

Digitalization and internationalization of SMEs: A Systematic Literature Review

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ABSTRACT

Purpose — *The objective of this study is to evaluate the prevailing trends in publications and investigate the literature derived from multiple studies concerning the impact of digitalization on SMEs and their internationalization process.*

Method — *We employ the Systematic Literature Review (SLR) methodology to identify and consolidate publication trends from various articles. The literature utilized in this study is sourced from the Scopus database. By referring to the PRISMA chart, a total of 33 literature works were selected for analysis using VOSviewer. In this research, we utilize bibliometric analysis to examine article trends and employ content analysis to assess the literature.*

Result — *We discovered that there were 19 keywords representing the latest and seldom explored themes among researchers, which were organized into 5 clusters for further analysis within a research framework. Moreover, we identified new and infrequently studied themes such as effectuation, international performance, digital transformation, digital technologies, and export performance. Additionally, we uncovered novel research topics that have the potential to inspire future studies in related areas.*

Contribution — *This study contributes by examining literature on digitalization and internationalization, identifying research trends and proposing future directions, especially for SMEs in Southeast Asian countries. It also introduces the rarely-used Systematic Literature Review (SLR) approach to examine the role of digitalization in internationalization, challenging the dominance of quantitative methods in prior research.*

Keywords: *digitalization, internationalization, digital platform, SMEs, SLR, bibliometric*



INTRODUCTION

In the current era of the global market, modern companies are expected to rapidly adapt to the digital innovation and open innovation paradigms. The utilization of digital technology has transformed the approach to innovation and management within organizations. Digitalization enables organizations to access foreign markets easily through online marketing platforms and international payment systems. Internationalization, which is facilitated by technological advancements in entering global markets, is a crucial factor for the success and sustainability of a company ([Serrano et al., 2016](#)).

According to [Gartner \(2018\)](#), digitalization refers to the utilization of digital technology to transform business operations and create new sources of revenue and value. It involves transitioning towards a digital business model. On the other hand, digital transformation is a deliberate and ongoing process of digitally evolving a company's business model in a strategic and tactical manner ([Mazzone, 2014](#)). Digitalization has the potential to enhance competitiveness by improving customer experience and optimizing business processes for increased efficiency and effectiveness ([Rossato & Castellani, 2020](#)).

Digitalization has profoundly transformed the relationships between companies and various stakeholders such as customers, suppliers, and other parties. It has also revolutionized the way companies conduct business and expand globally ([Matarazzo et al., 2020](#)). The digital revolution has specifically prompted Small and Medium Enterprises (SMEs) to adapt and capitalize on opportunities available in foreign markets ([Hervé et al., 2020a](#)).

Internationalization refers to the business activities conducted by a company in foreign markets, involving the sale of products and services. In this context, internationalization encompasses the utilization of digital devices, such as e-commerce platforms, to support these activities ([Gaweł et al., 2023](#)). Presently, Small and Medium Enterprises (SMEs) are compelled to pursue growth opportunities beyond their domestic markets. The growing digitization of the global economy has created numerous prospects for internationalization and scaling ([Stallkamp & Schotter, 2019](#)).

Nonetheless, the internationalization process poses significant challenges, such as information gathering, cultural analysis, and substantial financial investments, making it particularly arduous for SMEs to pursue. However, the advent of digital transformation has emerged as a catalyst for facilitating the internationalization of SMEs. The increased adoption of digital technologies and investments in digital infrastructure have contributed to varying degrees of internationalization. Consequently, digital transformation has created an

environment in which businesses are more inclined to embark on the internationalization process due to reduced costs and lower risks of failure (Autio & Zander, 2016). Moreover, digital transformation can mitigate barriers to accessing market information and enable seamless cross-border communication (Y.-Y. Lee et al., 2019). It also enables digital technologies to anticipate market demand, adapt products and services, and bridge the cultural gap between companies and their target customer countries.

