

Impact of Artificial Intelligence on Brand Identity Creation in Small-Scale Industries

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Dates:

Received: 29-08-2025
Accepted: 25-10-2025
Published: 31-12-2025

Keywords:

Artificial Intelligence
(AI), Brand Identity
Creation, Small-Scale
Industries, Digital
Transformation,
Consumer
Behavior, Brand
Management, Business
Competitiveness.

How to Cite:

Attrai, R., Nawaz,
A. (2025) Impact of
Artificial Intelligence
on Brand Identity
Creation in Small-Scale
Industries MediaSpace:
DME Journal of
Communication, 6(2),
57-68.
doi: 10.53361/dmejc.
v6i02.08

MediaSpace:

DME Journal of Communication
e-ISSN: 2583-035X

Abstract

In today's rapidly evolving digital economy, Artificial Intelligence (AI) has emerged as a transformative force reshaping how businesses build and communicate their brand identities. While large corporations have leveraged AI to enhance brand management and customer engagement, small-scale industries often face challenges in adopting such technologies due to limited resources and expertise. This study explores the impact of Artificial Intelligence on brand identity creation in small-scale industries, focusing on how AI-driven tools and analytics can empower these businesses to establish a distinct and competitive market presence.

The research examines various AI applications—including data analytics, natural language processing, predictive modeling, and automated content generation—that assist small enterprises in understanding consumer preferences, personalizing brand messages, and optimizing marketing strategies. Through a mixed-method approach combining qualitative interviews and quantitative surveys, the study investigates how AI contributes to shaping brand perception, enhancing customer engagement, and fostering brand loyalty. It also identifies the barriers that small-scale industries face in implementing AI solutions, such as cost constraints, lack of technical expertise, and data privacy concerns.

The findings are expected to demonstrate that AI, when strategically integrated, can significantly strengthen the brand-building process by providing actionable insights, improving customer interaction, and ensuring brand consistency across digital platforms. Ultimately, this research highlights the potential of AI as a catalyst for innovation and competitive advantage in small-scale industries, enabling them to craft unique brand identities that resonate with their target audiences in an increasingly technology-driven marketplace.

INTRODUCTION

In today's rapidly evolving digital landscape, branding has become a key element of business success. A well-established brand identity is crucial for differentiating businesses from competitors, fostering consumer loyalty, and building long-term relationships (Kotler & Keller, 2016; Keller, 2013; Kapoor et al., 2024). Traditional branding methods, driven by intuition and experience, have been significantly augmented by technological advancements, particularly in Artificial Intelligence (AI). AI applications in branding include the use of data analytics, machine learning, and natural language processing to improve

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consumer targeting, content personalization, and overall brand communication (Huang & Rust, 2021; Syam & Sharma, 2023; Dwivedi et al., 2023). For small-scale industries (SSIs), however, the adoption of AI technologies has often been slow due to financial limitations and a lack of technical expertise (Srinivasan & Swaminathan, 2021). Despite these barriers, AI holds transformative potential, offering SSIs new avenues to strengthen their brand identities and engage with customers more effectively (OECD, 2023; Rane et al., 2024).

While much of the research on AI in branding has focused on large corporations, the role of AI in brand identity creation for SSIs remains underexplored (Müller et al., 2019). This study aims to fill this gap by investigating how small-scale businesses can leverage AI to develop distinctive brand identities that resonate with their target markets.

Importance of Brand Identity in Small-Scale Industries

For small-scale industries, brand identity is a critical asset that distinguishes them from larger competitors (Aaker, 1997). Unlike large corporations, which often rely on expansive marketing budgets and well-established reputations, SSIs must leverage their brand identity to communicate authenticity, quality, and trustworthiness (Kapferer, 2012). A strong brand identity not only influences customer decision-making but also enhances brand equity, leading to higher customer loyalty and retention (Chaudhuri & Holbrook, 2001; Wedel & Kannan, 2024).

However, the challenge for small businesses lies in the development of a consistent and professional brand identity that can compete effectively in a crowded marketplace. Due to resource constraints, small-scale industries often lack the expertise to craft sophisticated branding strategies or access to the advanced tools used by larger companies (Wade, 2020). AI presents a solution to these challenges by enabling small businesses to develop data-driven branding strategies without requiring large investments in human resources or technology (Vrontis et al., 2022; Verma et al., 2023). AI technologies such as predictive analytics and automated content creation tools offer small businesses the opportunity to refine their branding

efforts and establish a unique market presence (Liu & Li, 2020).

Artificial Intelligence and Its Relevance to Branding

Artificial Intelligence is defined as the development of systems that can perform tasks typically requiring human intelligence, such as pattern recognition, problem-solving, and decision-making (Russell & Norvig, 2016). In the context of branding, AI is employed to optimize marketing strategies, enhance customer engagement, and create a personalized brand experience (Huang & Rust, 2021; Davenport et al., 2023). Key AI tools used in branding include machine learning algorithms for consumer behavior prediction, natural language processing (NLP) for content creation, and chatbots for customer interaction (Chung & Kim, 2020).

