

The Influence of Digital Technology on Marketing Strategy

Pengaruh Teknologi Digital Terhadap Strategi Pemasaran

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ABSTRACT

The alignment of Artificial Intelligence (AI) Technology in marketing has revolutionized market segmentation and marketing strategies. This paper examines the factors that influence the relationship between the use of AI in market segmentation and marketing strategy, including data and resource availability, organizational readiness and corporate culture, and legal and ethical considerations. Through a comprehensive literature review and analysis, this study identifies key hypotheses and discusses their implications for future research and practice. Despite challenges such as privacy concerns and ethical dilemmas, the integration of AI in marketing provides significant opportunities for enhanced customer experiences and better business performance.

Keywords: Artificial Intelligence (AI), marketing, market segmentation, marketing strategy, data availability, organizational readiness, company culture, legal considerations, ethical implications

ABSTRAK

Penyelarasan Teknologi Kecerdasan Buatan (AI) dalam pemasaran telah merevolusi segmentasi pasar dan strategi pemasaran. Makalah ini mengkaji faktor-faktor yang mempengaruhi hubungan antara penggunaan AI dalam segmentasi pasar dan strategi pemasaran, termasuk ketersediaan data dan sumber daya, kesiapan organisasi dan budaya perusahaan, serta pertimbangan hukum dan etika. Melalui tinjauan literatur yang komprehensif dan analisis, studi ini mengidentifikasi hipotesis kunci dan membahas implikasinya bagi penelitian dan praktik masa depan. Meskipun menghadapi tantangan seperti kekhawatiran privasi dan dilema etika, integrasi AI dalam pemasaran memberikan peluang signifikan untuk pengalaman pelanggan yang ditingkatkan dan kinerja bisnis yang lebih baik.

Kata Kunci: Kecerdasan Buatan (AI), pemasaran, segmentasi pasar, strategi pemasaran, ketersediaan data, kesiapan organisasi, budaya perusahaan, pertimbangan hukum, implikasi etika

1. Introduction

Strategic decision making in marketing is becoming increasingly complex as digital technology advances. One technology that plays an important role in marketing transformation is artificial intelligence (AI). In this context, this research aims to explore the impact of using AI technology in market segmentation on the effectiveness of marketing strategies.

In the last decade, AI technology has become a major focus in various industries, including marketing. However, comprehensive research on how the use of AI technology in market segmentation influences marketing strategies is still limited. Therefore, this research seeks to fill this knowledge gap by conducting a systematic literature review approach.

Digital technology has indeed had a significant impact on marketing strategies across various industries. Research has shown that digital marketing is crucial in influencing consumer behavior, transforming societies, and shaping the digital economy (Khalilov et al., 2021). The integration of digital technologies in marketing has led to a shift in international marketing practices, emphasizing the need to align strategies with the digital era (Katsikeas et al., 2019). Studies have highlighted the importance of various factors such as the target market,

technology, content, budget, and media in enhancing the effectiveness of digital marketing initiatives (Baidhowi et al., 2022).

Furthermore, investigations into the influence of digital marketing on sales turnover, particularly in micro, small, and medium enterprises (MSMEs), have found that digital marketing directly impacts sales, with technological capital serving as an intermediary variable in this relationship (Hikmahwati & Sahla, 2022). In the tourism industry, digital marketing has revolutionized marketing strategies by providing new tools and platforms to engage domestic tourists, underscoring the pivotal role of technology in reshaping marketing approaches (CHAMBOKO-MPOTARINGA & Tichaawa, 2023).

Moreover, the application of artificial intelligence in digital marketing has been explored, particularly in financial services targeting vulnerable customers. Research suggests that digital technologies and predictive algorithms can assist in implementing inclusive financial strategies to cater to financially vulnerable segments (Mogaji et al., 2020). Additionally, studies have examined the mediating role of relationship marketing strategies between digital marketing initiatives and consumers' purchase decisions, highlighting the interconnectedness of different marketing approaches (Kanapathipillai & Kumaran, 2022).

