic in digital marketing. When consumers can perceive the "control" of information, their trust and loyalty to the brand will increase. In the AI copywriting scenario, whether to tell consumers that "the content is generated by AI" is actually an issue of information transparency, which also directly affects consumers' sense of empowerment.

3 Research on the effect of AIGC in marketing copywriting

3.1 Sample selection

This study selected experimental subjects according to unified standards and adopted the first-hand data collection method of questionnaires. Finally, 320 questionnaires were distributed and 276 valid questionnaires were collected. There were 65, 70, 73 and 68 people in each group of experimenters, respectively. The specific information is shown in Table 1 and Table 2.

Table 1. Basic information statistics of sample data

Groups	Manual + product group	Manual + activity group	AI + product group	AI + activity group
Frequency of accommodation	81.5% of people stay 2-10 times a year	86.3% of people stay 2-10 times a year	85.7% of people stay 2-10 times a year	80.9% of people stay 2-10 times a year
Duration of each stay	61.5% of people stay 1-2 nights	74% of people stay 1-2 nights	74.3% of people stay 1-2 nights	69.1% of people stay 1-2 nights
Payment for one night's room	78.5% of people choose the price range of 101-250 yuan	72.6% of people choose the price range of 101-250 yuan	77.1% of people choose the price range of 101-250 yuan	63.2% of the people chose the price range of 101-250 yuan

3.2 Data measurement

The four groups of testers answered the measurement items about booking willingness and attitude towards AI in the last part of the questionnaire. All the above questions are presented in combination with Likert scale (7 points).

Table 2. Data analysis of consumer booking willingness

	Manual + product group	Manual + activity group	AI + product group	AI + activity group
Scale reliability coefficient	0.8775	0.7784	0.8353	0.9008
Average measurement value of booking willingness	5.85	6.00	5.95	5.90

First, the reliability analysis was conducted on the variable "consumer booking willingness". The four groups of data all exceeded or approached 0.8, indicating that the internal consistency of the scale was good.

In the descriptive statistics, the average booking willingness of the four groups of samples was between 5.84–6.05, indicating that the overall tendency was positive. The overall score of the activity promotion copywriting group was higher than that of the product introduction copywriting group, which preliminarily showed that different copywriting types may have a more obvious impact than the copywriting source.

In order to further verify the above differences, this study conducted a two-way ANOVA. The results showed that the main effect of the copywriting source (manual vs. AI) on consumers' overall booking intention was not significant ($F = 0.28$, $p = 0.598$), and the main effect of the copywriting type (product vs. activity) ($F = 2.27$, $p = 0.133$) was close but also not significant. At the same time, the interaction ($F = 0.41$, $p = 0.522$) did not reach statistical significance. This shows that at the overall level, consumers do not show obvious preference or resistance to AI-generated content, and AI and manual writing have similar effects in this experimental situation.

Next, this study introduced "attitude towards AI content acceptance" as a regression independent variable and conducted an OLS regression analysis. It was found that the two test variables, "I think AI content can be trusted" and "whether AI is labeled or not will not affect my attitude," had a significant positive predictive effect on consumers' booking intention ($p < 0.01$). This result shows that although AI copywriting itself is not statistically significantly better than manual copywriting, the degree of trust in AI technology by individuals will significantly affect their consumption judgment. This supplements the findings of the two-way ANOVA to a certain extent and also reveals the importance of individual differences.

Overall, the performance of AI-generated copywriting in this study is not significantly different from that of manual copywriting, and consumers' attitude towards AI is a key predictor of booking intention. This inspires hotel marketing practice: instead of emphasizing the source of copywriting, it is better to improve the credibility and humanity of AI copywriting to enhance user acceptance.

4 Conclusion

This study focuses on "whether AI-generated content affects consumers' willingness to book hotels". The AI group was clearly prompted that "the content is generated by AI". From the perspective of empowerment theory, this transparency setting may affect consumers' cognition and response. From the overall data, neither the source of the copy nor the interaction with the copy type has a statistically significant difference in consumer willingness, revealing that the Z generation group is no longer overly sensitive to information such as "who wrote the copy". Young consumer groups have a neutral or even positive perception of AI's "information source status", and AI-generated copy is widely accepted in the current context.

Afterwards, the consumer's attitude variable towards AI was included in the regression model and it was found that AI trust had a highly significant positive impact on the overall booking intention. This shows that consumers' subjective trust and acceptance will significantly regulate their behavioral tendencies. This finding indirectly confirms the applicability of the "perceived trust" theory and the "user acceptance model" in the AI scenario.

This study believes that when hotels use AI technology to generate marketing copy, they should focus on the following three strategic directions: (1) "Humanity" and "emotionality" are the core of impressing consumers. Improving the authenticity and affinity of copy is the key task of generating content. (2) AI trust is a key variable that affects booking behavior. Companies can reduce users' misunderstanding and resistance to AI content and establish a foundation of trust through appropriate information disclosure, annotations, and other methods. (3) With the continuous evolution of generative AI technology, its value in copywriting, recommendations, customer service and other fields will continue to expand. Companies need to pay more attention to user psychology and trust building when implementing it.

Although this study strives to be rigorous in design and execution, it still has certain limitations. First, this study focuses on the young group aged 18-25, who are generally more receptive to AI technology, so the extrapolation of the research results is limited. Future research can introduce samples from more age groups, especially middle-aged and elderly consumers, to explore the differences in the acceptance of AI-generated content by people of different generations. Second, the sources of the copywriting are all generated by ChatGPT, and only rely on small prompts to distinguish between manual and AI sources, which may affect the subjects' actual judgment. Future research can try to introduce professional writers to write content, or try to measure the subjects' judgment on the source of the copywriting to build a more realistic basis for comparison. Third, this study attempts to measure consumers' attitudes towards AI, but because it uses a questionnaire experimental design, it is difficult to capture the dynamic psychological changes of users in actual booking behavior. In the future, it can be combined with dynamic methods such as behavior tracking to conduct in-depth exploration.

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