



Research Article

The Impact of Artificial Intelligence in Shaping Advertising Strategies for SMEs: Systematic Literature Review and Qualitative Research

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Abstract

Today, digital advancements in business challenge SMEs to reach and engage with their target audiences through advertising. Traditional advertising strategies require modification, as consumer behaviors are changing. Therefore, they view ads differently on various platforms. Nevertheless, Artificial intelligence gained wide opportunities in various industries, and marketing is no exception. The research aimed to explore Artificial Intelligence's role in modifying SMEs' advertising campaigns and strategies. The author used quantitative research. A survey study was developed based on a systematic literature review. The questionnaire was distributed using snowball and conventional sampling methods to a diverse sample of SMEs across social media platforms such as Facebook, LinkedIn, Instagram, and X. The author used the Technology Acceptance Model (TAM) as a theoretical framework. According to the TAM model, users' acceptance and adoption of technology are influenced by perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness would compare to SMEs' beliefs about the effectiveness and benefits of AI in improving advertising methods. Perceived ease of use would correlate to SMEs' perceptions of the ease with which practitioners can combine and use AI tools within their existing advertising campaigns. The research findings underline empirical evidence of the significance of Artificial intelligence in advertising strategies for SMEs. These research insights offer SMEs actionable recommendations for effectively using AI to enhance their advertising strategies, gain a competitive advantage, and gain sustainable growth in the digital landscape.

Keywords: Artificial Intelligence, Advertising, AI Marketing, social media, SMEs

Introduction

Nowadays, the digital and competitive business landscape challenges SMEs to reach and engage with their target audiences through diverse

advertising platforms, channels, and methods (Gabelaia, 2022; Sivasankari & Balamurugan, 2024). Therefore, by determining the critical elements of AI-driven advertising strategies, this research offers actionable insights

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for SMEs to navigate the complexities of modern advertising in marketing and capitalize on artificial intelligence.

This research investigated Artificial Intelligence's role in modifying SMEs' advertising campaigns and strategies. Hence, this aimed to define how AI-driven techniques empower SMEs to improve customer targeting, personalize content to their audiences, optimize campaigns, and utilize predictive analytics, thus bolstering their advertising effectiveness and competitiveness (Zeng et al., 2022; Rathee & Milfeld, 2024; Martín-Herrán et al., 2023).

The author used a quantitative research approach. A survey study was developed based on a systematic literature review. Surveys were distributed using snowball and conventional sampling methods to a diverse sample of SMEs across social media platforms such as Facebook, LinkedIn, Instagram, and X. Regression analysis and correlation were used to determine statistical relationships and significances. The research findings highlight the significance of AI adoption. By comparing advertising metrics between SMEs using AI-driven techniques and those depending on traditional methods, the impact of AI on advertising effectiveness is essential.

The author used the Technology Acceptance Model (TAM) as a theoretical framework. Fred Davis developed TAM in the 1980s. This model is widely used in information systems and technology adoption research and effectively suits this research. According to the TAM model, users' acceptance and adoption of technology are influenced by perceived usefulness (PU) and perceived ease of use (PEOU). Consequently, people are more likely to embrace new technology if they perceive it to be useful in enhancing their performance or reaching their objectives and if they perceive it to be easy to use.

In this research, TAM offers a valuable perspective on characteristics impacting SMEs' adoption of Artificial intelligence. Perceived usefulness would compare to SMEs' beliefs about the effectiveness and benefits of AI in improving advertising methods. Perceived ease of use would correlate to SMEs' perceptions of the ease

with which practitioners can combine and use AI tools within their existing advertising campaigns.

The research findings underline empirical evidence of the significance of Artificial intelligence in advertising strategies for SMEs. Moreover, the research emphasizes the scientific framework underlying AI-powered advertising, explaining the theoretical principles and technological instruments causing its effectiveness. These research insights offer SMEs actionable recommendations for effectively using AI to enhance their advertising strategies, gain a competitive advantage, and gain sustainable growth in the digital landscape.

Literature Review

In today's vibrant marketplace, businesses continually pursue strategies to stand within the competition (Sinclair, 2015). Therefore, advertising emerges as an opportunity to navigate brands toward recognition, relevance, and revenue (Rios et al., 2020; Craig, 2015). Businesses can effectively communicate their offerings through strategic campaigns and foster customer engagement (Osakwe, 2016; Rosenbaum-Elliott, 2021; Minissale, 2017). Besides, new digital technologies have significantly changed how businesses communicate and interact via digital media (Jiang et al., 2017; Heejun & Cho, 2020).