The integration of digital technology into marketing strategies offers several advantages. Firstly, it enhances reach and engagement by enabling businesses to connect with a broader audience in real-time through platforms like social media. Secondly, digital marketing proves cost-effective compared to traditional methods, as avenues like social media advertising and email campaigns tend to be more budget-friendly. Moreover, digital tools provide access to extensive consumer data, facilitating data-driven insights that refine targeting and strategy. Additionally, real-time analytics empower businesses to monitor campaign performance and adapt strategies promptly. Furthermore, personalization capabilities inherent in digital technology allow tailored messaging, fostering higher conversion rates and customer loyalty (Widyatmoko, 2022).

However, there are challenges associated with employing digital technology in marketing. Firstly, concerns over data privacy and security arise due to the collection and storage of personal information. Secondly, the technical complexity of digital marketing strategies can present hurdles, demanding a certain level of expertise. Moreover, the dynamic nature of digital platforms, such as algorithm changes and feature updates, necessitates continuous adjustments to marketing approaches. Furthermore, the digital landscape's competitiveness poses a challenge, with numerous businesses vying for consumer attention online. Finally, the prevalence of ad blockers and ad blindness among consumers diminishes the effectiveness of digital marketing efforts, highlighting the need for innovative approaches to engage audiences effectively (Xu, 2021).

Overall, the literature emphasizes the significance of digital marketing in enhancing brand awareness, customer satisfaction, and marketing performance. As businesses evolve, digital marketing strategies are expected to play a crucial role in effectively and innovatively reaching target audiences (Karen & Zai, 2022). A systematic review of the impact of digital marketing stresses the importance for businesses to leverage digital channels effectively to communicate ideas and drive company growth (Qurtubi et al., 2022).

This approach provides a holistic overview of research that has been previously conducted in this domain. The data used in this review comes from academic journals, conferences, and other related literature relevant to the topic. Through this comprehensive review, this research aims to provide new insights and in-depth understanding of the influence of AI technology in market segmentation on marketing strategy.

It is hoped that the conclusions drawn from this research can make a significant contribution to the digital marketing literature and provide practical guidance for marketing practitioners in developing more effective and efficient strategies. Thus, this article will not only discuss the main findings of the research, but will also highlight the unique contribution of

this research to our understanding of the interactions between AI technology and marketing strategy.

In this overview, this article will explore in detail the impact of using AI technology in market segmentation on marketing strategy. Thus, it is hoped that this article will provide readers with valuable insight into how AI technology can change the landscape of modern marketing strategies.

2. Research Methods

The research method used in this research is a systematic literature review approach. This approach was chosen because it allows thorough investigation and analysis of the literature relevant to the research topic, namely the impact of the use of artificial intelligence (AI) technology in market segmentation on the effectiveness of marketing strategies.

The first step in this systematic literature review approach is to formulate clear and detailed research questions. In this context, the underlying research question is: "How does the use of AI technology in market segmentation affect the effectiveness of marketing strategies?"

After the research questions have been determined, a search for relevant literature is carried out using databases of academic journals, conferences and other sources deemed relevant. A literature search was conducted using relevant keywords, such as "AI", "market segmentation", "marketing strategy", and other variations.

Next, literature selection was carried out in accordance with the predetermined inclusion and exclusion criteria. Inclusion criteria included relevance to the research topic, availability of adequate information, and publication in English. Meanwhile, exclusion criteria include literature that is irrelevant, not available in complete form, or is outdated.

Once the relevant literature has been collected, data analysis and synthesis is carried out to extract the main findings relating to the impact of using AI technology in market segmentation on marketing strategies. The data taken includes information about the use of AI technology in market segmentation, the effectiveness of marketing strategies measured, as well as other factors that influence the relationship between the two.

The results of this systematic analysis of the literature will be presented and discussed in detail in the Results and Discussions section, including a discussion of the research framework that emerged from the literature findings and the formulation of relevant hypotheses. Thus, it is hoped that this systematic literature review approach can provide an in-depth understanding of the influence of AI technology in market segmentation on marketing strategy.

