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Comparative Study of Artificial Intelligence (AI) Utilization in Digital Marketing Strategies Between Developed and Developing Countries: A Systematic Literature Review

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ABSTRACT: Artificial Intelligence (AI) has become crucial in digital marketing strategies in the rapidly advancing digital era. Developed and developing countries exhibit significant differences in adopting and implementing this technology, influenced by infrastructure readiness, human resources, and policy support. This study aims to compare the use of AI in digital marketing strategies between developed developing countries to understand each group's challenges and opportunities. The research employs a Systematic Literature Review (SLR) method by analyzing 50 articles from leading databases such as Scopus, Springer, and IEEE Xplore. The analyzed articles were selected based on inclusion criteria, including relevance to the topic, publication year (2018-2024), and full accessibility. Data were analyzed through thematic synthesis to identify patterns, trends, and gaps in AI adoption between the two groups of countries. NVivo and VOSviewer are used as analytical tools to facilitate data analysis. The findings reveal that developed countries leverage AI for content personalization, predictive analytics, and marketing automation, supported by advanced digital infrastructure. Meanwhile, developing countries still face various obstacles, such as limited infrastructure and digital literacy. The implications of this study highlight the need for more significant investment in technological infrastructure in developing countries and the importance of global collaboration to accelerate equitable AI adoption. This research also provides recommendations for policymakers and business practitioners to optimize AI utilization in digital marketing strategies across different contexts.

**Keywords:** Artificial Intelligence, Digital Marketing, Developing Countries, Developed Countries



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#### **INTRODUCTION**

In the era of globalization and technological advancement, Artificial Intelligence (AI) has emerged as one of the most significant innovations impacting various sectors, including digital marketing (Aly, 2022). AI technology offers solutions that enable companies to automate and optimize their

marketing processes, enhance customer engagement, and accelerate decision-making through accurate and rapid data analysis (Basha, 2023; Sarker, 2021). In developed countries, using AI in digital marketing has become common, assisting companies in personalizing user experiences and strengthening customer loyalty more effectively (Rajagopal et al., 2022). This technology also facilitates using predictive analytics to project market trends and identify consumer behavior with high precision (Martini et al., 2024).

Conversely, in developing countries, the adoption of AI in digital marketing is still in its early stages. Many companies in these countries have not fully implemented AI-based marketing strategies due to technological infrastructure limitations, constrained human resources, or cost factors. (Sharifani et al., 2022; Torfi et al., 2020). Nevertheless, there is significant potential for companies in developing countries to benefit from AI in enhancing their competitiveness in the global market. The phenomenon of AI in digital marketing is closely tied to various challenges and opportunities that differ between developed and developing countries. (Haleem et al., 2022; Zhou et al., 2024). In developed nations such as the United States, the United Kingdom, and Japan, AI has been integrated into marketing systems through advanced applications like chatbots, big data analytics, and machine learning to enhance the efficiency of marketing campaigns. (Nair & Gupta, 2020). This integration enables companies in developed countries to deliver more targeted campaigns, improve consumer interactions, and maximize sales conversions. (Dumitriu & Popescu, 2020). As a result, AI-based marketing has become essential to corporate marketing strategies in developed countries. (De La Fuente Garcia et al., 2020; Kopalle et al., 2022).

However, in developing countries, the utilization of AI faces several obstacles, including low technology investment, limited access to high-quality data, and a lack of technical knowledge related to AI. (Darma, 2020; Nalbant & Aydin, 2023). In these countries, marketing strategies often rely on conventional methods or essential digital technologies that are not yet fully integrated with AI. (Abrokwah-Larbi & Awuku-Larbi, 2024; Rosário & Raimundo, 2021) This phenomenon highlights the gap in AI adoption in digital marketing between developed and developing countries. This gap is influenced by various factors, such as technological readiness, government support, and corporate awareness of AI's benefits. (Mogaji & Nguyen, 2022; Purnomo, 2023).