SMEs play a significant role in the global economy, operating in highly competitive markets with limited resources (Shi et al., 2019). In this context, creating and executing effective advertising strategies are necessary for SMEs to improve brand cognition, attract customers, and grow sales (Grygiel, 2019). Moreover, Artificial intelligence has emerged as a transformative force in advertising (Kumar, 2019). Hence, SMEs increasingly acknowledge AI's potential in shaping their advertising strategies (Qi, 2019).

Advertising is the technique to bring products, services, opinions, or causes to the public's attention and persuade the customer to respond as advertised (Rathee & Milfeld, 2024; Shareef, 2019; Cortez, 2020; Fennis & Stroebe, 2020). In other terms, the definition of advertisement is the means of communication in which a product

is advertised to attract interest, engagement, and sales (Rup, 2020; Fennis & Stroebe, 2020).

Exploring the impact of diverse advertising strategies on SMEs demonstrates noteworthy insights into their market penetration and consumer engagement (Rios et al., 2020; Shen et al., 2020). These strategies have developed with artificial intelligence, becoming more sophisticated and targeted (Rosenbaum-Elliott, 2021). Moreover, SMEs have long employed traditional advertising methods to build brand awareness and reach broad audiences (Lorente-Páramo et al., 2020). However, the digital age has shown new techniques that enhance customer relationships with brands (Tran et al., 2020). Besides, these AI strategies allow businesses to tailor their messages more precisely to specific demographics (Mehta et al., 2021).

Artificial intelligence is critical in this change by enabling personalized advertising (Heejun & Cho, 2020; Yang et al., 2021; Gabelaia, 2022). AI algorithms can analyze extensive data to identify consumer preferences and forecast trends, permitting businesses to produce highly targeted ads that echo with individual consumers (Jee, 2021). Additionally, AI-driven tools improve customer interaction, customer experience, and loyalty (Karray et al., 2022). Moreover, AI encourages real-time monitoring and adjustment of ads (Gabelaia, 2022; Nuara et al., 2022). By constantly analyzing performance metrics, AI methods optimize ad placements, budgets, and content (Cortez, 2020). This dynamic process helps SMEs stay agile (Karray et al., 2022; Sivasankari & Balamurugan, 2024; Bagwell, 2007).

For an advertisement to be adequate, its production and placement must be based on knowledge and skilled media use (Rosenbaum-Elliott, 2021; Zeng et al., 2022; Kim et al., 2022). A strategy will combine Creativity in producing the advertising messages with intelligent scheduling and placement (Baudieret al., 2022). However, with a fixed budget, advertisers face a fundamental choice in how their message is seen or heard by many people fewer times or by fewer people many times (Poddar et al., 2022; Spotts et al., 2022).

AI-powered instruments propose worthwhile insights into market trends, consumer behavior,

and competitor strategies, enabling more knowledgeable decision-making in advertising (Gabelaia, 2022; Hao et al., 2022; Heejun & Cho, 2020). Moreover, by analyzing large datasets, AI algorithms can identify patterns that human analysis may neglect, enabling more effective advertising planning (Wilkinson et al., 2022; Rizvanovi et al., 2023; Gliga & Evers, 2023). Moreover, AI-driven predictive analytics allows SMEs to proactively modify their advertising and be more competitive (Reijmersdal et al., 2022; Sivasankari & Balamurugan, 2024).

AI technologies, such as natural language processing and generative algorithms, are changing content creation for SME advertising (Karray et al., 2022). NLP algorithms analyze consumer sentiment and language patterns to craft compelling ads. At the same time, generative models autonomously develop visuals, videos, and other multimedia content, reducing the time and cost (Rathee & Milfeld, 2024; Sinclair, 2015; Nuara et al., 2022). Hence, this enables SMEs to create engaging and personalized advertising content at scale (Craig, 2015).

The importance of advertising lies in composing persuasive narratives that resonate with audiences (Rios et al., 2020; Nugroho & Wang, 2023). Moreover, it integrates art and science, connecting creative storytelling and data-driven insights to build brand awareness and recognition (Zhang, 2021). At its heart, advertising connects brands with their target audiences (Martín-Herrán et al., 2023). Therefore, one of the essential advantages of AI in advertising is its ability to hyper-target specific audience segments (Gabelaia, 2022). Through data mining and machine learning algorithms, SMEs can collect detailed information about their target demographics (Kumar, 2021). This encourages detailed ad targeting (Rios et al., 2020; Sharma et al., 2023). As a result, SMEs can optimize their advertising budget (Sivasankari & Balamurugan, 2024).