Many SMEs are unable to do so because their businesses were not designed for digital internationalization at the start of their development (Bailetti, T., & Tanev, 2020). Managing an online business poses challenges for SMEs, and one contributing factor is the limited focus of existing literature on internationalization capabilities, primarily targeting large multinational corporations rather than Small and Medium Enterprises.

The utilization of new digital technologies, including big data, AI, and cloud computing, plays a crucial role in the internationalization of MSMEs. However, the significance of these advanced technologies is often overlooked by scholars, despite their significant contributions to digital transformation. Research focusing on digitization-driven internationalization of online-based small and medium enterprises remains scarce (Wittkop et al., 2018). Empirically, several studies have explored the relationship between digitalization and internationalization of MSMEs, including works by Reim et al. (2022), Kolagar et al. (2022), Y. Y. Lee et al. (2022), Eduardsen (2018), Denicolai et al. (2021), Jin & Hurd (2018), and Gawel et al. (2023).

The current research landscape concerning the digitalization and internationalization of entities lacks the utilization of the SLR method. Therefore, this paper aims to fill this gap by conducting a Systematic Literature Review (SLR) on the topic of digitalization and internationalization, specifically focusing on SMEs in various countries in Asia and Europe.

The primary objectives of this study are to identify and analyze the prevailing publication trends and examine the existing literature pertaining to the impact of digitalization on the internationalization of SMEs.

METHOD

This article employs a scientific methodology to identify research outcomes. The chosen method is the Systematic Literature Review (SLR) (Tranfield et al., 2003). By utilizing this method, the author can systematically examine the intersection of digitalization and internationalization.

This SLR method was employed to analyze the current publication trends and synthesize several studies from 2018 to 2023 concerning digitalization and internationalization in MSMEs. A literature search was conducted using the Scopus database, employing the keywords "digitalization" AND "internationalization" to identify relevant articles. Given the broad nature of the digitalization and internationalization subject, we applied inclusion criteria to narrow down the collected data and ensure the inclusion of relevant literature.

This Systematic Literature Review will take various study designs in terms of inclusion criteria as shown in the table below:

Table 1. Data inclusion criteria

Type	Inclusion
Publication Type	Research articles
Publication Year	2018 - 2023
Origin of Publication	International Publication
Language	English
Publication Standard	Scopus

Source: authors (2023)

An article search was conducted on February 24, 2023 using the Scopus database (www.scopus.com) as the primary source, resulting in 246 published articles. After applying the restriction of English language publications, the number of articles decreased to 239. Furthermore, a time limit was applied to include only journals published between 2018 and 2023, resulting in 183 articles. However, when the search was narrowed down to the subject area "Business, Management, and Accounting," 91 publications were found. Subsequently, by selecting the document type as "Article" only, the remaining number of articles reduced to 53.

In this paper, we aim to identify and analyze the current publication trends related to digitalization and internationalization in order to synthesize research results. Therefore, we conducted Systematic Literature Reviews (SLRs) based on the PRISMA chart (Moher et al., 2009) to locate the best and most relevant articles.

In the PRISMA chart, we illustrate a flowchart to select the articles to be included. From the initial search on the Scopus database, we obtained 53 articles. After adding 3 relevant articles and removing any duplicates, a total of 56 publications were reviewed. By assessing the title, abstract, and keywords, we narrowed down the selection to 35 articles. After conducting a thorough full-text screening, we finalized the inclusion of 33 publications for the bibliometric analysis. For this analysis, we utilized the VOSviewer application, which provided us with valuable insights, including: 1) the number of articles per year, 2) the most

relevant journal, 3) the geographical distribution of authors, 4) co-citation analysis to identify influential articles, 5) verification of emerging themes, and 6) the research cluster network.

RESULT AND DISCUSSION

This study used bibliometric analysis with two analyses: performance and scientific mapping. In order to avoid repetition with previous research, research mapping was carried out; the tool used was the VOSviewer software. According to [Donthu et al. \(2021\)](#), bibliometric analysis can be supported by VOSviewer software. The performance analysis, which is a descriptive analysis, is based on publications and citations. In this study, bibliometric analysis is used to analyze the number of publications per year, leading countries and journals, influential authors and articles, and author cluster networks.