3. Results and Discussions

3.1. Introduction to Artificial Intelligence (AI) Technology in Marketing

Artificial Intelligence (AI) in the marketing context refers to the utilization of technology-enabled systems that mimic human intelligence to enhance various marketing activities. This includes leveraging AI for customer service to provide personalized recommendations and solutions (Xu et al., 2020). AI has reshaped marketing strategies, interactions, and relationships, playing a pivotal role in transforming the dynamics of the digital world (Zaman, 2022). However, the implementation of AI in marketing comes with challenges such as poorly defined objectives, biased AI, and the need for explainable and controllable AI (Bruyn et al., 2020).

Definitions of AI in marketing often describe it in terms of human intelligence, emphasizing its role in enhancing service delivery and customer satisfaction (Costa et al., 2022). The concept of AI in interactive marketing involves the co-creation of value through interactions across platforms, emphasizing the importance of engagement and organizational structuring (Peltier et al., 2023). Moreover, AI's impact on marketing has led to the development of intelligent agents and various marketing applications (Paulich et al., 2022).

In the marketing domain, AI is celebrated for its advantages, but concerns have been raised regarding the need for AI auditing and certification to ensure consumer well-being and prevent harm (Blösser, 2023). Researchers and practitioners are encouraged to approach service design from a customer experience perspective and avoid classifying service tasks based on questionably conceived AI intelligences (Giebelhausen, 2023).

In conclusion, AI in marketing represents a significant advancement that has revolutionized marketing strategies and customer interactions. While offering numerous benefits, the ethical implications, pitfalls, and the need for transparency and consumer well-being remain critical considerations in the integration of AI in marketing practices.

3.2. Recent Developments and Applications of AI in the Marketing Industry

Recent advancements in artificial intelligence (AI) have had a profound impact on the marketing industry, leading to significant changes in marketing strategies, customer behaviors, and decision-making processes (Davenport et al., 2019). The integration of data-intensive machine learning techniques, powered by AI, has transformed decision-making practices in various sectors, including marketing, by facilitating evidence-based approaches (Jordan & Mitchell, 2015). The expanding role of AI in redefining services and automating tasks previously carried out by humans has been acknowledged, underscoring its potential for innovation while also presenting challenges to traditional job roles (Huang & Rust, 2018).

Within the marketing sphere, AI has played a crucial role in enabling personalized experiences based on customer journey perspectives, thereby swiftly altering consumer market dynamics and marketing methodologies (Gao & Liu, 2022). Additionally, AI technologies have demonstrated remarkable effectiveness in digital marketing, particularly in business-to-business (B2B) settings, signaling a rising trend towards incorporating AI into conventional marketing strategies (Keegan et al., 2022). The anticipated benefits of AI in marketing encompass accelerated decision-making processes and the provision of invaluable insights to marketing professionals (Overgoor et al., 2019).

The ethical considerations surrounding AI in marketing have sparked discussions, with AI-driven automation of consumer tasks and tailored content delivery prompting inquiries into consumer decision-making processes and privacy concerns (Gonçalves et al., 2023). Furthermore, the potential of AI in strategic marketing decision-making has been emphasized, stressing the importance for businesses, especially in competitive sectors, to leverage AI for enhanced decision-making capabilities to maintain a competitive edge (Stone et al., 2020).

Overall, the convergence of AI with marketing represents a significant trend, with AI applications driving innovation in business models across diverse industries, including marketing, technology/media, consumer products, financial services, and healthcare (Lee et al., 2019). The transformative influence of AI on advertising and customer experiences highlights the pivotal role AI plays in improving efficiency, meeting market demands, and revolutionizing customer-brand interactions (Yu, 2022; Ameen et al., 2021).