Effective advertising strategies for SMEs depend on understanding their target audience (Yaiprasert & Hidayanto, 2023). SMEs must invest time and resources in market research to identify and segment their target demographics (Sharma et al., 2023). Moreover, SMEs can tailor their advertising messages and channels by

identifying the perfect customers, raising the possibility of conversion and long-term customer loyalty (Zhang, 2021; Gabelaia, 2022). Besides, advertising informs, persuades, and reminds (Rosenbaum-Elliott, 2021; Mehta et al., 2021). Advertising creates awareness of brands, products, and concepts (Yang et al., 2021; Jee, 2021).

Digital marketing has revolutionized the advertising landscape for SMEs, presenting cost-effective and targeted advertising (Heejun & Cho, 2020; Nugroho & Wang, 2023). Digital channels give SMEs immediate access to their target audience and real-time feedback (Zhang, 2021). Moreover, mobile technology allows them to engage with customers anytime and anywhere (Martín-Herrán et al., 2023; Rosenbaum-Elliott, 2021). Furthermore, the digital era introduced new platforms, techniques, and metrics for success (Osakwe, 2016). Digital advertising has brought unprecedented personalization and data-driven targeting. At the same time, social media and search engine platforms have evolved as integral to advertising strategies (Jiang et al., 2017; Sivasankari & Balamurugan, 2024; Minissale, 2017). Lastly, digital transformation has also democratized advertising, allowing businesses of all sizes to participate in the market and connect with their audiences innovatively (Baudieret al., 2022; Poddar et al., 2022).

Innovative technologies, such as artificial intelligence and machine learning, are shaping advertising strategies for SMEs (Spotts et al., 2022). AI-powered tools encourage SMEs to automate repetitive tasks, analyze massive data, and personalize advertising messages at scale (Cortez, 2020; Rup, 2020). Moreover, utilizing machine learning algorithms helps SMEs identify areas for improvement and modify their advertising strategies (Lorente-Páramo et al., 2020; Sivasankari & Balamurugan, 2024).

Furthermore, creativity is vital for advertising, serving as the stimulus that transforms ordinary messages into impactful ones (Rios et al., 2020; Tran et al., 2020). Besides, the creative process in advertising implicates more than just aesthetic appeal; it is about crafting stories and making brands relatable and products desirable. Hence, creative advertising makes messages stand out

(Rosenbaum-Elliott, 2021; Shi et al., 2019; Grygiel, 2019).

While the benefits of AI in advertising for SMEs are noteworthy, some challenges must be managed (Fennis & Stroebe, 2020; Kumar, 2019; Sivasankari & Balamurugan, 2024). These challenges include data privacy, cybersecurity, the need for skilled personnel, and the algorithmic bias affecting advertising results (Qi, 2019). Besides, it is necessary to ensure transparency and ethical use of AI in advertising to strengthen consumer trust and credibility (Shareef, 2019). Lastly, SMEs' ultimate challenge in advertising planning is budget limitations (Gabelaia, 2022; Sivasankari & Balamurugan, 2024). Unlike large businesses, SMEs have limited financial funds for advertising (Kumar, 2021). Consequently, SMEs prioritize cost-effective advertising to maximize reach (Sharma et al., 2023; Sivasankari & Balamurugan, 2024; Bagwell, 2007; Yaiprasert & Hidayanto, 2023; Gabelaia, 2022; Hao et al., 2022; Reijmersdal et al., 2022).

Research Methodology

The research was conducted using quantitative research methodology to explore Artificial Intelligence's role in modifying SMEs' advertising campaigns and strategies. Firstly, the author observed and analyzed secondary data through a systematic literature review synthesizing existing research on AI in SMEs. This approach helped to identify significant variables relevant to AI and advertising effectiveness, ensuring the study was grounded in a theoretical framework and provided practical relevance.

The survey was developed to collect data on AI and its integration within SME advertising campaigns. Questions were constructed using Likert scales to measure attitudes and perceptions and multiple-choice questions to assess specific practices. Furthermore, the survey was distributed on Facebook, LinkedIn, Instagram, and X (formerly Twitter) using snowball and convenience sampling. Snowball sampling leans on initial respondents to expand the sample through the network of connections. Besides, the convenience sampling method targets a predefined sample of SMEs through various channels. Therefore, using social media

permits the efficient dissemination of the survey to increase response rates and enhance the sample's representativeness.

Regression analysis was used to highlight the relationship between variables. Therefore, it helped to quantify how various factors related to AI affected advertising. Moreover, correlations were used to exhibit statistical relationships between paired variables. Correlation analysis provided insights into whether SMEs using AI experienced or obtained different advertising results than traditional methods.

