Exploring the Landscape of marketing performance of MSMEs in the era of digital transformation: A Bibliometric Analysis

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Abstract: This study explores the marketing performance of MSMEs in the digital transformation era through bibliometric and cartographic analysis. It is guided by four main research questions: (1) What trends have been observed in publications related to digital entrepreneurship for people with disabilities over the years? (2) Which authors and countries have made the most significant contributions to the literature on digital entrepreneurship for people with disabilities? (3) Which journals have published the most articles on this topic? and (4) What are the most common keywords in the literature on digital entrepreneurship for people with disabilities? The study uncovers trends, key contributors, leading journals, and common themes in the marketing performance of MSMEs in the digital transformation era. Additionally, through cartographic analysis using VOSviewer, it visualizes the relationships and collaboration networks among authors, countries, and keywords, providing a comprehensive view of the global research landscape in this important field. By highlighting existing research and its dynamics, the study enhances the understanding of digital entrepreneurship in the disability context and guides future research and policy efforts to improve the marketing performance of MSMEs in the digital transformation era.

Keywords: marketing performance, digital transformation, bibliometric, cartographic, VOSviewer

INTRODUCTION

Digital transformation has become one of the main pillars in the development of Micro, Small and Medium Enterprises (MSMEs) around the world, especially in facing increasingly complex economic challenges (Wang & Zhang, 2025). In various parts of the world, the application of digital technology not only serves to improve operational efficiency, but also to expand market reach and improve competitiveness. By utilizing e-commerce platforms and social media, MSMEs can reach customers not only locally but also in international markets (Mulyana et al., 2024). This is especially important given that MSMEs account for the majority of employment

and contribution to global Gross Domestic Product (GDP). Digital transformation provides opportunities for MSMEs to innovate and adapt to changes in consumer behavior that are increasingly dependent on technology (Al-Shami et al., 2024).

However, the journey to digital transformation for MSMEs is not without hurdles. Many MSME players face limited resources, both in terms of finances and knowledge of technology (Caiado et al., 2024). Some business owners may not be fully aware of the benefits offered by digitalization, so they tend to be hesitant to invest in new technologies. In addition, data security and privacy issues are also major concerns that must be addressed so that consumers feel safe when transacting online (Kumar et al., 2024). Therefore, it is important for the government and relevant agencies to provide support through training programs, access to technology, and incentives that can help MSMEs adopt digital technology more effectively.

With the increasing penetration of the internet and the use of mobile devices around the world, opportunities for MSMEs to transform digitally are increasingly wide open. Through digital transformation, MSMEs are not only able to survive but also thrive by utilizing various digital payment services and more efficient management systems (Agarwal et al., 2023). The success of digital transformation will largely depend on the awareness and readiness of MSME players to adapt to changes as well as support from various parties to create an inclusive and sustainable ecosystem (Akhtar et al., 2023). Thus, digital transformation is not just an option, but an urgent need for MSMEs around the world to ensure sustainability and growth in this increasingly connected era.

Digital transformation also enables MSMEs to optimize customer experience through the use of advanced technology (Navas et al., 2024). For example, by applying data analytics and artificial intelligence, MSMEs can better understand consumer preferences and behavior. This allows them to devise more personalized and relevant marketing strategies, thereby increasing conversion rates and customer satisfaction (Satpathy et al., 2025). In addition, technologies such as chatbots and AI-based customer service can provide fast and efficient support, assisting MSMEs in answering customer queries in real-time. Thus, digital transformation focuses not only on improving internal efficiency, but also on creating added value for customers (Paweloszek et al., 2023).

On the other hand, collaboration between MSMEs and technology companies is also key in accelerating the digital transformation process. Many technology companies now offer solutions specifically designed to meet the needs of MSMEs, ranging from management software to digital marketing platforms (Cuevas-Vargas et al., 2024). By establishing these partnerships, MSMEs can access resources and knowledge that were previously difficult to reach. In addition, local business communities and professional networks can serve as a platform for MSMEs to share experiences and learn from each other in implementing new technologies. This kind of collaboration not only strengthens MSMEs' position in the market, but also creates an ecosystem that supports each other in facing challenges in the digital era (Zuhroh et al., 2025).