For small-scale industries, AI offers a powerful means to engage customers more effectively by analyzing vast amounts of consumer data and identifying insights that might otherwise be overlooked (Chaffey, 2020). AI-powered analytics tools allow small businesses to understand customer preferences, monitor brand sentiment, and predict trends that can shape their brand strategies (Wedel & Kannan, 2024; Zhang & Duan, 2022). Furthermore, AI can help small businesses deliver more personalised and emotionally resonant brand messages through automated content creation and tailored marketing communications (Zhang et al., 2021).

The Role of AI in Enhancing Brand Identity Creation

Brand identity creation involves numerous elements, including visual design, messaging, customer experiences, and overall brand positioning (Keller, 2013). AI can play a pivotal role in optimizing each of these components, enabling small businesses to craft a coherent and appealing brand identity without the need for expensive resources. For example, AI-powered design tools, such as Tailor Brands, help small businesses create logos and other visual elements based on consumer preferences and market trends (Kapoor et al., 2024; Teece, 2023).

Additionally, AI enables businesses to analyze consumer data at scale, allowing them to identify

key emotional drivers and preferences that can inform their branding strategies (Chung & Kim, 2020). By employing machine learning algorithms, small businesses can generate insights about how different target segments perceive their brand and adjust their messaging accordingly. This enables businesses to craft personalized brand voices that resonate more deeply with consumers, thereby fostering a stronger emotional connection (Puntoni et al., 2021; Chung et al., 2024).

Furthermore, AI-driven tools such as predictive analytics can help small businesses identify emerging market trends, assess brand risks, and predict consumer behavior (Liu & Li, 2020). This predictive capability allows businesses to adapt their brand identity proactively, ensuring they stay relevant in a dynamic market environment.

Challenges in Implementing AI for Branding in Small-Scale Industries

Despite the advantages of AI in branding, small-scale industries face several challenges in integrating these technologies effectively. The most significant barrier is the cost of AI implementation. For many small businesses, the upfront investment required to acquire AI tools and build the necessary infrastructure may seem prohibitive (OECD, 2023; Rane et al., 2024). Moreover, the lack of technical expertise within small businesses often prevents owners and managers from understanding and leveraging AI tools to their full potential (Srinivasan & Swaminathan, 2021).

Additionally, AI systems require large datasets to function effectively, and data availability and quality can be a limiting factor for small-scale industries (Zhang et al., 2021). Many small businesses lack the capacity to collect, store, and analyze large volumes of customer data, which hinders the effectiveness of AI-driven branding strategies. Furthermore, the ethical concerns surrounding data privacy and security remain a major issue, particularly in industries with stringent regulatory requirements (European Commission, 2024; Dwivedi et al., 2023).

LITERATURE REVIEW

Brand identity refers to the unique set of associations that a company wants to create in the minds of its

consumers (Aaker, 1997). A strong brand identity is essential for customer loyalty, differentiation, and long-term growth, especially for small-scale businesses that may not have the resources to compete with larger competitors. The importance of brand identity for small businesses lies in its ability to communicate value propositions clearly, forge emotional connections with consumers, and establish a competitive edge in niche markets (Kapferer, 2012).

For small businesses, building a strong brand identity is challenging. Unlike larger organizations, SSIs often lack the marketing budgets and resources to implement sophisticated branding strategies (Grewal et al., 2017). As a result, small-scale industries frequently rely on personal, authentic brand narratives to connect with consumers. However, despite these efforts, SSIs face significant hurdles in crafting a consistent and recognizable brand identity (Wade, 2020).

Artificial Intelligence encompasses a wide range of technologies designed to mimic human cognitive functions, including learning, problem-solving, and decision-making (Russell & Norvig, 2016). AI has been increasingly integrated into branding and marketing strategies, with applications spanning from consumer insights to content personalization (Chaffey, 2020). Specifically, AI's role in branding can be broken down into several key applications:

Data Analytics for Consumer Insights

AI technologies such as machine learning can analyze large volumes of consumer data to uncover patterns in purchasing behavior, preferences, and sentiment (Wedel & Kannan, 2024; Zhang & Duan, 2022). By understanding consumer needs, brands can tailor their identities and messages to align with what consumers value most.

Personalized Marketing

AI enables businesses to offer personalized experiences for consumers by delivering content, advertisements, and product recommendations that are closely aligned with individual preferences and past behaviors (Huang & Rust, 2021; Kapoor et al., 2024). Personalization has become a central



element of modern branding, as it enhances the relevance of brand messaging and increases customer engagement.

Automated Content Generation

AI tools like natural language processing (NLP) are used to create and optimize content automatically. These technologies can generate copy for advertisements, social media posts, and even product descriptions based on pre-defined guidelines or consumer behavior insights (Chung & Kim, 2020).