The author developed five hypotheses such as:

Hypothesis 1 - Advertising Effectiveness

- H₀. There is no significant difference in advertising effectiveness between SMEs using AI and traditional methods.
- H₁. SMEs using AI experience significantly different advertising effectiveness than traditional methods.

Hypothesis 2- Advertising Reach

- H₀. There is no significant difference in advertising reach between SMEs using AI and traditional methods.
- H₁. SMEs using AI experience significantly different advertising reach than traditional methods.

Hypothesis 3 - Return on Investment (ROI)

- H₀. There is no significant difference in advertising ROI between SMEs using AI and traditional methods.
- H₁. SMEs using AI achieve significantly different advertising ROI than traditional methods.

Hypothesis 4 - Customer Engagement

- H₀. There is no significant difference in customer engagement metrics between SMEs using AI and traditional advertising methods.
- H₁. SMEs using AI experience significantly different customer engagement metrics than those using traditional advertising methods.

Hypothesis 5 - Audience Targeting Precision

- H₀. There is no significant difference in the precision of audience targeting between SMEs using AI and traditional advertising methods.
- H₁. SMEs using AI achieve significantly different precision in audience targeting than traditional advertising methods.

Results and Discussion

A Systematic Literature Review

The author conducted an extensive secondary data analysis to explore Artificial Intelligence's role in modifying SMEs' advertising campaigns and strategies. This process was important to define key variables before developing a survey questionnaire. Figure 1 outlines the process of how available literature was screened and filtered.

The secondary sources such as academic and scientific journals, and conference proceedings, were searched on SCOPUS, Web of Science, EBSCO, and Google Scholar databases. It was important not to miss reliable data to better understand and develop a questionnaire. Thus, 436 sources were identified, of which 222 were from SCOPUS, 113 were from WoS, and 101 were from Google Scholar.

A systematic literature review includes four major phases that offer an opportunity to be efficient in secondary data analysis. First, the author grouped major literature sources from three major platforms. Once the large sources were identified, the screening and selection process started. The author screened the articles based on the preset criteria to identify which articles were eligible for inclusion in the review. Besides, the author developed three major criteria for exclusion. After initial screening on duplicates, 124 duplicated articles were excluded.

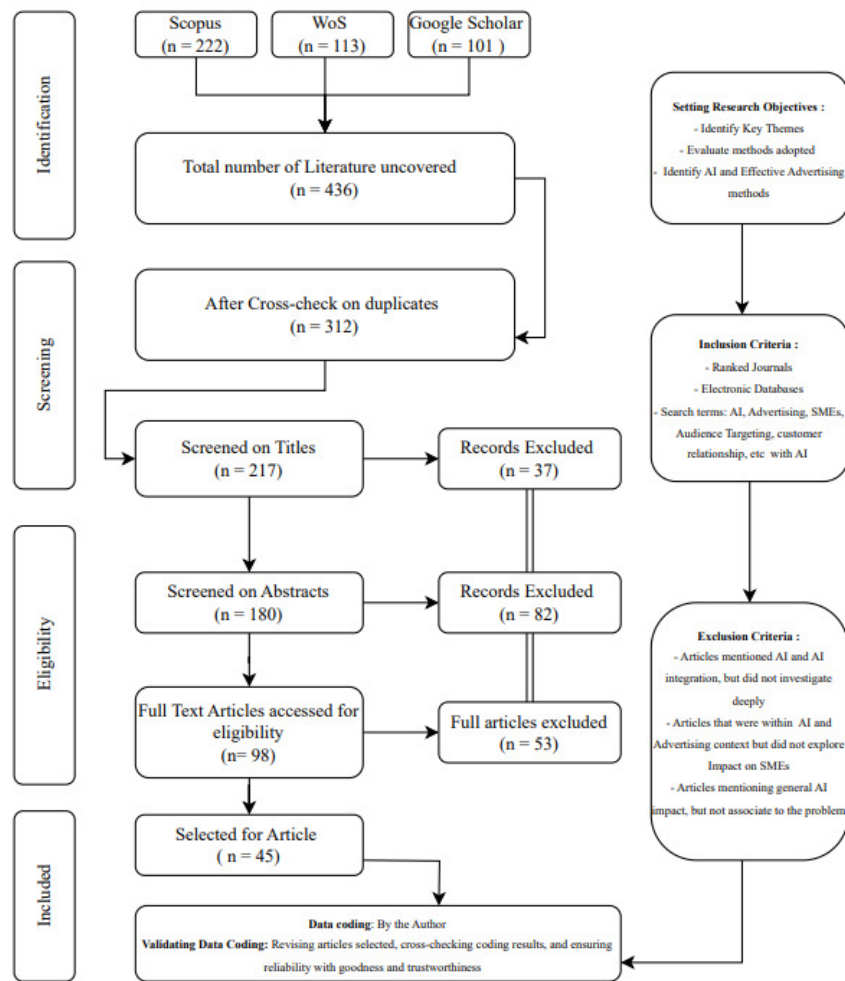


Fig 1. Systematic Literature Review (Developed by the Author)