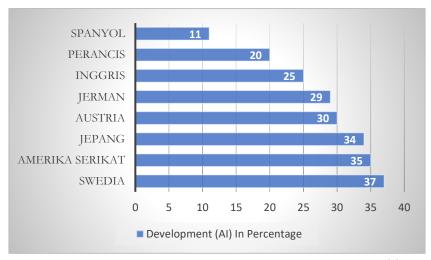


Figure 1. Countries Starting to Read AIHelps Productivity (Source: <a href="https://encr.pw/bIFTN">https://encr.pw/bIFTN</a>)

Figure 1 illustrates the percentage of Artificial Intelligence (AI) development in several countries to boost productivity. Sweden ranks highest at 37%, followed by the United States (35%), Japan (34%), and Austria (30%) (Sathupadi, 2021)Most of these countries are developed nations that are highly committed to AI development to drive productivity and efficiency across various sectors. (Patrick Azuka Okeleke et al., 2024)This data supports the idea that developed countries excel in implementing and developing AI technology compared to developing nations. (Akpan et al., 2022)This gap can be attributed to the more advanced technological infrastructure and significant investments in developed countries, which enable them to leverage AI's potential to support economic growth and innovation in business sectors, including digital marketing. (Ruiz-Real et al., 2021). On the other hand, developing countries may still lag in AI adoption due to various limitations, requiring specific strategies to bridge this gap. (Mannuru et al., 2023).



Figure 2. Utilization of AI in the Business World in Southeast Asia (Source: https://encr.pw/6PrEH)

Figure 2 displays data on the utilization of Artificial Intelligence (AI) in the business sector across Southeast Asia, where only 28% of companies in Indonesia plan to develop AI, while 57% are still in the early stages of understanding AI and just 2% are not interested in investing in this area. Compared to neighboring countries such as Singapore and Malaysia, which have 60% and 58% of companies in the AI development stage, Indonesia appears to lag in adopting this technology. This data focuses on the gap in AI utilization between developed and developing countries, particularly in Southeast Asia, where nations with more advanced infrastructure and technological support show higher levels of adoption. (Kshetri, 2020).

A study conducted by (Low et al., 2020) Indicates that developed countries have a higher rate of AI adoption in digital marketing than developing countries. According to a survey by (Sharma et al., 2022)More than 70% of companies in developed countries have adopted AI for their marketing strategies, while in developing countries, this figure remains below 30%. This data emphasizes the significant differences in technological readiness and resource capacity between developed and developing countries, which affect how AI supports digital marketing strategies.

The study by Nneka Adaobi Ochuba et al., (2024) also highlights the importance of technological infrastructure and supportive government regulations in facilitating AI adoption in the marketing sector. Government and private sector support for technological innovation in developed

countries has enabled companies to integrate AI more easily (Lundvall & Rikap, 2022). In contrast, such support in developing countries remains limited, and companies often face regulatory frameworks that are less conducive to technological innovation, hindering AI adoption in digital marketing. (Hendricks & Mwapwele, 2024) In developed countries, the literature frequently focuses on advanced technologies such as Natural Language Processing (NLP) and computer vision, which analyze customer data deeply to create more personalized marketing experiences. Meanwhile, in developing countries, the literature emphasizes the challenges of technology adoption, including limited resources and the need for adequate workforce training to understand and implement AI on a large scale.

Comparing the use of Artificial Intelligence (AI) in digital marketing strategies between developed and developing countries is crucial, as these two groups of countries have different characteristics in terms of technological infrastructure, levels of digital adoption, and human resource readiness. Developed countries generally have better access to advanced technology, abundant resources, and supportive regulations, enabling them to optimize AI in various marketing aspects, such as content personalization, predictive analytics, and process automation. (Aly, 2022). On the other hand, developing countries face numerous obstacles, such as limited infrastructure, low technological literacy, and high implementation costs, which hinder AI adoption. This comparison allows us to understand the existing gap, identify best practices from developed countries that could be adapted by developing countries, and formulate more effective and inclusive strategies to accelerate AI adoption in the latter (Nchofoung et al., 2021). The findings from this study can offer valuable insights for government authorities and entrepreneurs in designing targeted interventions to overcome barriers and maximize AI's potential in supporting digital economic growth in both contexts.

One of the theories used in this study is the Technology Acceptance Model (TAM), a widely recognized framework for understanding user acceptance of technology. Developed by Davis (1989), TAM posits that two primary factors influence technology adoption: perceived usefulness (PU) and perceived ease of use (PEOU) (Chatterjee et al., 2021). Perceived usefulness refers to the degree to which an individual believes that using a particular technology will enhance their job performance, while perceived ease of use pertains to the extent to which the technology is perceived as being free from effort (Na et al., 2022). These factors, in turn, influence the user's attitude toward the technology and their intention to use it. In the context of this research, TAM will help analyze how businesses in developed and developing countries perceive and adopt AI in their digital marketing strategies, considering their unique technological and infrastructural contexts.

