Artificial Intelligence for Creative Project in Small Business

Wening H. N. Ruci[1,*] Muchlis Arief[1] Nur Wakhid[1] Winarno Winarno[1]
Siti Mutmainah[1] Damara A. Pradipta[2]

[1] Universitas Negeri Surabaya, Surabaya, Indonesia
[2] Universitas Internasional Semen Indonesia, Gresik, Indonesia
weningruci@unesa.ac.id

Abstract. This study aims to investigate the application of artificial intelligence (AI) to creative projects. AI-assisted creative projects can be of assistance to a wide range of industries, including small businesses. In most cases, the first step for small businesses is to concentrate on the products that they are going to sell. Since there are so many small businesses competing with other businesses, they require efficient branding in order to increase their brand exposure. On the other hand, small businesses typically have limited finances, and the process of branding can be quite expensive. In the process of branding, AI may be a solution for creative projects. This study utilizes a descriptive qualitative method with a literature review and in-depth interviews as data collection. The findings indicate that AI can assist in branding processes, including creating logos, content, posters, images, content calendars, infographics, business cards, T-shirt designs, Instagram posts, bulletin boards, and reports.

Keywords: Artificial Intelligence, Small Business, Creative Project.

1   Introduction

The rapid development of information and communication technology has led to various innovations, one of which is Artificial Intelligence (AI). AI holds significant potential for providing creative solutions across multiple aspects, including managing and promoting small businesses [1]. Small businesses frequently face challenges in branding and marketing due to limited resources. They must compete with larger companies that have more substantial capital and resources. In this context, AI can be an extremely beneficial tool [2]. AI possesses the capability to analyze data, predict trends, and generate creative content that supports branding strategies. Therefore, small businesses can enhance their market exposure at a lower cost compared to conventional methods [3]. This study aims to explore how AI can be utilized in creative projects to assist small businesses in the branding process, including logo creation, content development, posters, images, content calendars, infographics, business cards, T-shirt designs, Instagram posts, bulletin boards, and reports.

2   Methods

This research employs a descriptive qualitative method. This method is chosen to gain a deep understanding of AI use in creative projects for small businesses. Data collection is conducted through a literature review and in-depth interviews with small business owners who have used AI in their branding strategies [4]. The research steps are as follows:1) Literature review: collect and analyze various literature sources related to the use of AI in creative projects and branding for small businesses; 2) Data analysis: analyze the data obtained from the literature review and interviews to identify patterns, themes, and conclusions relevant to the research objectives; 3) Case studies: examine several case studies of small businesses that have successfully used AI to assess the effectiveness and concrete impact of AI implementation [5].

3   Results and Discussion

3.1   Logo Creation and Visual Identity

AI provides significant solutions for small business logo creation and visual identity. AI platforms like Logojoy or Looka allow users to create appealing logos with minimal effort [6]. AI analyzes user preferences, color palettes, and current design trends to generate logos that match the brand. In some cases, AI can even produce multiple design alternatives, allowing business owners to choose the logo that best aligns with their vision. It saves time and costs compared to using professional graphic designers.

Case study: an online clothing store owner uses AI to design a logo that reflects the desired retro style. With AI, they can create several logo versions, choose the best one, and make final adjustments within hours [7].

3.2   Social Media Content and Marketing

Creating content for social media platforms such as Instagram, Facebook, and Twitter can be very time-consuming [8]. AI can assist small businesses by generating relevant and engaging text, images, and videos. AI tools like Canva, with its content creation features and Lumen5 for videos, can automate this process [9]. AI analyzes user data and trends to produce content that is more likely to gain interaction and engagement from the target audience.

Case study: a small cafe uses AI to generate daily posts featuring special menus, stories about the origins of their coffee beans, and customer testimonials. As a result, they see a 30% increase in social media engagement.

3.3   Posters and Infographics

Creating visually appealing posters and infographics can be challenging for small businesses that do not have in-house designers. AI can simplify this process with tools like Visme or Piktochart. AI can automatically arrange layouts, choose colors, and insert data to create informative and readable infographics [10].

Case study: a small travel agency uses AI to create infographics showing the latest travel trends and popular vacation packages. These infographics are then used in email campaigns, resulting in higher open rates than regular content.

3.4   Content Calendar and Schedule Management

AI can assist in managing content calendars by analyzing the best posting times based on previous interactions and engagement trends. Tools like CoSchedule or Buffer with AI features can recommend when and where content should be posted to reach a larger and more relevant audience [11].

Case study: a food blogger uses AI to schedule their posts. With AI's help, they discovered that posting new recipes on Tuesday afternoons gets the highest engagement. It helps increase Website visitors and boosts sales of their digital cookbook.

3.5   T-Shirt and Business Card Design

AI can be used to design unique and personalized T-shirts and business cards. Platforms like Printful or Zazzle with AI support allow small businesses to create attractive designs that reflect their brand identity. AI can provide design suggestions, choose the right fonts, and match colors with the company's visual identity [12].