Furthermore, after excluding duplicates, the author screened literature on research titles. This is a critical part of the process, as many articles have effective research titles, but are not relevant with content. Title screening resulted in excluding 37 articles based on predetermined elements. Nevertheless, the authors screened the remaining articles on abstracts, and 82 articles were excluded. Furthermore, 98 eligible full-text articles were accessed, and 53 were excluded.

Accordingly, 45 articles were identified as eligible and included in the research. However, before using articles, they were crosschecked for reliability. Consequently, based on a systematic literature review, the author identified five major patterns (figure 2) such as advertising effectiveness, advertising reach, return on investment, customer engagement, and audience targeting procession. Consequently, based on these patterns, the survey study was developed.

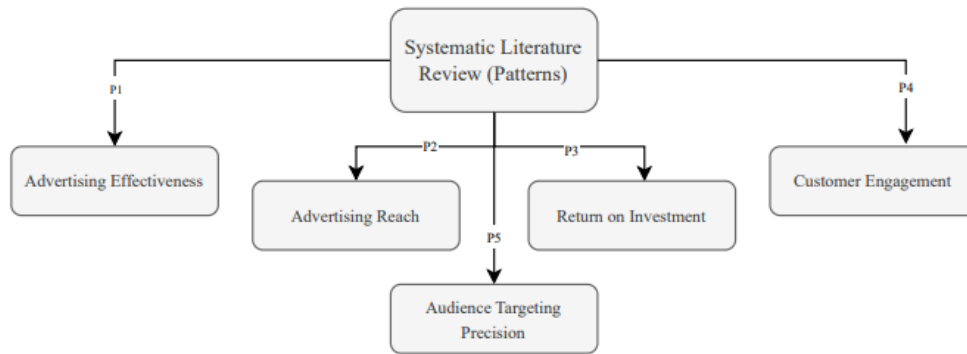


Fig 2. Patters based on Systematic Literature Review (Developed by the Author)

Survey Results and Findings

The survey was administered between January 1st and March 1st, 2024, to explore Artificial Intelligence's role in modifying SMEs' advertising campaigns and strategies. The survey was distributed on Facebook, LinkedIn, Instagram, and X (formerly Twitter) using snowball and convenience sampling. Data were collected using Qualtrics software. Before accepting participation in the survey, respondents had to familiarize themselves with a consent form, and only after they could participate. The critical requirements were level of experience and professional field. It was essential to have respondents working in marketing, especially in advertising, AI marketing, content creation, social media, marketing strategies, etc.

Based on patterns identified from the literature review, the author created a survey that studied five patterns, with additional survey questions related to AI and advertising. Seven questions addressed advertising effectiveness, seven questions addressed advertising reach, eight questions addressed return on investment, seven questions addressed customer engagement, and eight questions addressed audience targeting process. This approach was essential to emphasize and explore the hypotheses developed for this research study.

Overall, 120 professionals voluntarily participated in the survey, emphasizing the credibility and reliability of the data collected.

Figure 3 highlights the demographics of the respondents. Most respondents fall between the ages of 23 and 32, which corresponds well with professional experience. Moreover, other age categories also have significance for the study. The vast majority of the respondents had 1-3 years of professional experience in the marketing field. It could also be emphasized that experience distribution is equal, which is an excellent sample representation.

Moreover, participants highlighted that they work primarily for SMEs, other types of businesses, and large enterprises. Nevertheless, it is another excellent sample representation. Lastly, it was essential to have participants who have experience and work in the professional marketing field. Snowball and convenient sampling are great, but they also have disadvantages as they allow bias. Anyone can fill out the survey without necessarily following consent form guidelines. Most respondents held a position in advertising, followed by content creation. However, marketing strategists and digital marketers are behind. It could be concluded that respondents represent a robust sample.

The participants' responses provided a detailed understanding of advertising and AI integration in SMEs. By focusing on people with direct experience in marketing, the survey acquired viewpoints on emerging trends, strategies, and professional challenges in advertising. Therefore, the collected data offer valuable insights into the effectiveness of advertising campaigns and AI

integration. Moreover, they show AI's growing role in advertising and its impact on SMEs compared to traditional advertising practices. This knowledge is essential for designing

informed strategies and acclimating to the dynamic advertising influenced by artificial intelligence.