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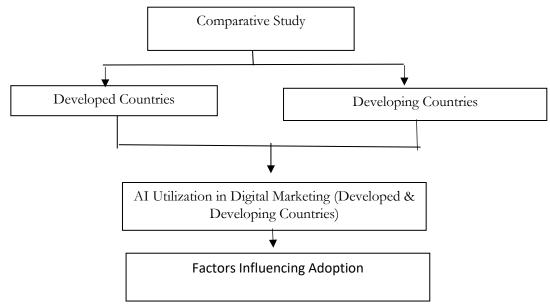


Figure 3. Conceptual Framework

The conceptual framework presented in Figure 3 outlines the comparative study of Artificial Intelligence (AI) utilization in digital marketing between developed and developing countries. It begins with the overarching theme of a comparative study, which branches into two distinct contexts: developed and developing countries. Both contexts converge on analyzing AI utilization in digital marketing, featuring how these two groups of countries implement AI in their marketing strategies. The framework further considers the factors influencing AI adoption, encompassing technological infrastructure, government support, and resource readiness. This structure provides a comprehensive overview, allowing the study to systematically explore the disparities and commonalities in AI adoption and identify challenges and opportunities for both contexts to optimize their digital marketing strategies. This study uses the Systematic Literature Review method to compare AI utilization in digital marketing strategies between developed and developing countries.

#### **METHOD**

The research methodology employed is a Systematic Literature Review (SLR) aimed at identifying, reviewing, and evaluating various related studies to obtain comprehensive results and summarize them thoroughly. The SLR approach was chosen to explore the literature on using Artificial Intelligence (AI) in digital marketing strategies between developed and developing countries. This study follows the SLR methodology comprising five main stages as outlined by (Kitchenham, 2021): formulating research questions, article selection process, selection and evaluation, data analysis and synthesis, and reporting results. Each stage is conducted systematically to ensure that only relevant and high-quality literature is analyzed in this research.

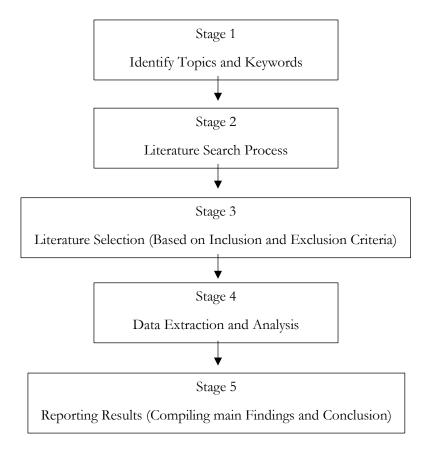


Figure 4. Systematic Literature Review Research Process

The SLR process begins with formulating research questions focusing on exploring the literature on the use of AI in digital marketing in developed and developing countries and the challenges and benefits that may arise in these contexts. (J. Creswell, 2017). Keywords used include "AI in digital marketing," "AI adoption in developed countries," "AI adoption in developing countries," and "AI for marketing optimization." Articles are collected from leading databases such as Scopus, ScienceDirect, Springer, and IEEE Xplore by applying a specific search protocol to gather relevant studies. Once the articles are collected, they are evaluated using inclusion and exclusion criteria, considering the publication year, article type, publication status, and relevance to the research objectives. (J. Creswell, 2016). The analysis phase involves content synthesis to understand the patterns and gaps in AI adoption in digital marketing between developed and developing countries. NVivo and VOSviewer are used as analytical tools to facilitate data analysis, enabling in-depth exploration of themes, trends, and relationships within the collected literature. The final research findings are compiled into a scientific report, presenting comprehensive information on the adoption and challenges of AI implementation in digital marketing across these two contexts. (J. W. Creswell & Creswell, 2018).

This study's Systematic Literature Review (SLR) method applies inclusion criteria consisting of articles published between 2018 and 2024, focusing on using Artificial Intelligence (AI) in digital marketing strategies, and available in reputable journals from databases such as Scopus and Springer. The exclusion criteria include irrelevant articles, such as technical studies on AI, without any connection to digital marketing or opinion-based articles. Once the articles are selected, the

data is analyzed using thematic synthesis, focusing on identifying patterns, trends, challenges, and opportunities in AI implementation in developed and developing countries. This analysis aims to compare results across countries and provide a comprehensive overview of the topic under investigation.