This study used bibliometric analysis to determine the most frequently discussed marketing performance of MSMEs in the era of digital transformation in the literature, as well as to pinpoint gaps in the literature and suggest future research directions. There are four research questions in this study: (1) What pattern have publications about digital entrepreneurship of people with disability shown throughout the years?, (2) Which writers and nations have made the biggest contributions to the literature on digital entrepreneurship of people with disability?, (3) Which journals publish the most articles about the digital entrepreneurship of people with disability? and (4) What are the most popular keywords in digital entrepreneurship of people with disability documents? While bibliometric studies were used to address questions one through three, VOSviewer was used to address question four. There was no single study on the bibliometric analysis of marketing performance

of MSMEs in the era of digital transformation papers published in the Scopus database. Therefore, this study provides a perspective on this issue. An analysis of research efforts in the area of marketing performance of Micro, Small and Medium Enterprises (MSMEs) in the era of digital transformation can reveal several important insights that have significant implications for future initiatives. In addition, understanding the key authors, countries, organizations, and references in Scopus publications related to marketing performance of MSMEs in the era of digital transformation is crucial for several reasons. First, the implementation of digital marketing strategies has been shown to improve MSME performance, with the use of e-commerce platforms and social media expanding market reach and increasing revenue. This suggests that adaptation to digital technology is critical for MSMEs to remain competitive.

Second, the research identified challenges faced by MSMEs in the adoption of digital technologies, such as digital literacy and infrastructure limitations. Understanding these barriers allows stakeholders to design more effective training programs, thereby helping MSMEs overcome obstacles and make the most of digital marketing potential (Tao & Chao, 2024). Third, recognizing influential studies provides a foundation for future research. By identifying relevant works, new researchers can build their research on existing findings, preventing duplication of effort and ensuring a continuous flow of innovation. Focus area analysis from leading authors can also help predict future trends and ensure support for MSMEs in meeting the challenges of the digital world.

Marketing performance refers to the extent to which an organization, in this case Micro, Small, and Medium Enterprises (MSMEs), achieves its stated marketing objectives (Fernandez-Escobedo & Cuevas-Vargas, 2023). This performance can be measured through various indicators, such as increased sales, market share, customer satisfaction, and marketing cost effectiveness. In the context of MSMEs, good marketing performance is essential for business survival and growth, especially in the digital era full of competition (Ragoobur et al., 2023; Telukdarie et al., 2022a).

Digital transformation is the process of integrating digital technology into all aspects of a business, which changes the way an organization operates and delivers value to customers. For MSMEs, digital transformation offers opportunities to improve operational efficiency and expand market reach. By adopting digital technology, MSMEs can utilize online platforms to market their products, reach new consumers, and interact more closely with existing customers (Sharma et al., 2022).

Digitalization has a direct impact on the marketing performance of MSMEs. By utilizing digital tools such as social media, e-commerce, and data analytics, MSMEs can increase their brand visibility and attract more customers (Ragoobur et al., 2023; Telukdarie et al., 2022b). Digital marketing strategies allow MSMEs to conduct more precise market segmentation and tailor their offerings to the specific needs of consumers. This has the potential to increase sales conversion rates and customer loyalty.

Despite the many benefits offered by digital transformation, MSMEs also face various challenges in its implementation (Luo et al., 2021). Limited resources, both in terms of finances and digital skills, are often a major obstacle for MSMEs to effectively adopt digital marketing strategies. In addition, a lack of understanding of digital marketing tools and techniques can hinder their ability to compete in an increasingly competitive market (Fernandez-Escobedo & Cuevas-Vargas, 2023; Tao & Chao, 2024).

Support from the government, educational institutions and other organizations is essential to help MSMEs meet these challenges. Training and mentorship programs on digital marketing can help improve digital literacy among MSME players. With the right support, MSMEs can be better equipped to capitalize on the opportunities offered by digital transformation and improve their overall marketing performance (Agarwal et al., 2023; Al-Shami et al., 2024).

METHODS

This study is a literature review, a method that summarizes and assesses a set of writings on a specific subject (Knopf, 2006). A structured literature review is employed to map and evaluate existing literature, identifying potential gaps in research and areas of limited knowledge (Fahimnia et al., 2015). Bibliometric analysis, also known as scientometrics, is a component of research evaluation methodology. By analyzing the available literature, bibliometric analysis can be conducted using a distinct approach (Aksnes et al., 2019; Ellegaard & Wallin, 2015). In this study, articles were selected from the Scopus database. Scopus is preferred over the WOS database for business and management papers due to its larger collection and easier data export functionality. Additionally, exporting more than 500 papers from WOS requires manual steps (Aksnes et al., 2019). As a result, Scopus has proven to be a more suitable resource for bibliometric analysis than the Web of Science (WoS) database (Cruzara et al., 2020). The main difference between WoS and Scopus is that WoS does not provide the extensive coverage that Scopus offers, though all of Scopus's content can be accessed through a single, continuous subscription (Pranckutė, 2021). The articles gathered from Scopus were then analyzed based on several criteria, as outlined below.