3.3 Relevance of Using AI in Market Segmentation

Artificial Intelligence (AI) is significantly impacting the field of marketing, particularly in market segmentation. By utilizing AI technologies, marketers can enhance their strategies and gain a deeper understanding of customer behaviors (Davenport et al., 2019). AI can be strategically integrated at various stages of marketing, including segmentation, targeting, and positioning, to enhance operational efficiency and deliver personalized experiences to customers (Huang & Rust, 2020). Facial recognition technology, powered by AI, is also being increasingly employed to segment customers based on their characteristics, showcasing the diverse applications of AI in marketing (Srivastava & Bag, 2023).

Research indicates that AI has a profound impact on marketing, aiding in decision-making processes and supporting marketing strategies (Overgoor et al., 2019).

Additionally, AI plays a critical role in improving advertising campaigns and enhancing the effectiveness of marketing communications (Nesterenko & Олєфіренко, 2023). The integration of AI in marketing not only influences consumer value delivery but also affects marketing organization and management, demonstrating its extensive reach across all elements of the marketing mix (Jarek & Mazurek, 2019).

Furthermore, AI is instrumental in comprehending customer behavior, generating insights, and enhancing customer engagement and loyalty (Kiran, 2021). Through the use of AI, marketers can target customers more effectively, enhance customer experiences, and increase customer lifetime value. AI also helps optimize brand marketing strategies, serving as a supplementary tool to boost marketing endeavors (Liu & Chen, 2021).

In conclusion, the incorporation of AI in market segmentation provides marketers with a powerful tool to refine their strategies, comprehend customer behaviors, and enhance overall marketing effectiveness. The varied applications of AI in marketing underscore its significance in shaping the future of marketing practices.

3.4 Market Segmentation Theories and Concepts

Market segmentation is a fundamental concept in marketing that involves dividing a heterogeneous market into smaller, more homogeneous segments based on various characteristics such as demographics, psychographics, behavior, and needs. This segmentation allows businesses to tailor their products, services, and marketing strategies to specific groups of consumers, thereby increasing efficiency and effectiveness in reaching their target audience (Bass et al., 1968). The scope of market segmentation extends beyond traditional marketing literature, encompassing concepts such as consumer orientation, exchange theory, competition, and continuous monitoring (Carins & Rundle-Thiele, 2013).

In the context of labor markets, segmentation theory does not provide a straightforward definition of market segments. Piore (1975) locates the secondary segment of the labor market in small firms that lack stable product markets and the minimum size required to develop rules and procedures for internal promotions (Dekker et al., 2002). Housing market segmentation is influenced by structural and spatial attributes, with price predictions being most accurate when based on the segmentation used by appraisers (Bourassa et al., 2003; Cox & Hurtubia, 2020).

The scope of a firm's market activities includes engagement in different economic activities and geographic markets. This can involve industries, segments, product lines, countries, states, provinces, and cities (Peng et al., 2021). Market segmentation methods developed in marketing can also be beneficial in identifying specific stakeholder groups within a given role-based stakeholder group (Wolfe & Putler, 2002).

Overall, market segmentation plays a crucial role in various industries and disciplines, allowing businesses to better understand and target their audiences effectively. The concept has evolved to encompass a wide range of factors and considerations, highlighting its significance in modern marketing strategies and business operations.

3.5 Traditional Approach to Market Segmentation

Market segmentation is a fundamental concept in marketing, allowing businesses to divide a heterogeneous market into smaller, more manageable segments. Traditional approaches to market segmentation have evolved over time to adapt to changing market dynamics. While traditional mass market strategies have been effective, there is a growing recognition of the need for more personalized and differentiated approaches to segment targeting (Marez et al., 2007). This shift is driven by the understanding that different market segments may require tailored marketing strategies to effectively reach and engage with consumers (Hunt, 2010).

In the realm of market segmentation, there are various approaches such as a priori and a posteriori segmentation, also known as commonsense and data-driven segmentation (Pesonen et al., 2011). These approaches highlight the importance of combining both intuitive understanding and empirical data to effectively segment markets. Additionally, the use of innovative techniques like mixture regression modeling has shown promise in identifying segments based on individuals' domain-specific lifestyle characteristics (Bruwer & Li, 2017).