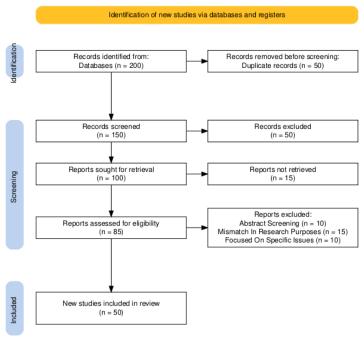


Figure 5. PRISMA Table (Source: Created from PRISMA Database, 2024)

This Systematic Literature Review (SLR) study was conducted following the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020, which aim to provide a structured, objective, and transparent framework for conducting and reporting systematic literature reviews (Haddaway et al., 2022). PRISMA is a method initially designed for research in the healthcare field. Still, its popularity has expanded to various other disciplines, including business and marketing, due to its strengths in establishing a valid and accountable article selection process. PRISMA ensures that each stage of article selection, from identification to inclusion, is carried out meticulously and systematically to avoid bias and enhance the quality of the review results. In the initial stage, articles are identified from various databases, and duplicate or irrelevant articles are gradually filtered out until only those meeting the inclusion criteria remain. Applying PRISMA establishes a solid foundation for selecting highly relevant data, effectively addresses the research questions, and provides a thorough analysis.

#### **RESULT AND DISCUSSION**

The study conducted by (Apriani et al., 2024) implementing AI in digital marketing strategies focuses on enhancing personalization and automation, mainly through chatbots and predictive analytics. This research emphasizes that AI helps companies gain deeper insights into consumer behavior and improve customer engagement. On the other hand, (Kumari, 2024) found that AI enhances the effectiveness of marketing campaigns and strengthens the relationship between brands and consumers, resulting in higher ROI. Both studies demonstrate that AI is crucial in

creating more personalized and efficient customer experiences, though they point out different benefits.

Kaperonis (2023) revealed that AI plays a significant role in enhancing user experiences by leveraging real-time analytics and content personalization. This study shows that technologies such as machine learning enable the delivery of relevant and timely marketing messages. On the other hand, a study by Surjadeep Dutta, Arivazhagan, Uma Padmini Ema, (2024) highlights the impact of AI on consumer purchasing decisions, particularly in the e-commerce sector. They found that AI-based personalization can improve customer satisfaction and increase sales conversions. Both studies reinforce the importance of big data and AI algorithms in creating effective digital marketing strategies.

(Adwan, 2024) emphasizes in his research that AI can automate the content creation process, enabling greater efficiency in marketing campaigns. However, he also emphasizes the need for human involvement to ensure content quality and relevance. Similarly, Raghav et al., (2023) explore how AI can integrate advanced technologies such as augmented reality and voice search to create more interactive and engaging marketing strategies. Their study indicates that while AI brings efficiency and innovation, the human element remains essential to optimize its implementation.

Giannakopoulos et al., (2024) focus on the application of AI in the agribusiness sector, demonstrating how AI can optimize marketing strategies by analyzing the relationship between macroeconomic indices and digital marketing performance. Their findings reveal that AI can potentially boost productivity in traditional sectors such as agriculture. Meanwhile, Labib (2024) identifies six key clusters of AI's role in marketing, including ethical marketing and value transformation. Labib also explains future trends in AI usage, such as integrating more advanced technologies and ethical approaches in marketing practices.

Research conducted by Sodiq Odetunde Babatunde et al., (2024) demonstrates that AI-based personalization can enhance customer loyalty and increase sales conversions. The study emphasizes that AI, through in-depth data analysis, can create more relevant customer experiences. On the other hand Senyapar (2024) draws attention to AI implementation's ethical challenges, particularly data privacy and algorithmic transparency. Both studies highlight that while AI offers many benefits for marketing strategies, attention to ethical and privacy aspects is crucial to ensure responsible and sustainable implementation.