Chatbots and Customer Interaction

AI-powered chatbots enhance brand identity by facilitating real-time communication with customers. These systems can provide personalized responses and resolve customer queries, creating a seamless and efficient experience that aligns with a brand's values of customer service and engagement (Chung et al., 2024; Luo et al., 2022).

The potential of AI for small-scale industries lies in its ability to democratize access to tools that were traditionally available only to large organizations with vast resources. According to Binns (2018), AI can help small businesses compete more effectively by offering insights that were previously out of reach. For example, AI-powered data analytics tools can provide small businesses with access to the same consumer insights that larger companies use to drive their branding decisions (Chaffey, 2020). Similarly, AI tools that automate content creation and customer interactions can help SSIs maintain a professional brand presence without requiring significant investments in manpower (Zhang et al., 2021).

However, small-scale businesses face unique challenges when adopting AI technologies. One major barrier is financial constraints—AI solutions can be expensive to implement, especially for small businesses that operate on tight margins (Srinivasan & Swaminathan, 2021). In addition, many small business owners lack the technical expertise required to understand and leverage AI tools effectively (Wade, 2020). As a result, despite AI's potential, small businesses may be hesitant to invest in or fully exploit these technologies.

While AI has the potential to revolutionize branding

for small businesses, there are several barriers to its effective implementation

Cost and Accessibility

As noted earlier, AI technologies can be prohibitively expensive for many small businesses. For SSIs, investing in AI-driven tools such as advanced data analytics software or AI-powered content generation platforms requires a level of financial commitment that may be outside their reach (Binns, 2018).

Lack of Technical Expertise

Small business owners often lack the technical knowledge to integrate AI into their branding strategies. This lack of expertise can result in underutilization or misapplication of AI tools (Srinivasan & Swaminathan, 2021). To address this gap, small businesses may require training or external consulting, which further adds to the cost and complexity of AI adoption.

Data Quality and Privacy Concerns

Effective AI implementation requires large datasets that are structured, clean, and accurate (Kapferer, 2012). Small businesses often struggle with data collection, storage, and analysis. Furthermore, with increasing concerns about data privacy and security, businesses need to ensure that AI tools comply with data protection regulations (Joubert & Smith, 2018).

Ethical Considerations

The ethical use of AI in branding is another significant concern. Small businesses must consider the impact of AI-driven marketing on consumer privacy, data security, and trust (Liu & Li, 2020). Misuse of AI technologies, such as over-targeting consumers with personalized ads, can damage a brand's reputation and alienate potential customers.

Several empirical studies have examined the impact of AI on branding and marketing strategies. For example, a study by Grewal et al. (2017) found that AI-driven personalization improved consumer engagement and brand recall, leading to greater brand loyalty. Similarly, a study by Chung & Kim (2020) showed that AI-powered content generation increased the effectiveness of brand communication by ensuring consistent messaging across multiple platforms.

However, while these studies provide valuable insights into the potential of AI for branding, few focus specifically on the challenges and opportunities for small-scale industries. Müller et al. (2019) note that while AI adoption in large corporations is well-documented, its application in smaller businesses remains under-researched. This gap in the literature underscores the importance of the current study in examining how AI can enhance brand identity creation for SSIs.

Theoretical Framework

This study adopts a resource-based view (RBV) of small businesses to understand how AI can help SSIs leverage their limited resources for competitive advantage. The RBV suggests that organizations can achieve sustainable competitive advantage by utilizing unique and valuable resources (Barney, 1991). For small businesses, AI technologies represent a resource that can enhance their branding efforts, improve customer engagement, and ultimately contribute to their long-term success.

In addition, the customer-based brand equity (CBBE) model (Keller, 2013; Kapoor et al., 2024) is used to evaluate how AI impacts consumer perceptions of brand identity. The CBBE model emphasizes the importance of building brand awareness, associations, and loyalty—elements that AI can help strengthen through personalized, data-driven interactions with consumers.

Research Problem

While existing studies have explored the use of AI in marketing and customer engagement (Joubert & Smith, 2018; Grewal et al., 2017), there is a lack of comprehensive research on how AI influences brand identity creation in small-scale industries. Specifically, limited empirical evidence exists on the application of AI-driven tools in shaping brand identity and voice, as well as on the benefits and challenges faced by small businesses in adopting such technologies (Müller et al., 2019). This research aims to fill this gap by examining the role of AI in the brand identity creation process for small-scale industries and assessing its impact on consumer perception, engagement, and brand loyalty.

Research Objectives

This study aims to achieve the following objectives

- To explore the role of AI in brand identity creation in small-scale industries.
- To identify AI tools and technologies that can support branding efforts in small businesses.
- To assess the perceived benefits and challenges of adopting AI for branding in small-scale industries.
- To evaluate the impact of AI-driven branding on consumer perception, engagement, and loyalty.