Moreover, the traditional methods of market segmentation are being challenged by the complexities of analyzing online review data. Traditional segmentation methods may struggle to account for the networked nature of relationships among reviewers and brands across online platforms (Wang, 2022). As markets become more dynamic and diverse, there is a need for segmentation strategies that can adapt to these changes and provide actionable insights for businesses.

In conclusion, while traditional market segmentation remains a cornerstone of marketing strategy, there is a growing recognition of the need for more personalized, data-driven, and innovative approaches to effectively segment markets. By combining traditional segmentation methods with modern techniques and understanding the evolving dynamics of consumer behavior, businesses can create targeted and impactful marketing strategies.

3.6 Use of AI Technology to Improve Market Segmentation

Market segmentation is a crucial aspect of marketing strategy, and the integration of Artificial Intelligence (AI) technology has shown significant promise in enhancing this process. AI can revolutionize market segmentation by automating business processes, acquiring valuable marketing insights from data, engaging with customers, and aiding in the development of effective planning strategies (Kim et al., 2021). Through the application of AI in marketing, businesses can improve operational efficiency, provide better customer experiences through personalization, and achieve large-scale customization for marketing purposes (Yang et al., 2021).

AI technology can be strategically utilized in the segmentation, targeting, and positioning (STP) stage of marketing. Mechanical AI can assist in segment recognition, thinking AI can aid in segment targeting, and feeling AI can contribute to segment positioning, thereby enhancing the overall segmentation process (Huang & Rust, 2020). By leveraging AI, companies can gain a comprehensive understanding of customer needs, identify market opportunities swiftly, set precise business goals, and implement smart and precision marketing strategies effectively (Zhu, 2022).

Moreover, AI technology has been instrumental in improving work efficiency and streamlining management processes in Market Public Administration, leading to enhanced productivity and simplification of complex tasks (Lu & Gao, 2022). The use of AI in marketing is increasingly prevalent, particularly in enhancing the online consumer experience through various digital channels (Peyravi et al., 2020).

AI systems enable marketers to engage in one-to-one segmentation and targeting, allowing for the customization of messages tailored to individual customers, thereby enhancing customer engagement and appeal (Mogaji et al., 2020). The adoption of AI in marketing practices focuses on enhancing processes such as personalization, segmentation, and market analysis, leading to improved marketing actions and strategies (Keegan et al., 2022).

In conclusion, the integration of AI technology in market segmentation holds immense potential for businesses to optimize their marketing strategies, enhance customer experiences, and drive growth through targeted and personalized approaches.

3.7 The Influence of Using AI Technology in Market Segmentation on the Effectiveness of Marketing Strategies

The integration of AI technology in market segmentation processes has demonstrated promising results in enhancing the accuracy and quality of segmentation, thereby impacting the effectiveness of marketing strategies. By leveraging AI, marketers can achieve more precise segmentation, leading to better-targeted marketing campaigns and improved customer engagement (Zhang et al., 2021). AI can extract data from various touchpoints, process it, and continuously learn from it, enabling marketers to gain valuable insights for segmentation (Mogaji et al., 2020). Moreover, AI can significantly improve the accuracy of segmentation and clustering, including market segmentation, customer clustering, and supplier clustering, thereby enhancing the overall quality of segmentation efforts (Chen et al., 2021).

The strategic use of AI in marketing, as illustrated in various areas of marketing, can lead to personalized and effective marketing strategies (Huang & Rust, 2020). AI technology not only aids in segmenting and quantifying data accurately but also provides quicker methods for analysis, which can be crucial in devising agile and responsive marketing strategies (Zhang et al., 2021). The application of AI in market segmentation can contribute to the development of competitive advantages and increased business performance by providing higher quality segmentation solutions (Hajibaba et al., 2019).