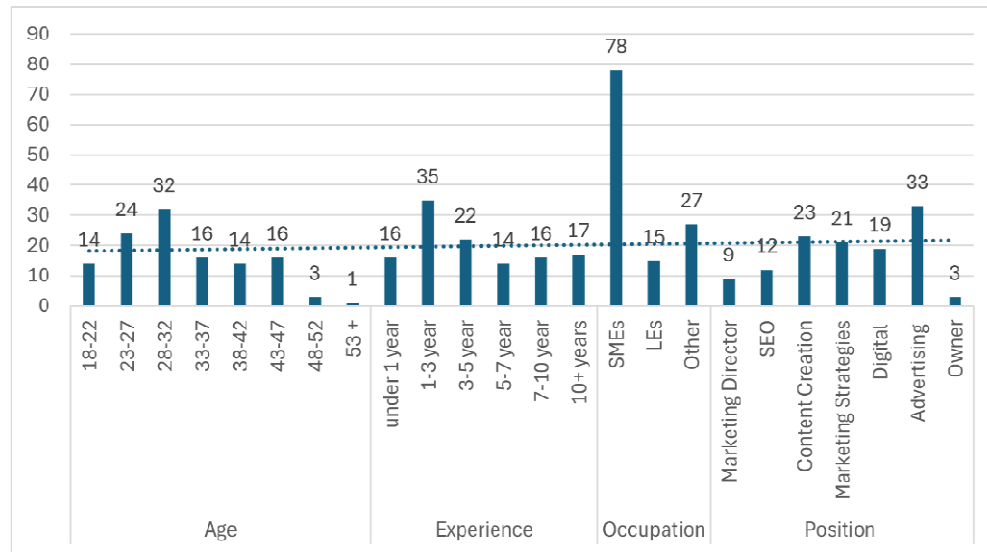


Fig 3. Demographics of Survey Study

The respondents were asked to rank to what extent AI has an impact on advertising characteristics such as advertising effectiveness, advertising reach, return on investment, customer engagement, and audience targeting procession, with 1 being lowest, and 3 being highest. Figure 4 highlights responses. First, 69.2% of the respondents indicated that AI has a massive impact on audience targeting precision, while 11.7% indicated no impact on advertising strategies. AI improves audience-targeting precision by examining massive datasets more accurately and assisting in predicting user preferences and behaviors more accurately than traditional advertising. Moreover, it personalizes content delivery, optimizes advertising strategies, and improves engagement rates by ensuring the right message goes to the right audience at the right time. Second, 50.8% indicated that AI impacts customer engagement. AI greatly enhances customer engagement by providing personalized interactions, 24/7 support, and more. It encourages brands to foresee customer needs and deliver a timely user experience, improving satisfaction and loyalty. On the contrary, 23.3% do not believe the impact, which is also supported by 25.8% who are not sure of their AI and its power impacting advertising strategies.

Furthermore, 45.8% of the respondents indicated that AI impacts return on investment (ROI). AI positively impacts return on investment by improving operations, decreasing costs, and causing revenue growth. It facilitates the automation of routine tasks and provides actionable insights. Besides, it supports developing effective advertising campaigns and resource allocation, increasing ROI. On the contrary, 21.7% did not believe in the fact. Besides, 32.5% are not quite sure that AI has a huge impact or enhances advertising strategies for SMEs and drives ROI. Last but not least, 59.2% indicated that AI has an impact on advertising reach. AI grows advertising reach by balancing advanced algorithms to optimize ad placements, target audiences, and predict user behaviors on various platforms. Consequently, it maximizes the reach and impact of advertising measures.

On the other hand, 28.3% indicated that AI does not impact heavily on advertising reach for SMEs. Lastly, 52.5% of the respondents indicated AI impacts advertising effectiveness. AI improves advertising effectiveness by enabling real-time optimization. It diagnoses user data and behavior to provide applicable ads to the right audience by automating high-impact content creation,

resulting in higher engagement rates and ROI. On the contrary, 27.5% of the respondents indicated

the opposite.