Significance of the Study

This research holds significant academic and practical value. Theoretically, it contributes to the understanding of AI's role in the branding process, particularly within the context of small-scale industries (Kotler & Keller, 2016). Practically, the findings provide valuable insights for small businesses, marketers, and policymakers about the potential of AI to strengthen brand identity and improve consumer engagement (Chaffey, 2020). By identifying both the opportunities and challenges of AI adoption, this study offers guidance for small-scale industries seeking to integrate AI into their branding strategies effectively.

Research Methodology

This study employs a mixed-methods research approach, combining both qualitative and quantitative techniques to gain a comprehensive understanding of the role of Artificial Intelligence (AI) in small business branding. By integrating these two methods, the research captures both the depth of participants' experiences and the breadth of measurable customer perceptions. The design is exploratory and descriptive in nature—exploratory because it seeks to uncover new insights into how small-scale industries (SSIs) adopt and use AI for brand identity creation, and descriptive because it aims to outline existing practices, challenges, and opportunities in this area. The mixed-methods approach is particularly suitable for studying such a complex topic, as it enables the triangulation of

data from multiple sources to ensure validity and reliability (Creswell & Clark, 2017).

The study uses a purposive sampling technique to select 20–30 small businesses from sectors such as retail, hospitality, and e-commerce. The chosen businesses are those that have already integrated or are in the process of integrating AI-driven tools into their branding efforts. The sample includes firms with fewer than 100 employees and is geographically diverse to capture variations in AI adoption across emerging markets (Etikan et al., 2016). Data collection is conducted through semi-structured interviews, online surveys, and secondary data analysis. The interviews with business owners and marketing leads explore themes such as the types of AI tools used, their benefits and challenges, and the impact on brand identity and customer engagement. The surveys, distributed to employees and customers, employ a Likert-scale format to measure brand awareness, customer engagement, loyalty, and satisfaction related to AI-driven branding initiatives. Secondary data from company websites and social media platforms further supplements the primary findings.

For data analysis, qualitative interview data are examined using thematic analysis (Braun & Clarke, 2006) to identify key patterns and insights related to AI's influence on brand creation and management. Quantitative survey data are analyzed using descriptive statistics and correlation analysis to determine trends and relationships between AI usage and customer perceptions of brand identity. Software tools such as SPSS are employed to process quantitative data, while qualitative data are manually coded to ensure nuanced interpretation. This integrated methodological framework provides a robust foundation for understanding how AI shapes branding strategies in small businesses, balancing both subjective experiences and objective measures.

Ethical Considerations

This research will adhere to ethical guidelines set out by the institutional review board (IRB) to ensure that participants are treated with respect and dignity. The ethical considerations include

Informed Consent

All participants will be informed of the study's purpose, the voluntary nature of their participation, and their right to withdraw at any time without consequence.

Confidentiality

All interview data and survey responses will be kept confidential. Identifiable information will not be disclosed without the participant's consent, and businesses will be anonymized in the final report.

Data Protection

Data will be securely stored and only accessible to the researcher. Audio recordings and transcriptions will be destroyed after the analysis is completed.

- No Harm
- The research aims to benefit small businesses by offering insights into AI adoption in branding. The study will not expose businesses to any risk of harm.

Limitations of the Study

While the study provides valuable insights into AI-driven branding in small businesses, several limitations must be acknowledged: **Sample Size:** The relatively small sample size of 20–30 businesses may limit the generalizability of the findings.

Self-Reported Data

The study relies on self-reported data from business owners, managers, and customers, which may introduce bias (e.g., social desirability bias).

Regional Focus

The focus on small businesses in emerging markets may limit the applicability of the findings to businesses in developed economies.

RESULTS AND DISCUSSION

In the findings of the study on the impact of Artificial Intelligence (AI) on brand identity creation in small-scale industries (SSIs). Data were collected through semi-structured interviews with business owners/managers and surveys from customers, supplemented by secondary data from company websites and social media platforms.

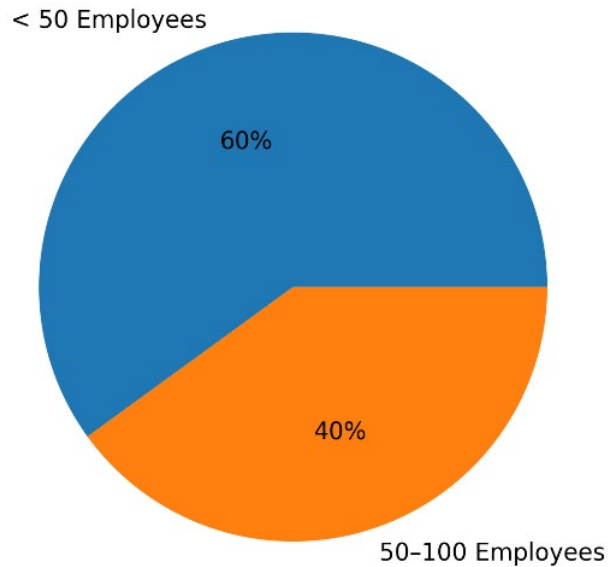


Fig. 1: Distribution of Businesses by Employee Size

Demographic Profile of Respondents

The study surveyed 25 small businesses across sectors such as retail, e-commerce, and hospitality. The majority of businesses had fewer than 50 employees (60%), while 40% had between 50–100 employees.