Table 1 Article Processed

Criteria	Screening Results
Keywords: "marketing" AND "digital transformation" OR "financial literacy" OR "costumer trust" OR "digital ease of use" OR "government support" OR "marketing performance"	2752
Year: 2021-2025	1467
Subject Area: Business, Management, Accounting, Economics, Econometrics, Finance	777
Source Type: Journal	547
Language: English	536
Publication stage: Final	492

Source: processed by the authors, 2024

Table 1 demonstrates that this study processed a total of 492 data entries. These data were analyzed using bibliometric methods with the VOSviewer application. The analysis included Co-occurrence analysis, which was employed to statistically identify research topics or variables, and Co-authorship analysis, which helped uncover relationships between researchers based on the research documents they produced. Additionally, Bibliographic analysis was conducted to identify research areas that are likely to evolve annually due to new discoveries and researchers shifting their focus to different research problems.

RESULTS AND DISCUSSION

Number of Publications Analysis

The development of publications resulting from research on marketing performance of MSMEs in the era of digital transformation from 2021 to 2025 shows a very fluctuating movement. This study collected 492 articles from the Scopus page according to the screening results according to the specified topics with the distribution as shown in Figure 1.
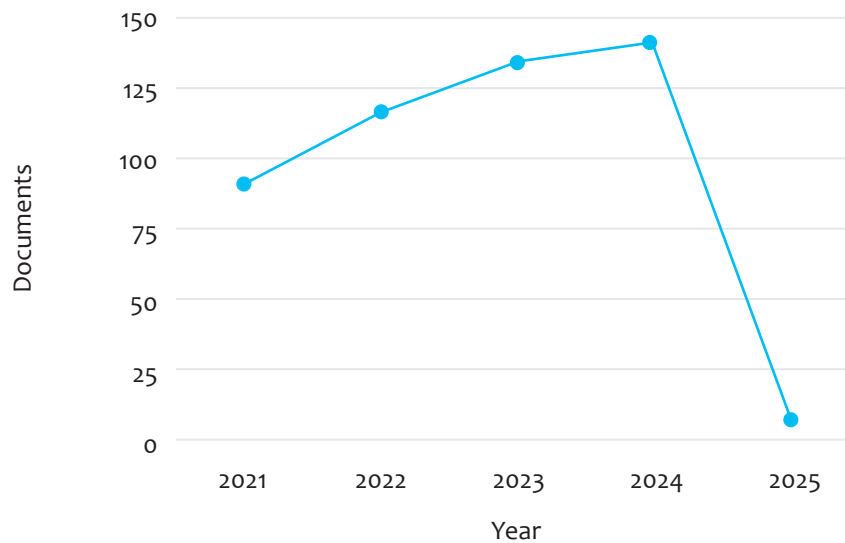
Figure 1 Publication Graphics

Research on the marketing performance of Micro, Small and Medium Enterprises (MSMEs) continues to increase through 2021-2024, especially in response to the impact of the COVID-19 pandemic. Even though in 2025 it decreased because the data taken was only until this analysis was made at the beginning of 2025. The increase in 2021–2024 occurred for several reasons.

First, the pandemic has forced many MSMEs to adapt quickly to the changing behaviour of consumers moving to digital platforms. With social distancing and physical closures in place, MSMEs that previously relied on offline sales must quickly shift their marketing strategies to digital channels to survive. This creates an urgent need for research exploring the effectiveness of digital marketing strategies in improving business performance.

Secondly, during the pandemic, many MSMEs experienced a significant drop in performance, fuelling the need to understand the factors affecting their marketing. Research has focused on aspects such as product innovation, use of e-marketing, and strengthening entrepreneurial networks as strategies to improve marketing performance. With increasing interest in understanding how MSMEs can adapt and thrive amidst these challenges, research in this area is becoming increasingly relevant and important (Mulyana et al., 2024).