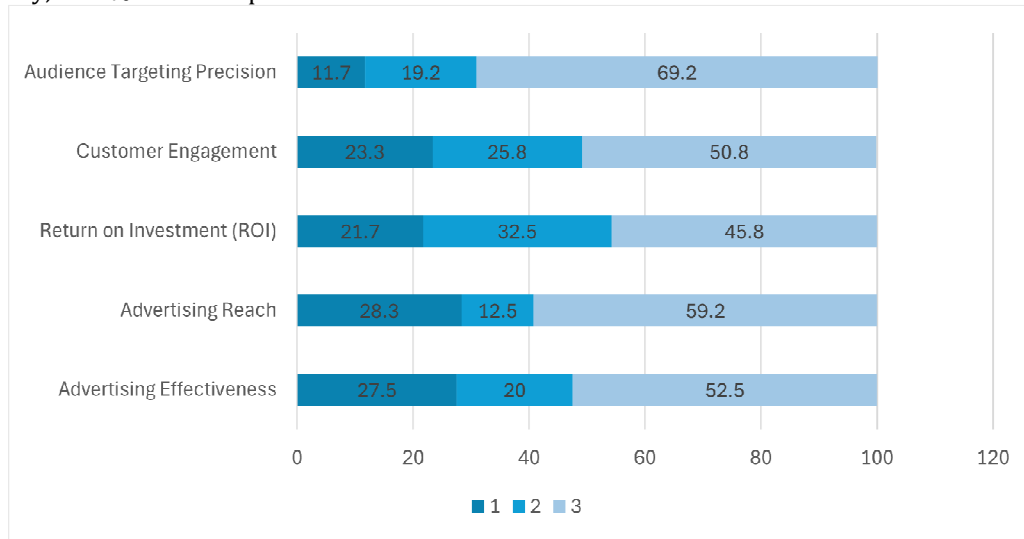


Fig 4. AI's impact on advertising characteristics

To continue, the respondents listed top advertising strategies such as data-driven targeting, automated campaign management, dynamic content personalization, real-time performance optimization, and predictive forecasting. Out of them, data-driven targeting and real-time performance optimization were the top two strategies, both of them holding 61.4%. AI balances massive user data to construct detailed audience profiles, allowing for precise targeting. Moreover, by examining past behaviors, preferences, and demographics, AI ensures that ads reach the most relevant audience. Additionally, AI continuously scans and modifies ad campaigns in real-time. It examines performance metrics and user relations to adjust targeting, bidding, and content dynamically. This agility allows prompt reaction to enhance overall campaign performance.

The author used Descriptive Statistics, correlation, and regression analysis for hypothesis testing. Descriptive statistics summed the data and provided a synopsis of the distribution of both groups (AI and traditional) and the central tendencies of advertising characteristics. Pearson's correlation assessed the linear relationship. Lastly, a simple linear regression was conducted using advertising characteristics such as *IV* and advertising

methods such as *DV*. The following conditions were established:

- If $p\text{-value} < 0.05$, reject the null hypothesis H_0
- If $p\text{-value} \geq 0.05$, fail to reject the null hypothesis H_0

First, Hypothesis 1, Advertising Effectiveness against advertising methods (AI vs. traditional), was calculated.

- H_0 . There is no significant difference in advertising effectiveness between SMEs using AI and traditional methods.
- H_1 . SMEs using AI experience significantly different advertising effectiveness than traditional methods.

The correlation coefficient was 0.78. Moreover, based on the regression Analysis, the Coefficient for the Advertising Method was approx. 5.06 and $p < 0.001$. Consequently, it was concluded that the p-value is significantly less than 0.05. Therefore, the author rejected H_0 . This indicated a significant difference in advertising effectiveness between SMEs using AI and traditional methods, therefore accepting the alternative hypothesis H_1 .

Second, Hypothesis 2, Advertising Reach against advertising methods (AI vs. traditional), was calculated.

- *H₀. There is no significant difference in advertising reach between SMEs using AI and traditional methods.*
- *H₁. SMEs using AI experience significantly different advertising reach than traditional methods.*

The correlation coefficient was 0.79. Moreover, based on the regression analysis, the Coefficient for the Advertising Method was approx. 100.5 and $p < 0.001$. Hence, it was concluded that the p-value is significantly less than 0.05. Therefore, the author rejected the H_0 . This indicated a significant difference in advertising reach between SMEs using AI and traditional methods, therefore accepting the alternative hypothesis H_1 .

Third, Hypothesis 3, Return on Investment (ROI) against advertising methods (AI vs. traditional), was calculated.

- *H₀. There is no significant difference in advertising ROI between SMEs using AI and traditional methods.*
- *H₁. SMEs using AI achieve significantly different advertising ROI than traditional methods.*

The correlation coefficient was 0.78. Moreover, based on the regression analysis, the Coefficient for the Advertising Method was approx. 0.5 and $p < 0.001$. Consequently, it was concluded that the p-value is significantly less than 0.05. The author rejected H_0 . This indicated a significant difference in advertising ROI between SMEs using AI and traditional methods, therefore accepting the alternative hypothesis H_1 .