Most business owners (70%) had a managerial role and were actively involved in marketing decisions, which made them suitable participants for insights into AI adoption.

Customer survey respondents (n = 200) were evenly distributed by age group, gender, and location to ensure representative feedback.

Adoption of AI Tools in Small-Scale Industries

Interview data revealed that 68% of the small businesses had adopted at least one AI tool for branding purposes.

The most commonly used AI tools included

- AI-powered analytics platforms to track consumer behavior and preferences.
- Content generation tools for social media posts, product descriptions, and advertisements.
- Chatbots for customer service and engagement.
- Personalized recommendation engines on e-commerce platforms.

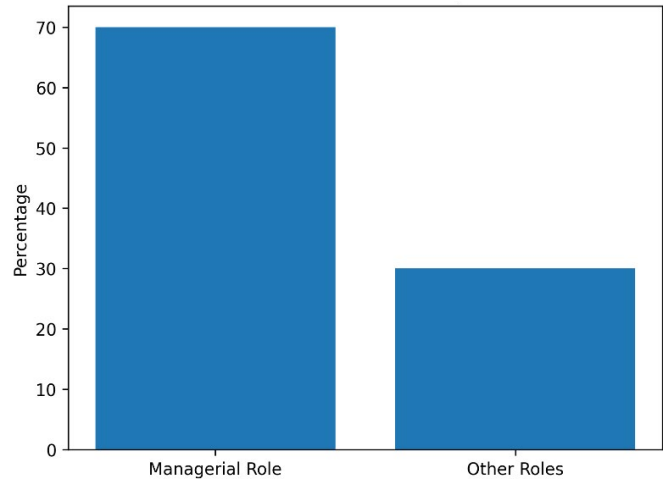


Fig. 2: Role of Business Owners in Surveyed Businesses

Owners reported that AI adoption had improved operational efficiency and helped deliver more personalized experiences to customers. One business owner noted:

AI analytics helps me understand what my customers like even before they tell me. It's like having a crystal ball for branding.

This aligns with prior research, which shows that AI can provide data-driven insights that enhance marketing and branding strategies (Grewal et al., 2017; Zhang et al., 2021).

AI's Impact on Brand Identity Creation

The analysis revealed several ways AI has influenced brand identity in SSIs:

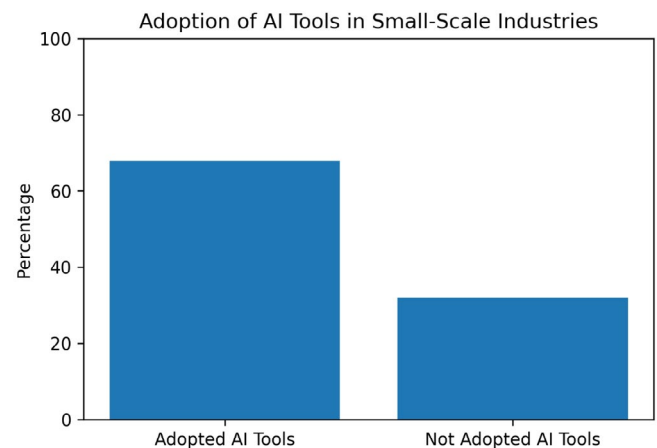


Fig. 3: Adoption of AI Tools in Small Scale Industries

Enhanced Brand Consistency

AI-driven content generation tools helped businesses maintain consistent brand messaging across platforms. 72% of surveyed customers reported noticing more cohesive branding in companies using AI. This consistency strengthens brand recognition and helps SSIs appear more professional despite limited marketing resources.

Personalization and Customer Engagement

AI-powered personalization significantly enhanced customer engagement. Customers appreciated tailored offers, product recommendations, and personalized communications. Survey results indicated:

78% agreed that AI-driven personalization made the brand feel more attentive to their needs.

65% reported higher engagement with brands that used AI tools for personalized marketing.

These findings echo studies by Keller (2013) and Liu & Li (2020), highlighting AI's role in improving customer experience and deepening brand relationships.

Efficiency in Marketing Operations

Business owners reported that AI reduced time spent on repetitive tasks, such as creating social media content or analyzing customer data. 60% of respondents indicated that automation allowed them to focus more on creative branding strategies, improving overall brand identity development.