Third, as the post-pandemic economy recovers, there is renewed hope for MSMEs to grow and thrive. Continued research on marketing performance in the context of digital transformation can provide valuable insights for businesses in formulating more effective strategies. Moreover, with the emergence of new technologies and evolving marketing trends, this research helps MSMEs to remain competitive and relevant in an increasingly dynamic market (Al-Shami et al., 2024). Therefore, increased research in this area is not only important for academics but also for practitioners looking to capitalise on opportunities in the digital age. The following is the distribution of the 5 highest journals that publish research results related to marketing performance of MSMEs in the era of digital transformation.

Journal Analysis

Figure 2 illustrates that publications on the marketing performance of MSMEs in the digital transformation era are distributed fairly evenly, without being dominated by specific publishers. This indicates that the topic is widely accepted by various publishers, suggesting it is a significant and relevant area for publication. The

focus on the economic field in this context arises from the broader themes of the research, such as marketing performance, financial literacy, and government support, which are intrinsically linked to economic outcomes. These subjects are broadly acknowledged and embraced by many publishers, highlighting their importance and relevance within the economic landscape. Figure 2 shows that these publications are well spread across different publishers, emphasizing their broad interest and significance. This trend suggests that research on MSMEs' marketing performance in the digital transformation era aligns with key economic concerns, making it a valuable topic for publication and offering potential to influence economic policy and development.
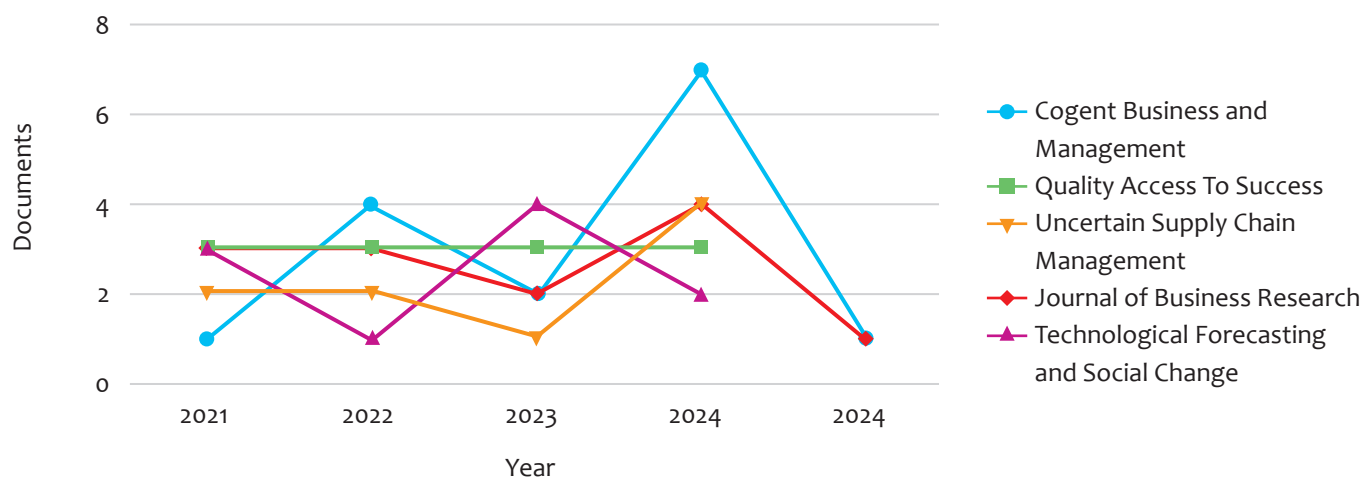

Figure 2 Publication Diagrams

Analysis of Variables and Author

The other variables used in studies related to marketing performance of MSMEs in the era of digital transformation are depicted in Figure 3.

Figure 3 offers a summary of the variables that commonly appear in relation to the marketing performance of MSMEs during the digital transformation era. The size of each circle in Figure 3 represents the frequency with which each variable is mentioned, with larger circles indicating more frequent occurrences. Table 2 presents a detailed quantification of each variable. From Figure 3, it is evident that the most prominent variables are digitalisation and entrepreneurship, a finding that is further supported by Table 2, which shows that the variables related to digital marketing and commerce are mentioned more often than others. Digital marketing and e-commerce are the most researched variables related to the marketing performance of Micro, Small, and Medium Enterprises (MSMEs) in the digital era as digital transformation has changed the way consumers interact with brands. With more and more consumers turning to online platforms for shopping, MSMEs need to understand and implement digital marketing strategies to stay relevant and competitive in the market (Agarwal et al., 2023). Research in this area helps MSMEs explore new ways to reach customers and increase sales through digital channels.