Furthermore, the impact of AI on marketing strategy effectiveness is evident in its ability to enhance labor productivity by automating prediction tasks and improving the overall efficiency of marketing processes (Abrardi et al., 2021). AI's role in improving the accuracy and quality of segmentation directly influences the effectiveness of marketing strategies by enabling marketers to tailor their approaches more precisely to target audiences (Chen et al., 2021). Integrating AI into marketing tasks can lead to improved corporate performance, profitability, and competitive advantage, highlighting the transformative potential of AI in shaping marketing strategies (Shaik, 2023).

In conclusion, the utilization of AI technology in market segmentation processes not only increases the accuracy and quality of segmentation but also plays a pivotal role in enhancing the effectiveness of marketing strategies. By leveraging AI for segmentation, marketers can gain deeper insights, target specific customer segments more effectively, and ultimately drive better outcomes in their marketing efforts.

3.8 Factors Influencing the Relationship Between the Use of AI Technology in Market Segmentation and Marketing Strategy

1. Availability of Data and Resources

Factors influencing the relationship between the use of AI technology in market segmentation and marketing strategy are multifaceted. The availability of data and resources plays a crucial role in this dynamic. Research by Huang & Rust (2020) highlights the strategic application of AI in marketing, where different types of AI can be utilized at various stages of the marketing strategy process, such as segmentation, targeting, and positioning. Wu & Monfort (2022) emphasize that factors like marketing capabilities and customer co-creation positively influence AI marketing strategy and performance. Moreover, Ho & Chow (2023) point out that in AI marketing efforts, factors like information, accessibility, and customization can significantly impact brand experience.

In the context of market segmentation and marketing strategy, the study by Zhu (2022) underscores how AI can enhance companies' understanding of customer needs, identify market opportunities swiftly, set accurate business goals, and enable precise marketing strategies. Additionally, the research by Varma (2022) mentions the use of AI, automation, and cloud software in collecting consumer data for retail purposes, indicating the importance of technological resources in segmentation strategies.

Overall, the interplay between AI technology, data availability, and resource allocation is pivotal in shaping effective market segmentation and marketing strategies. Leveraging AI tools at different stages of the marketing process, understanding customer behavior, and utilizing advanced technologies for data collection and analysis are essential components for successful segmentation and strategy formulation in the modern marketing landscape.

2. Organizational Readiness and Company Culture

Factors influencing the relationship between the use of AI technology in market segmentation and marketing strategy are multifaceted and include organizational readiness and company culture. Organizational readiness, as highlighted in various studies (Rahayu & Day, 2015; Kareem et al., 2022), plays a crucial role in determining the adoption and successful implementation of AI technologies. Factors such as technology readiness, knowledge management capabilities, and innovation have been identified as key drivers for encouraging the use of AI in organizations (Kareem et al., 2022). Additionally, the cultural context within a company, as discussed in studies (Dabbous et al., 2021; Behl et al., 2021), can significantly impact employees' intention to use AI and influence decision-making processes related to AI adoption.

Moreover, the adoption of AI technology in market segmentation and marketing strategy is influenced by various organizational factors. Studies (Ghani et al., 2022; Alami et al., 2020) emphasize the importance of technology, organizational, and environmental factors in determining the successful adoption of AI in different industries. Factors such as technology competency, top management support, and competitive pressure have been identified as critical influencers in the adoption of AI technologies (Ghani et al., 2022; Islam, 2023). Furthermore, organizational conditions and factors, beyond technological challenges, are essential for realizing the value proposition of AI (Alami et al., 2020).

In conclusion, the relationship between the use of AI technology in market segmentation and marketing strategy is shaped by a combination of organizational readiness, cultural factors, and organizational conditions. Understanding and addressing these factors are crucial for organizations looking to leverage AI effectively in their marketing strategies.

3. Legal and Ethical Aspects in the Use of AI in Marketing

Factors influencing the relationship between the use of AI technology in market segmentation and marketing strategy are multifaceted, with legal and ethical aspects playing a crucial role. The integration of AI in marketing raises concerns regarding transparency, algorithmic bias, data privacy, and accountability (Zhang & Zhang, 2023; Bhavani & Thuraisingam, 2022). Ethical considerations such as beneficence, autonomy, and responsibility attribution are paramount when utilizing AI in marketing strategies (Mouchabac et al., 2021). The rapid advancement of AI technology necessitates a continuous evaluation of its ethical and regulatory implications in marketing practices (Kumar, 2024).