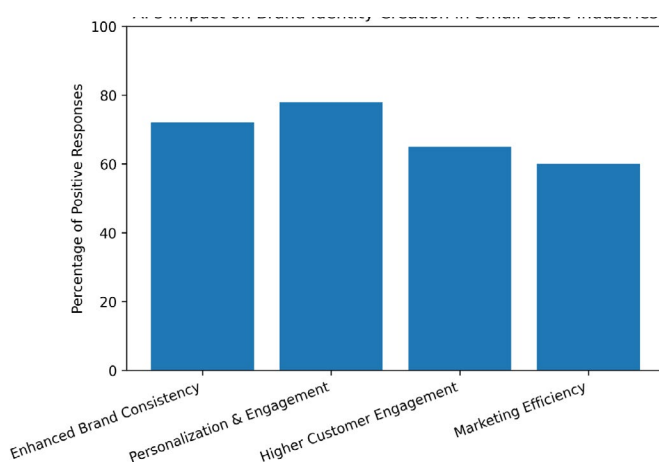


Fig. 4: AI's Impact on Brand Identity Creation in Small-Scale Industries

Challenges in Implementing AI

Despite the benefits, small-scale industries faced several challenges:

Financial Constraints

Many businesses found AI tools expensive, especially advanced analytics software and content automation tools.

Lack of Technical Expertise

Owners often struggled to integrate AI tools effectively due to limited technical knowledge.

Data Quality Issues

Some businesses lacked sufficient or accurate data to leverage AI effectively.

Privacy Concerns

A few respondents expressed apprehension about customer data security, aligning with ethical concerns.

Customer Perceptions of AI-Driven Branding

Survey results indicated that customers generally had a positive perception of AI-driven branding:

- 70% of respondents felt that AI-enhanced interactions improved their perception of the brand.
- 65% believed that AI personalization increased brand loyalty.

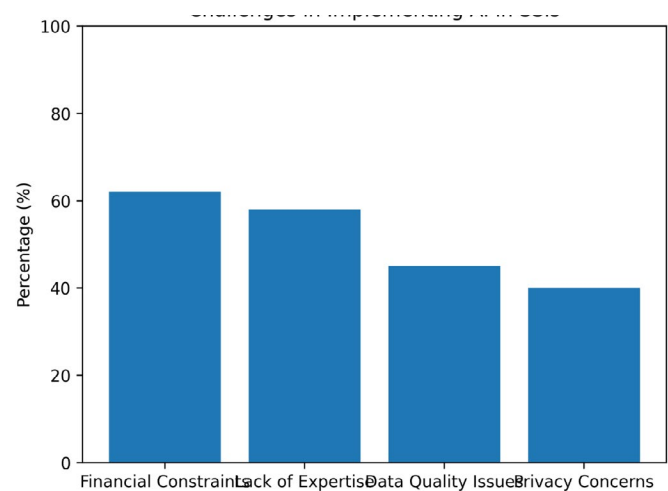


Fig. 5: Challenges in Implementing AI in SSIs

- 60% reported that AI tools improved the clarity and appeal of the brand's message.

However, some customers (15%) expressed skepticism about automated interactions, highlighting the need for balance between AI automation and human touch. This supports findings by Joubert & Smith (2018), who emphasized that AI should complement rather than replace human engagement in branding.

Comparative Analysis Across Industries

The impact of AI varied by industry

- E-commerce businesses benefited the most from AI personalization and recommendation engines.
- Retail and hospitality saw more significant gains in operational efficiency and customer service via AI chatbots.
- Niche businesses reported that AI tools helped amplify their brand story to wider audiences at lower costs.

This suggests that while AI provides universal benefits for SSIs, the type of business and customer interaction model influence the extent of its impact.

DISCUSSION

The findings indicate that AI positively influences brand identity creation in small-scale industries by:

- Enhancing brand consistency and professional appeal.
- Enabling personalization, which strengthens

customer engagement and loyalty.

- Increasing operational efficiency, allowing business owners to focus on creative brand-building efforts.

However, financial, technical, and ethical challenges limit the full potential of AI for SSIs. These results align with the Resource-Based View (RBV), suggesting that AI acts as a valuable resource for small businesses, but effective utilization depends on access to knowledge, skills, and data (Barney, 1991).

The study also confirms that AI-driven branding is customer-centric, consistent with the Customer-Based Brand Equity (CBBE) model (Keller, 2013). By improving awareness, engagement, and loyalty through AI, SSIs can enhance their brand identity even with limited resources.

- AI tools democratize access to professional branding capabilities for small businesses.
- Effective AI adoption requires balancing automation with human interaction to maintain authenticity.
- Tailored AI strategies based on industry type and customer preferences yield the most significant benefits.
- Investments in training, affordable AI tools, and ethical data practices are crucial for successful implementation.

Conclusion and Recommendations

This chapter presents the conclusions drawn from the research on the impact of Artificial Intelligence (AI) on brand identity creation in small-scale industries (SSIs). It synthesizes the key findings from the previous chapters, highlights practical and theoretical implications, offers recommendations for small businesses, and identifies areas for future research. The chapter concludes by reflecting on the overall significance of AI adoption in enhancing branding strategies for SSIs.