The findings of this study indicate that the use of Artificial Intelligence (AI) in digital marketing strategies significantly contributes to enhancing the effectiveness and efficiency of marketing efforts. AI facilitates content personalization, predictive analytics, and automated customer interactions. This allows companies to deliver more relevant and timely messages to their audiences, improving customer engagement and loyalty. Besides, AI helps companies gain deeper insights into consumer behavior patterns, enabling them to develop more targeted marketing strategies responsive to changing market needs. The study also highlights the benefits of AI implementation, which vary between developed and developing countries. In developed nations, AI has been widely integrated into various aspects of digital marketing, such as chatbots, big data analytics, and augmented reality technologies, providing a competitive advantage in the global market. In contrast, developing countries face several challenges in adopting AI, including limited

technological infrastructure, low digital literacy, and high implementation costs. Nonetheless, developing countries have significant potential to leverage AI to enhance their competitiveness, provided these barriers can be addressed.

The study emphasizes that while AI can automate many aspects of marketing, the human element remains crucial to ensure the quality and relevance of the content produced. Human involvement is essential for tailoring marketing strategies to local contexts and ensuring that decisions based on AI analytics align with the company's values and norms. This is particularly important in addressing ethical challenges, such as data privacy and algorithmic transparency, which are critical concerns in AI implementation. Altogether, the findings affirm that AI is a critical component in the digital transformation of marketing. However, the success of its implementation largely depends on technological readiness, regulatory support, and the skill set of human resources in each country. With the right strategies, developed and developing countries can harness AI to improve operational efficiency, strengthen customer relationships, and achieve more ambitious marketing goals in this digital era.

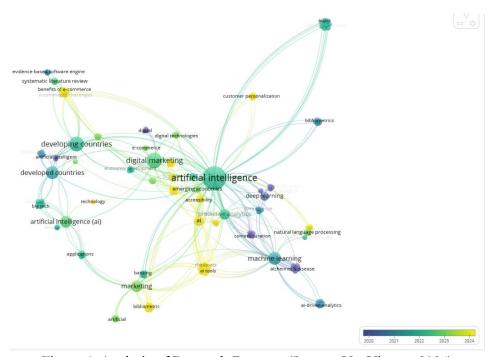


Figure 6. Analysis of Research Patterns (Source: Vos Viewer, 2024)

Figure 6 presents an analysis of research patterns using VOSviewer, which identifies connections and relationships among various topics related to Artificial Intelligence (AI) in digital marketing. The visualization reveals that AI is a central hub linked to key terms such as digital marketing, machine learning, deep learning, and predictive analytics. This highlights that AI is a supporting technology and a core component in transforming digital marketing strategies. In addition, clusters connecting AI with customer personalization and chatbots highlight the importance of AI in delivering more personalized consumer experiences. This reflects current trends in the literature, emphasizing AI as a crucial tool for enhancing customer interaction and engagement.

The analysis also highlights differences in research focus between developed and developing countries, represented by the terms "developed" and "developing countries." These clusters indicate that literature from developed nations tends to concentrate on implementing advanced technologies such as big data and bibliometrics. In contrast, research in developing countries focuses more on the challenges of adoption and technology accessibility. The strong connection between AI and emerging economies demonstrates AI's significant potential to support digital economic growth in developing nations despite the various obstacles to its adoption. Through these connection patterns, the analysis provides a comprehensive overview of the direction of AI research in digital marketing, and the differing research focuses based on geographical context and technological development levels.

In today's increasingly advanced digital era, Artificial Intelligence (AI) has become one of the critical pillars in business transformation, particularly in digital marketing. This technology has enabled companies to manage large volumes of data, identify consumer behavior patterns, and deliver more personalized customer experiences. AI has become integral to marketing strategies in developed countries, helping businesses analyze market trends, enhance customer engagement, and optimize marketing budget allocation. The adoption of AI in digital marketing faces significant challenges, including limited technological infrastructure, a shortage of skilled human resources, and high implementation costs.

In the current era, AI has become a crucial component of digital marketing, allowing marketers to make faster and more accurate data-driven decisions. AI applications range from chatbots for customer service to predictive analytics to understand consumer needs and content personalization to boost user engagement. The disparity in AI adoption between developed and developing countries is a central focus of this study. Developed nations tend to integrate AI technologies more rapidly due to adequate infrastructure and policy support while developing countries must overcome several obstacles before fully adopting this technology.

The Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) theories are often used to understand AI adoption. TAM, introduced by Davis (1989), explains that technology adoption depends on perceived ease of use and perceived usefulness (Chatterjee et al., 2021). In digital marketing, TAM helps understand how consumers and companies accept AI as a tool that simplifies marketing processes. For instance, positive perceptions of AI's ability to enhance marketing campaign efficiency can encourage companies to adopt the technology more quickly (Na et al., 2022). The DOI theory, introduced by Rogers (2003), focuses on how technological innovations spread within a society. DOI emphasizes that factors such as relative advantage, compatibility, and complexity influence the rate of AI adoption. In developed countries, DOI highlights that implementing better technological infrastructure and a supportive business environment accelerates AI. Also, factors such as limited technological access and resistance to change can hinder AI adoption. (Ghimire & Edwards, 2024).

The application of AI in digital marketing has rapidly expanded across various aspects. One of its primary applications is content personalization, where AI analyzes user data to deliver relevant and engaging content. In developed countries, companies like Amazon and Netflix have successfully leveraged this technology to enhance user experience and foster customer loyalty. Personal

branding created through AI-driven interactions helps companies build stronger consumer relationships. AI is also used for predictive analytics, enabling businesses to forecast market trends and future consumer needs. In developing countries, while predictive analytics is still limited, companies are beginning to recognize its importance in designing more effective marketing strategies. For example, e-commerce companies in Southeast Asia are starting to adopt AI to predict consumer preferences based on past purchase data.

AI also plays a crucial role in managing digital advertising. This technology helps companies target the right audience and optimize their advertising budgets. In developed countries, AI algorithms maximize ad conversions on platforms such as Google Ads and Facebook Ads. Meanwhile, in developing countries, companies face challenges in collecting sufficient data to support AI algorithms (Saura, 2021)However, some companies have successfully increased their ROI using localized AI solutions tailored to their markets. AI is also essential in customer service through chatbots and virtual assistants. (Luisa, 2024). These technologies improve service efficiency and provide quick responses to customers. In developed countries, advanced chatbots powered by machine learning have become standard in the industry. Although chatbot adoption is still in its early stages, companies are beginning to adopt this technology to reduce operational costs and enhance customer experiences.

The findings of this study indicate that AI holds significant potential to enhance the effectiveness of digital marketing strategies in both developed and developing contexts. However, the success of its implementation is heavily influenced by technological readiness, human resources, and government policies. Developed countries have an advantage in leveraging this technology due to better support systems while developing countries need to overcome various barriers to achieve the same level of adoption. Based on the studies referenced in this article, there is a difference in focus between research conducted in developed and developing countries. Research in developed countries tends to focus on developing and optimizing AI technologies to maximize business profits. In contrast, research in developing countries is more concerned with the challenges of adoption and the potential use of AI to enhance competitiveness. The articles used in this study are mapped based on their geographical locations in Figures 7 and 8 below:

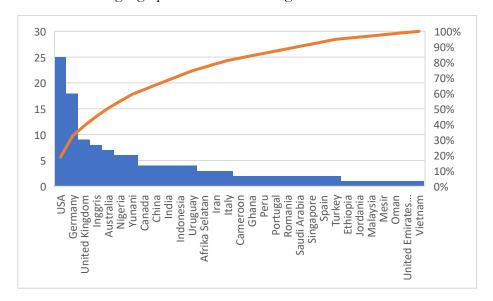


Figure 7. Number of Studies by Country (Source: Data Processing, 2024)

Figure 7 illustrates the distribution of research on using Artificial Intelligence (AI) in digital marketing strategies by country. The United States leads with the highest research contribution, followed by Germany, the United Kingdom, and Australia. These countries are known for their advanced technological infrastructure, high levels of AI adoption, and strong government support for promoting digital innovation. This highlights that developed countries are more proficient in leveraging AI to enhance the effectiveness of digital marketing strategies, whether through content personalization, predictive analytics, or automated marketing campaigns. While countries like Indonesia and Nigeria are showing growth in the number of studies, their contributions remain relatively limited. This indicates that AI adoption in developing nations still faces significant challenges, including limited infrastructure, technology access, and digital literacy.