In addition, digital marketing offers a cost-efficient solution, allowing MSMEs with limited budgets to promote more economically compared to traditional marketing methods (Caiado et al., 2024). Support from the government and related agencies also encourages the use of digital technology among MSMEs, making research on the implementation and impact of these programmes highly relevant.
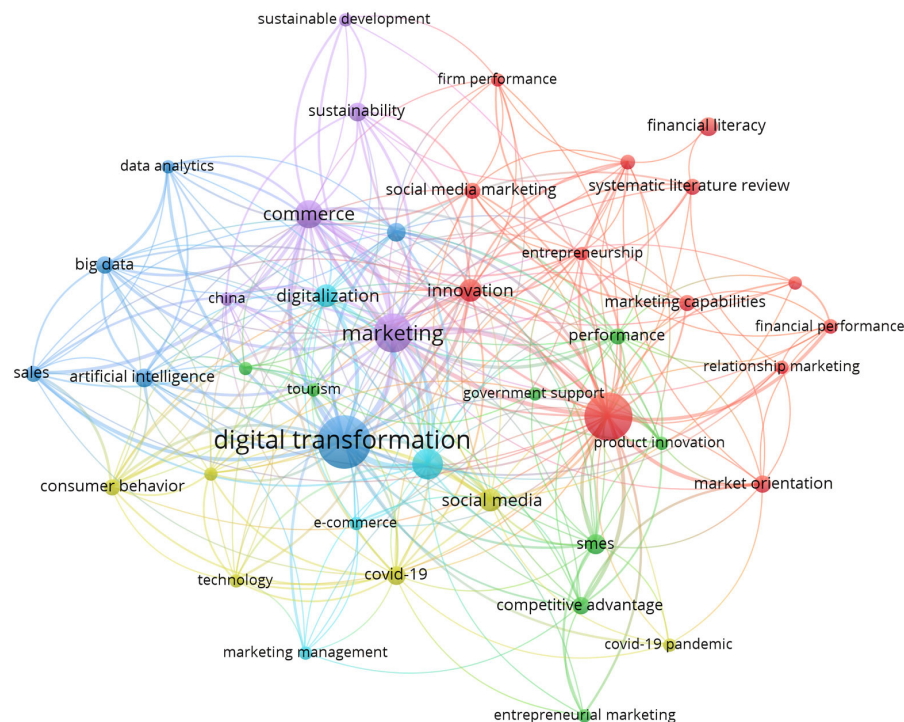
Figure 3 VOSviewer Results for keywords

Rapid technological developments, such as the use of social media and data analytics, create a need for MSMEs to continuously learn and adapt. Research on marketing performance in the context of digital marketing provides important insights into the latest trends and techniques that can be used to improve marketing effectiveness (Akhtar et al., 2023). With increased competition in the global market, a deep understanding of digital marketing is crucial for MSMEs to expand their market share, making this variable a key focus in research related to marketing performance in the digital age. Table 2 shows which variables are frequently associated with this research topic. It is essential to know the variables that are frequently associated with this research topic because identifying the most frequently researched variables in a field of study provides an overview of the current research focus and priorities. This allows researchers to be aware of the latest trends, identify gaps in knowledge, and develop innovative research topics. In addition, variable analysis in bibliographic research can provide insights into broader social and cultural trends. This can help researchers, policymakers, and the general public to understand how social and cultural issues develop and change over time. The number in the cluster column shows that the variable often appears associated with other variables in the same cluster. However, it does not rule out the possibility that the variable is associated with other variables in other cluster groups. The number in the total links column shows how often the variable is associated with other variables, such as entrepreneurship, innovation, and digitalisation variables. The number in the occurrences column shows how much the variable appears in the publication. Table 2 shows that many variables appear that have been researched, associated with the topics of marketing performance of MSMEs in the era of digital transformation, but there are still many other variables that have not been listed in the table. This means that there are still many variables that have not been studied related to the topic of this research, and therefore, providing an

opportunity for the authors to further explore the variables that have not been listed in Table 2. Figure 4 provides an overview of the authors who often publish research results related to this research topic, which can be used as material for reference.