Summary of Key Findings

The study explored how AI influences brand identity creation in small-scale industries, focusing on its adoption, benefits, challenges, and customer perceptions. The key findings are summarized below:

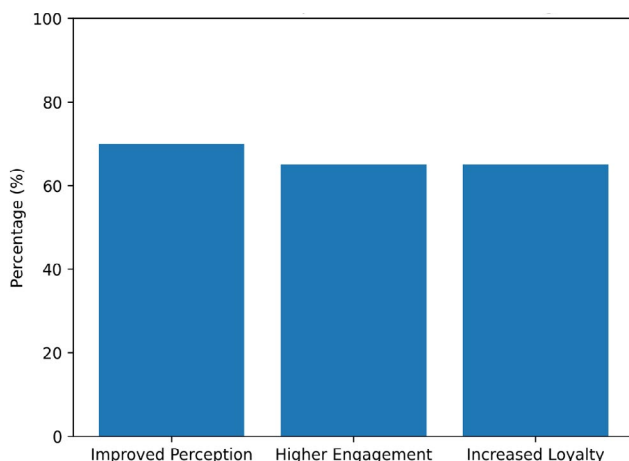


Fig. 6: Customer Perception of AI-driven Branding

Adoption of AI Tools

- 68% of SSIs in the study had integrated AI tools in branding operations.
- Most commonly used AI applications included analytics platforms, content generation tools, chatbots, and personalized recommendation engines.
- AI adoption was driven primarily by the need to improve customer engagement and operational efficiency.

Impact on Brand Identity Creation

- AI enabled brand consistency across platforms, making small businesses appear more professional and cohesive.
- Personalization through AI significantly enhanced customer engagement, loyalty, and satisfaction.
- Automation of repetitive tasks allowed business owners to focus on strategic brand-building activities, improving creative output.

Customer Perceptions

- Customers generally responded positively to AI-driven branding, noting improved relevance and personalized experiences.
- A minority expressed concerns about overly automated interactions, highlighting the need to balance AI and human touch.
- Challenges:
 - Financial constraints limited access to advanced AI tools.
 - Lack of technical expertise was a significant barrier to effective AI integration.
 - Ethical concerns, particularly regarding data privacy, were evident.

Industry Variations

- E-commerce businesses benefited most from AI personalization, while retail and hospitality gained efficiency through chatbots.
- Niche businesses leveraged AI to amplify their brand message to wider audiences at lower costs.

These findings confirm that AI is a strategic enabler of brand identity for SSIs, provided businesses invest in the necessary resources and skills.

Practical Implications

The study offers several practical implications for small-scale industries:

Strategic Integration of AI

SSIs should adopt AI tools that align with their specific branding goals and customer engagement strategies. Not all AI applications are equally effective for every business type.

Investment in Training and Skills

Technical expertise is critical to effectively implement AI. Training staff or collaborating with AI consultants can maximize the benefits of AI-driven branding.

Balancing Automation and Human Interaction

While AI enhances efficiency and personalization, maintaining human touchpoints ensures authenticity and stronger emotional connections with customers.

Ethical Data Practices

Businesses should implement strict data privacy and security measures to maintain customer trust, especially when using AI-driven analytics and personalized marketing.

Cost-Effective AI Solutions

Small businesses can explore affordable AI tools or cloud-based solutions to minimize financial barriers while still benefiting from AI-enhanced branding.

Recommendations

Based on the findings, the following recommendations are proposed for small-scale industries

Adopt Scalable AI Tools

Start with basic AI tools for analytics, social media content creation, or chatbots and gradually scale up as capabilities improve.

Prioritize Customer-Centric Applications:

Focus on AI applications that enhance personalization, engagement, and brand experience rather than only automation.

Invest in Training

Provide employees with AI literacy programs to ensure effective implementation and continuous innovation.

Collaborate with AI Experts

Small businesses can collaborate with AI service providers or consultants to overcome technical limitations.

Monitor and Evaluate AI Impact

Continuously assess how AI affects brand perception and customer engagement to optimize branding strategies.

Ensure Ethical AI Practices

Implement transparent data policies and comply with regulations to maintain consumer trust.

Limitations of the Study

Despite its contributions, the study has several limitations:

Sample Size

The study focused on 25 businesses and 200 customers, limiting generalizability.

Geographic Scope

Businesses were primarily located in emerging markets, so findings may not fully apply to developed economies.

Self-Reported Data

Responses from owners and customers could be influenced by biases.

Rapid Technological Changes

AI tools evolve rapidly, so findings may become less applicable as new technologies emerge.

Future Research

Future studies could address the limitations and expand the research by:

- Conducting longitudinal studies to track long-term effects of AI on brand identity.
- Investigating AI adoption in small businesses across different geographic regions and industries.
- Exploring customer perceptions in greater depth, including cultural and demographic factors influencing responses to AI-driven branding.