Moreover, the legal and ethical frameworks surrounding AI in marketing are evolving, with governments introducing regulations to address ethical issues posed by AI (O'Connor et al., 2022). The use of AI in marketing also presents challenges related to liability, algorithm bias, and data privacy, which require careful consideration (Bhavani & Thuraisingam, 2022). Stakeholders in the marketing industry need to navigate these complexities to ensure that AI is used ethically and responsibly in market segmentation and marketing strategies.

In conclusion, the adoption of AI technology in marketing requires a comprehensive understanding of the legal and ethical considerations involved. By addressing issues such as transparency, accountability, and data privacy, businesses can leverage AI effectively in market segmentation and marketing strategies while upholding ethical standards and regulatory compliance.

3.9 Future Challenges and Opportunities

In the realm of marketing, the integration of Artificial Intelligence (AI) presents both challenges and opportunities. Challenges in utilizing AI for market segmentation include obstacles such as the lack of structured processes, unclear objectives, and time constraints (Dolnicar et al., 2018). Additionally, concerns related to privacy, bias, and ethics pose significant policy questions that need to be addressed (Davenport et al., 2019). However, despite these challenges, there are promising opportunities for AI in marketing strategy. AI has the potential to enhance firm performance, especially for small and medium-sized enterprises, by aiding in areas such as marketing, financial performance, and data management (Ho et al., 2022).

Looking towards the future, further research directions in the context of AI in marketing should focus on overcoming obstacles like clinical data limitations, ethical use of data, regulatory barriers, and the need for increased understanding and trust in AI models (Borkowski, 2022). Collaborative efforts among key stakeholders will be essential in addressing these challenges and advancing the use of AI in marketing financial services (Mogaji & Nguyen, 2021). Moreover, as AI continues to evolve, it is expected to bring about significant changes, possibly leading to the realization of the fourth industrial revolution in the services sector (Bock et al., 2020).

In conclusion, while challenges exist in leveraging AI for market segmentation, there are clear opportunities for enhancing marketing strategies through AI adoption. Future research should aim to address current obstacles and foster collaboration among stakeholders to maximize the potential benefits of AI in marketing.

Hypothesis

H1: There is a positive relationship between the availability of data and resources and the use of AI technology in market segmentation and marketing strategy.

H2: Organizational readiness and company culture are positively related to the use of AI technology in market segmentation and marketing strategy.

H3: The legal and ethical aspects of using AI in marketing are positively related to the use of AI technology in market segmentation and marketing strategy.

H4: The relationship between the availability of data and resources and the use of AI technology in market segmentation and marketing strategy is moderated by organizational readiness and company culture.

H5: The relationship between the availability of data and resources and the use of AI technology in market segmentation and marketing strategy is moderated by legal and ethical aspects in the use of AI in marketing.

H6: The relationship between organizational readiness and corporate culture with the use of AI technology in market segmentation and marketing strategy is moderated by legal and ethical aspects in the use of AI in marketing.

H7: There is a significant interaction between the availability of data and resources, organizational readiness and company culture, as well as legal and ethical aspects in the use of AI in marketing on the use of AI technology in market segmentation and marketing strategy.

Conclusion

The integration of Artificial Intelligence (AI) technology in marketing, especially in market segmentation and marketing strategy, is a significant advance with enormous potential. AI technology enables marketers to increase understanding of consumer behavior, personalize experiences, and optimize marketing strategies effectively. However, this integration also brings with it a number of challenges, including concerns regarding data privacy, algorithm bias, and ethical implications. Nonetheless, the future prospects of AI Technology in marketing are very promising, with opportunities to improve corporate performance, collaborative research efforts, and realize the fourth industrial revolution in the services sector.

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