Case study: a local entrepreneur uses AI to design T-shirts with unique and relevant local motifs. These T-shirts are then sold in souvenir shops and receive positive customer feedback.

3.6   Instagram Posts and Bulletin Boards

AI can help small businesses manage social media content like Instagram posts and bulletin boards. AI tools like Later or Hootsuite can optimize content, analyze performance, and provide recommendations for the next posts [13]. It allows small businesses to maintain consistent postings and ensure that each post engages the audience.

Case study: a restaurant uses AI to manage its Instagram account, posting photos of food and special promotions at optimal times. It helps increase the number of followers and customers visiting the restaurant.

3.7   Reports and Analysis

AI can analyze data from branding campaigns and generate reports that provide valuable insights into the effectiveness of strategies [14]. With AI features, platforms like Google Analytics or HubSpot can provide automatic reports covering metrics, such as Website traffic, conversion rates, and social media engagement. It helps small businesses understand what works and where they can improve their strategies.

Case study: a small online store uses AI to analyze its ad campaign data. AI reveals that certain ads get more clicks from mobile users. With this information, they shifted their ad budget to focus on mobile platforms and saw a 25% increase in sales.

3.8   Challenges and Limitations

Although AI offers various benefits, there are some challenges to address. The first is technical skills (small businesses may need training to use AI tools effectively). The second is system customization (AI needs to be tailored to the specific needs of each business). The last is initial implementation costs (although AI can save costs in the long run, the initial investment in tools and training can be a barrier for some small businesses) [15].

In short, AI has proven to be a highly useful tool for small businesses in various aspects of creative projects. From logo creation to content management, AI helps small businesses become more effective in branding and marketing with limited resources. AI implementation enables small businesses to innovate and compete in an increasingly digital market, although they may face some challenges in the implementation process.

4   Conclusion

AI offers innovative and practical solutions for small businesses facing branding challenges. With AI's ability to generate creative content and analyze data effectively, small businesses can enhance their brand exposure at a lower cost and in a shorter time. This research indicates that AI implementation in creative projects can positively impact small businesses, particularly in creating logos, content, posters, images, content calendars, infographics, business cards, T-shirt designs, Instagram posts, bulletin boards, and reports. Nonetheless, AI implementation also requires appropriate understanding and customization to fit the needs and characteristics of each small business. This study is expected to serve as a reference for small businesses and researchers to understand better the potential and application of AI in creative projects.

References

1. E. Brynjolfsson and A. McAfee, "The business of artificial intelligence," *Harvard Business Review,* vol. 7, p. 3-11, 2017.
2. G. Hamel and C. K. Prahalad, "Competing for the Future," *Harvard Business Review*, 1994.
3. M. I. Jordan and T. M. Mitchell, "Machine learning: Trends, perspectives, and prospects," *Science*, vol. 349, no. 6245, p. 255-260, 2015.
4. J. Bughin, J. Seong, J. Manyika, M. Chui, and R. Joshi, "Notes from the AI frontier: Modeling the impact of AI on the world economy," *McKinsey Global Institute*, vol. 4, no.1, 2018.
5. M. E. Porter and J. E. Heppelmann, "How smart, connected products are transforming competition," *Harvard Business Review*, vol. 92, no. 11, p. 64-88, 2014.
6. A. N. Ramesh, C. Kambhampati, J. R. Monson, and P. J. Drew, "Artificial intelligence in medicine," *Annals of the Royal College of Surgeons of England*, vol. 86, no. 5, p. 334-338, 2004.

7. S. Ransbotham, D. Kiron, P. Gerbert, and M. Reeves, "Reshaping business with artificial intelligence: Closing the gap between ambition and action," MIT Sloan Management Review, Tech. Report. Sept. 2017.
8. K. Schwab, "The fourth industrial revolution," *Crown Publishing Group*, 2017.
9. D. Silver, A. Huang, C. J. Maddison, et al., "Mastering the game of Go with deep neural networks and tree search," *Nature*, vol. 529, p. 484-489, 2016.
10. G. Westerman, D. Bonnet, and A. McAfee, "Leading digital: Turning technology into business transformation," *Harvard Business Review*, 2014.
11. T. H. Davenport and N. Mittal, "How generative AI is changing creative work," *Harvard Business Review*. 2022.
12. C. Young, "Build a winning AI strategy for your business," *Harvard Business Review*, 2023.
13. N. Lillis, "How should small businesses take advantage of generative artificial intelligence?." *BizTech Magazine*, 2024.
14. McKinsey and Company, "The state of AI in early 2024: Key findings on business value and risks," 2024.
15. M. Mariani and Y. K. Dwivedi, "Generative artificial intelligence in innovation management: A preview of future research developments," *Journal of Business Research*, vol. 175, p. 1-21, 2024.