- Assessing the ROI of AI adoption in branding to provide a financial perspective for SSIs.
- Examining the ethical and social implications of AI use in branding more comprehensively.

REFERENCES

- Aaker, D. A. (1997). Building strong brands. *Free Press*.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Binns, R. (2018). Fairness in machine learning: Lessons from political philosophy. *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, 149–159.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chaffey, D. (2020). *Digital marketing: Strategy, implementation and practice* (7th ed.). Pearson Education.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance. *Journal of Marketing*, 65(2), 81–93. <https://doi.org/10.1509/jmkg.65.2.81.18255>
- Chung, M., & Kim, J. (2020). The internet information and technology research directions based on artificial intelligence. *Journal of Business Research*, 115, 19–26. <https://doi.org/10.1016/j.jbusres.2020.04.031>
- Chung, M., Wedel, M., & Rust, R. T. (2024). Artificial intelligence in marketing: A framework and research agenda. *Journal of Marketing*, 88(1), 1–23. <https://doi.org/10.1177/00222429231204521>
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2023). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 51, 24–42. <https://doi.org/10.1007/s11747-022-00866-1>
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., et al. (2023). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994. <https://doi.org/10.1016/j.ijinfomgt.2020.101994>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- European Commission. (2024). *Ethics guidelines for trustworthy artificial intelligence*. Publications Office of the European Union.
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The future of retailing. *Journal of Retailing*, 93(1), 1–6. <https://doi.org/10.1016/j.jretai.2016.12.008>
- Huang, M.-H., & Rust, R. T. (2021). A strategic framework



- for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49, 30–50. <https://doi.org/10.1007/s11747-020-00749-9>
- Joubert, J., & Smith, R. (2018). AI, ethics and branding: Balancing automation with authenticity. *Journal of Brand Strategy*, 7(3), 298–310.
- Kapferer, J.-N. (2012). *The new strategic brand management* (5th ed.). Kogan Page.
- Kapoor, A., Dwivedi, Y. K., Piercy, N. F., & Weerakkody, V. (2024). Customer-based brand equity in the era of artificial intelligence. *Journal of Business Research*, 162, 113812. <https://doi.org/10.1016/j.jbusres.2023.113812>
- Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity* (4th ed.). Pearson Education.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Liu, X., & Li, J. (2020). Artificial intelligence and marketing transformation: A systematic literature review. *Journal of Business Research*, 116, 15–28. <https://doi.org/10.1016/j.jbusres.2020.05.005>
- Luo, X., Tong, S., Fang, Z., & Qu, Z. (2022). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. *Marketing Science*, 41(1), 1–20. <https://doi.org/10.1287/mksc.2021.1307>
- Müller, J. M., Buliga, O., & Voigt, K. I. (2019). Fortune favors the prepared: How SMEs approach business model innovations in Industry 4.0. *Technological Forecasting and Social Change*, 132, 2–17. <https://doi.org/10.1016/j.techfore.2017.12.019>
- OECD. (2023). *Artificial intelligence in small and medium-sized enterprises*. OECD Publishing.
- Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, 85(1), 131–151. <https://doi.org/10.1177/0022242920953847>
- Rane, S. B., Thakker, S. V., & Kant, R. (2024). Artificial intelligence adoption in SMEs: Opportunities and challenges. *Journal of Small Business Management*. Advance online publication.
- Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach* (3rd ed.). Pearson Education.
- Srinivasan, R., & Swaminathan, S. (2021). Digital transformation and AI adoption in small businesses. *International Journal of Information Management*, 58, 102338. <https://doi.org/10.1016/j.ijinfomgt.2021.102338>
- Syam, N., & Sharma, A. (2023). Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice. *Industrial Marketing Management*, 109, 270–284. <https://doi.org/10.1016/j.indmarman.2022.08.006>
- Teece, D. J. (2023). Dynamic capabilities and artificial intelligence. *Business Strategy Review*, 34(1), 24–30.
- Verma, S., Bhattacharyya, S. S., & Kumar, S. (2023). AI-enabled marketing capabilities and firm performance. *Journal of Business Research*, 152, 1–12. <https://doi.org/10.1016/j.jbusres.2022.07.021>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, and human resource management. *International Journal of Human Resource Management*, 33(8), 1–31. <https://doi.org/10.1080/09585192.2021.1879203>
- Wade, M. (2020). *Digital business transformation*. IMD Business School.
- Wedel, M., & Kannan, P. K. (2024). Marketing analytics for data-rich environments. *Journal of Marketing*, 88(2), 97–121.
- Zhang, T., & Duan, Y. (2022). Big data analytics, AI capability and firm performance. *Information & Management*, 59(3), 103509. <https://doi.org/10.1016/j.im.2021.103509>
- Zhang, Y., Lu, Y., & Gupta, S. (2021). AI-driven personalization and brand communication effectiveness. *Journal of Interactive Marketing*, 54, 1–14. <https://doi.org/10.1016/j.intmar.2020.12.002>