This distribution aligns with findings from Jacobides et al. (2021), which reveal that developed countries have an advantage in integrating AI technologies into digital marketing strategies due to their more supportive technological ecosystems. (Gwagwa et al., 2020) They emphasize that in developing countries, research tends to focus more on the potential and challenges of AI implementation in local contexts. Both studies indicate that while AI significantly enhances marketing effectiveness in developed and developing nations, developed countries tend to capitalize on the technology's potential more quickly due to adequate supporting factors.

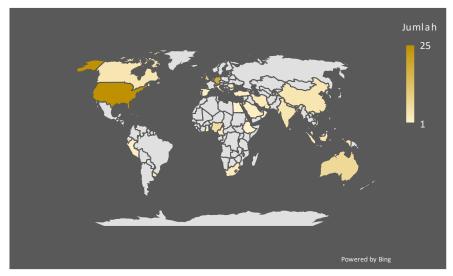


Figure 8. Geographic Chart of Number of Research by Country (Source: Data Processing, 2024)

Figure 8 depicts the geographical distribution of research on Artificial Intelligence (AI) in digital marketing by country. The United States stands out again, contributing the highest number of studies, represented by the darkest shade on the map. European countries such as Germany and the United Kingdom also show significant research intensity. This reflects a high concentration of studies in regions with advanced technological infrastructure, substantial investment in AI development, and strong government and private sector support. In the Asia-Pacific region, Australia and several developing countries like Indonesia are beginning to show increased contributions, although still below the global average.

This distribution reinforces that developed countries dominate AI research in digital marketing while developing countries lag. This aligns with the findings of (Feijóo et al., 2020), which indicates that countries with more advanced technological ecosystems tend to be more proactive in leveraging AI to support marketing strategies. In contrast, despite showing some progress, developing countries such as Indonesia still face significant infrastructure and digital skills barriers. The geographical map provides a comprehensive view of the disparity in AI research between regions, highlighting the need for global collaboration to accelerate technology adoption in developing countries.

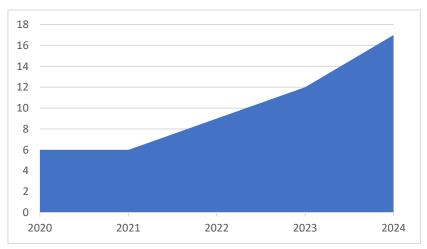


Figure 9. Number of Research Based on Year of Publication (Source: Data Processing, 2024)

Figure 9 illustrates the trend in the number of studies on using Artificial Intelligence (AI) in digital marketing strategies based on publication year. The data shows a significant increase from 2020 to 2024. In 2020, the number of studies was relatively low but began to rise sharply in 2022, continuing to climb to its peak in 2024. This growth reflects the increasing interest among academics and practitioners in AI in digital marketing, driven by rapid technological advancements and the growing business need for more effective data-driven solutions.

The trend also indicates that AI adoption in digital marketing strategies is becoming increasingly relevant and a central focus in recent literature. The surge in research can be attributed to increased investment in AI technologies and their applications across various sectors, including business and marketing. This aligns with the need for companies to enhance efficiency, personalization, and customer engagement. With the growing number of studies conducted each year, the available literature provides richer insights into the benefits and challenges of AI implementation in a global context.

#### **CONCLUSION**

Based on the findings and discussions, this study concludes that utilizing Artificial Intelligence (AI) in digital marketing strategies significantly enhances marketing efficiency and effectiveness in developed and developing countries. Developed nations benefit from advanced technological infrastructure and supportive policies, enabling them to integrate AI seamlessly into their marketing strategies for content personalization, predictive analytics, and campaign automation.

In contrast, developing countries face limited infrastructure, low digital literacy, and high implementation costs, which slow AI adoption. However, once these barriers are addressed, these countries show significant potential for leveraging AI to improve competitiveness and customer engagement. The findings highlight the need for tailored strategies to accelerate AI adoption in developing regions, considering their unique challenges and opportunities.

The implications of this research extend to policymakers and business practitioners in both contexts. For developed countries, continuous innovation in AI can further refine marketing strategies, while investments in infrastructure, digital education, and localized AI solutions are critical for developing countries. Despite its contributions, this study has limitations. The research relies solely on secondary data from existing literature, which may not capture real-time developments or specific regional dynamics. Moreover, including articles from specific databases could result in a potential bias toward certain regions or industries. Future research could address these limitations by incorporating primary data and expanding the scope to include more diverse sources, providing a more comprehensive understanding of AI's role in digital marketing globally.

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