Table 2 Most Used Keywords

Variable	Cluster	Occurrence	Total Link Strength
Commerce	1	31	64
Covid-19	1	14	16
Innovation	1	20	35
Marketing	1	60	88
Marketing Performance	1	89	47
SMEs	1	16	19
Social Media	1	20	22
Sustainibility	1	14	13
Artificial Intelligence	2	14	12
Digital Marketing	2	38	48
Digital Transformation	2	111	68
Digitalization	2	20	25
Marketing Startegy	3	14	21

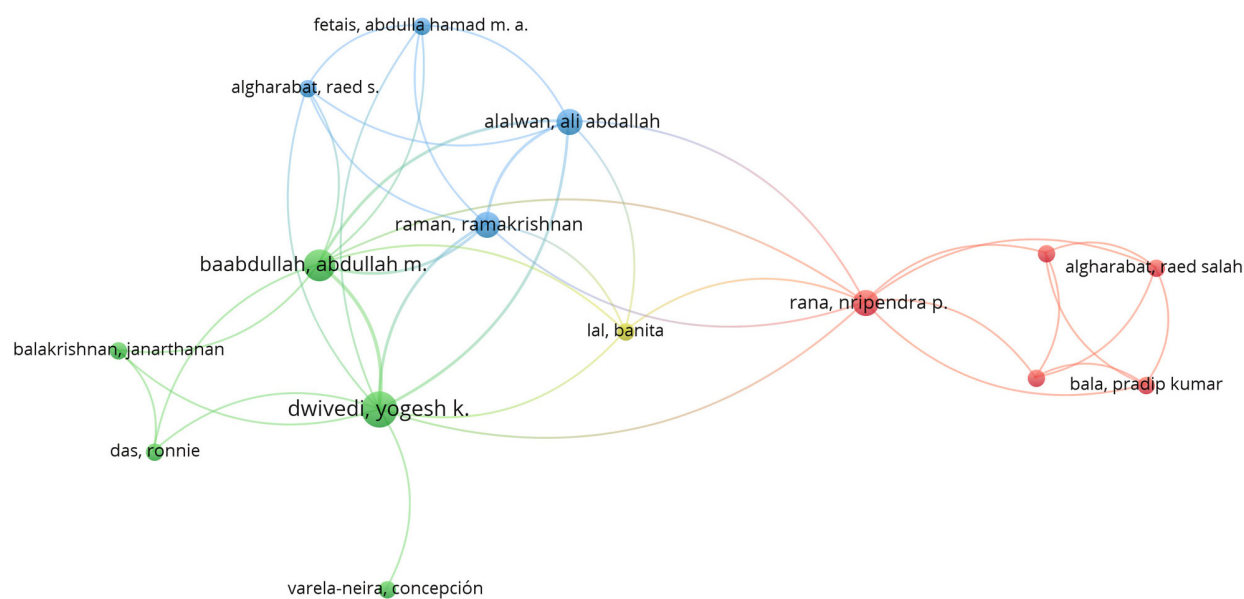Source: processed by the authors, 2024

Figure 4 Authors with other related in making publications

Figure 4 illustrates that certain authors collaborate with other relevant authors in their publications. The larger the circle next to an author's name, the more frequently that author publishes, as seen with Dwivedi, Yogesh K. The more often an author is featured in publications on the same topic, it suggests a deeper understanding of the subject matter. Consequently, the greater an author's expertise, the more valuable they become as a reference for future research on related topics.