Fourth, Hypothesis 4, Customer Engagement against advertising methods (AI vs. traditional), was calculated.

- *H₀. There is no significant difference in customer engagement metrics between SMEs using AI and traditional advertising methods.*
- *H₁. SMEs using AI experience significantly different customer engagement metrics than those using traditional advertising methods.*

The correlation coefficient was 0.72. Moreover, based on the regression analysis, the Coefficient for the Advertising Method was approx. 5.79 and $p < 0.001$. Hence, the p-value is significantly less than 0.05. The author rejected H_0 . This indicated a significant difference in customer engagement metrics between SMEs using AI and traditional methods, therefore accepting the alternative hypothesis H_1 .

Fifth, Hypothesis 5, Audience Targeting Precision against advertising methods (AI vs. traditional), was calculated.

- *H₀. There is no significant difference in the precision of audience targeting between SMEs using AI and traditional advertising methods.*
- *H₁. SMEs using AI achieve significantly different precision in audience targeting than traditional advertising methods.*

The correlation coefficient was 0.68. Moreover, based on the regression analysis, the Coefficient for the Advertising Method was approx. 9.6 and $p < 0.001$. Therefore, the p-value is significantly less than 0.05. The author rejected the H_0 . This indicated a significant difference in precision in audience targeting between SMEs using AI and traditional methods, therefore accepting the alternative hypothesis H_1 .

Figure 5 illustrates the synthesis of the variables. The descriptive statistics revealed statistics for advertising characteristics (advertising effectiveness, advertising reach, return on investment, customer engagement, and audience targeting procession) and both methods (AI vs. Traditional). The correlations indicated a strong relationship between both methods and advertising characteristics. Lastly, the regression analysis demonstrated that the advertising methods have a significant impact on the advertising characteristics. Consequently, the author rejected H_0 and accepted H_1 , showing a significant difference in advertising characteristics and SMEs using AI and traditional methods.

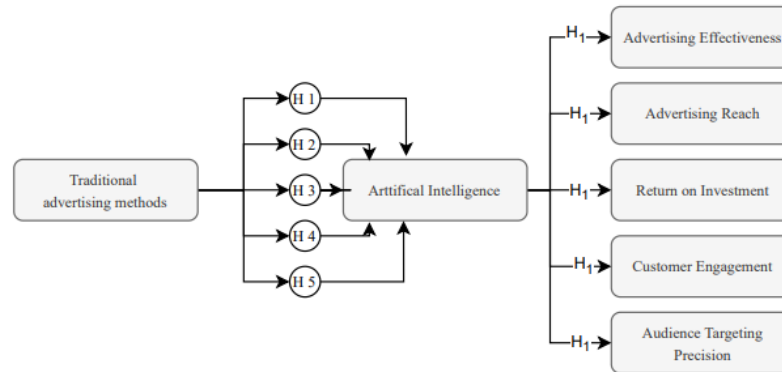


Fig 5. Synthesis hypothesis outcomes (Developed by the Author)

Conclusion

In conclusion, integrating artificial intelligence into various advertising strategies significantly strengthens their impact on SMEs. It not only enhances the precision and effectiveness of advertising efforts but also guarantees sustained engagement and customer satisfaction in a competitive business ecosystem.

The systematic literature review explored AI's growing position in advertising for SMEs, emphasizing its impact on strategy development, targeting, content creation, performance evaluation, and more. Consequently, five major advertising characteristics were identified that carry significance when modified by AI.

SMEs can create advertising strategies (AI and Traditional) that effectively reach and engage customers and push business growth in today's dynamic business ecosystem. Accepting AI's complete potential in advertising demands careful consideration of various challenges. As AI continues to develop, SMEs must welcome its transformative capabilities to stay competitive in the digital and data-driven marketplace.

The research findings indicated a significant difference in advertising characteristics and SMEs using AI and traditional methods. While many believe AI is an effective tool, others still contemplate fully employing AI in advertising strategies. This could be caused by budget constraints, as many SMEs do not have the luxury of fully utilizing AI in their business operations. It is recommended to employ data-driven targeting,

automated campaign management, dynamic content personalization, real time optimization, and more.

The research is valuable as it delivers insights into the marketing field, particularly in the transformation of advertising strategies. It offers added value for owners or marketing practitioners to utilize their budgets better, carefully plan marketing strategies, and accept the potential of AI.

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