Country Analysis

The most productive and significant countries in the area of marketing performance of MSMEs in the era of digital transformation. are examined in this section. Figure 5 shows the distribution of research objects on marketing performance of MSMEs in the era of digital transformation.
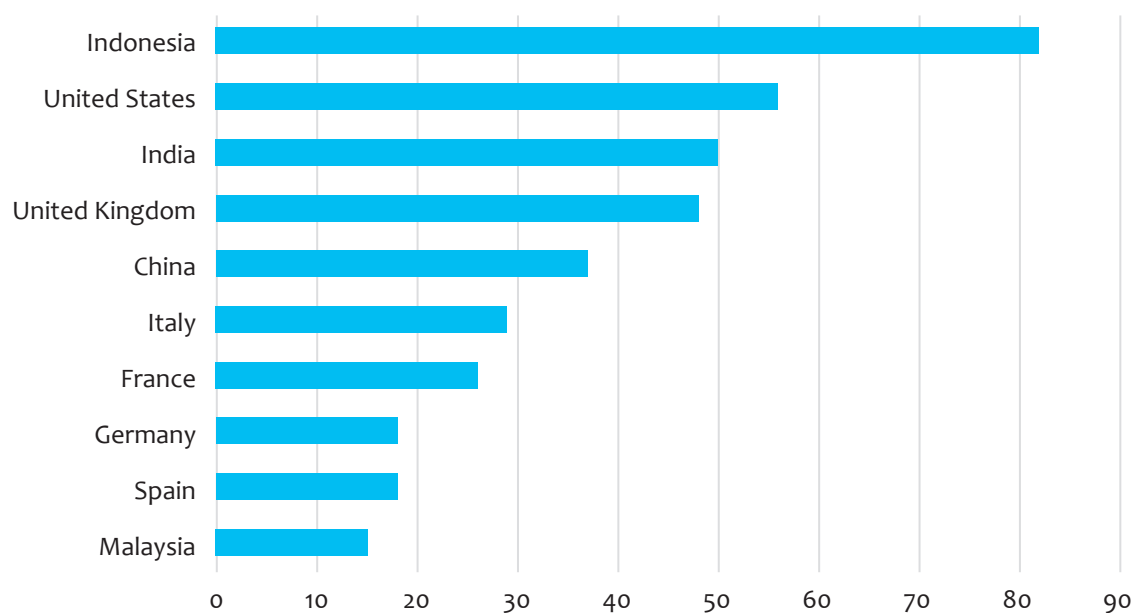

Figure 5 The country object of research

Figure 5 shows that Indonesia is the highest object of research related to marketing performance of MSMEs in the era of digital transformation. Indonesia is the country with the most research on the marketing performance of Micro, Small, and Medium Enterprises (MSMEs) in the digital transformation era compared to other countries due to several interrelated factors. Firstly, MSMEs play an important role in the Indonesian economy, contributing a large portion of employment and gross domestic product. With this huge potential, there is a strong drive to understand and improve their performance through in-depth research.

The rapid development of digital technology in Indonesia also creates an urgent need for MSMEs to adapt to market changes (Anatan & Nur, 2023; Setiawan et al., 2023; Al-Shami et al., 2024). Many studies have been conducted to explore effective digital marketing strategies for MSMEs, given that many of them still face challenges in implementing these technologies (Gao et al., 2023; Jadhav et al., 2023; Sharabati et al., 2024). This research focuses not only on the use of digital tools but also on product innovation and marketing strategies that can improve their competitiveness.

Support from the government and relevant agencies in encouraging the digitalisation of MSMEs has also contributed to the increase in research in this area. Training programs and initiatives to improve digital literacy among MSME players are driving more research to evaluate the effectiveness of these programs (Suryani et al., 2022; Coco et al., 2024; Shebeen et al., 2024). The COVID-19 pandemic has also accelerated the adoption of digital technology by MSMEs, creating a need to understand the impact of digital marketing on business performance (Alqasa & Afaneh, 2022; Baral et al., 2023; Mishrif & Khan, 2023). Research during and after the pandemic is particularly relevant to explore how MSMEs can survive and thrive amid economic uncertainty. The combination of these factors makes Indonesia an active research centre in the field of MSME marketing performance in the era of digital transformation.

CONCLUSION

The research on marketing performance of MSMEs in the era of digital transformation has experienced considerable fluctuations over the past five years. The findings of this study reveal that publications on this topic have been distributed across several high-quality journals in the top Scopus quartile. The study also highlights the development of variables such as marketing, digital transformation, financial literacy, customer trust, digital ease of use, government support, and marketing performance, with frequent associations to topics like digital marketing and commerce. Prominent authors frequently publishing on this topic include Dwivedi, Yogesh K., and the most commonly studied location is Indonesia. A limitation of this study is that the VOSviewer analysis does not capture links with minimal values, preventing the study from providing a clear overview of the latest developments in research on MSMEs' marketing performance in the digital transformation era for the most recent years. Nevertheless, this research aims to guide more accessible and precise research directions in the future. It encourages not only revisiting well-explored variables but also exploring new variables that reflect current developments and conditions, thereby further enriching the scientific knowledge surrounding the marketing performance of MSMEs in the digital transformation era.

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