Performance analysis result

Annual publication trends

Table 2 below shows the related publications on the development of digitalization and internationalization from 2018 to 2022, which have generally increased over time, although there was a slight decrease in 2021. As for 2023, the exact number of publications is unknown as the search was conducted on February 24, 2023.

Table 2. Number of articles per year

Year	Number of articles	Percentage
2018	3	9.10%
2019	4	12.12%
2020	6	18.18%
2021	5	15.15%
2022	11	33.33%
2023	4	12.12%
Amount	33 articles	100%

Source: VOSviewer (2023)

The most influential countries

In the articles focusing on digitalization and internationalization, a total of 33 publications are included, contributed by authors from 22 different countries. Figure 1 below illustrates the top 10 countries with the highest number of contributions, with each country having at least two publications.

A network graph illustrating relationships between countries. The nodes are colored blue, green, or yellow, and are connected by curved lines representing edges. The blue nodes are 'france' and 'italy'. The green nodes are 'malaysia', 'south africa', 'iran', 'united states', 'china', and 'south korea'. The yellow nodes are 'finland' and 'sweden'. The connections are as follows: 'france' is connected to 'italy', 'malaysia', and 'united states'. 'italy' is connected to 'france', 'malaysia', 'south africa', and 'iran'. 'malaysia' is connected to 'italy', 'south africa', and 'iran'. 'south africa' is connected to 'italy', 'malaysia', and 'iran'. 'iran' is connected to 'italy', 'malaysia', 'south africa', and 'united states'. 'united states' is connected to 'iran' and 'finland'. 'china' is connected to 'united kingdom' and 'south korea'. 'south korea' is connected to 'china' and 'united kingdom'. 'united kingdom' is connected to 'china', 'south korea', and 'finland'. 'finland' is connected to 'united states', 'united kingdom', and 'sweden'. 'sweden' is connected to 'finland'.

The figure indicates that the United Kingdom had the highest number of published documents (n=9), followed by Italy (n=7), Finland (n=5), Sweden (n=5), and Malaysia (n=3). Iran, South Korea, France, South Africa, China, the United States, and Indonesia each contributed 2 articles. The remaining countries, including Egypt, United Arab Emirates, India, Pakistan, Spain, Cyprus, Denmark, New Zealand, Poland, and Switzerland, each had 1 publication document.

Table 3. Ten influential countries

No	Country name	Number of articles	Number of quotations	Quotation average
1	Italy	7	192	27,43
2	United Kingdom	9	188	20.88
3	France	2	86	43
4	Sweden	5	74	14,8
5	Finland	5	71	14,2
6	New Zealand	1	45	45
7	United States	2	44	22
8	Egypt	1	42	42
9	United Arab Emirates	1	42	42
10	Switzerland	1	24	24

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Influential journals

33 publications utilized the field of digital and internationalization were sourced from 27 different journals. Conducting a bibliographical coupling analysis on sources with a minimum of 19 citations, we identified the 10 most influential journals based on the highest number of citations. In Table 4, it can be observed that the journal "International Marketing Review" has the highest number of publications, with 4 articles. However, the two journals with the highest number of citations are "Technological Forecasting and Social Change" (n=166) and "Journal of Small Business Management" (n=88).

Table 4. Ten influential journals

No	Journal name	Number of publications	Number of citations	Quotation average
1	<i>Technological forecasting and social change</i>	2	166	83
2	<i>Journal of small business management</i>	1	88	88
3	<i>Journal of world business</i>	1	48	48
4	<i>Journal of asia-pacific business</i>	1	45	45
5	<i>International marketing reviews</i>	4	44	11
6	<i>Journal of business and industrial marketing</i>	1	42	42
7	<i>International business reviews</i>	1	40	40
8	<i>Technology innovation management review</i>	2	26	13
9	<i>Journal of international management</i>	2	19	9,5
10	<i>Business perspectives and research</i>	1	19	19

Source: VOSviewer (2023)

Influential authors

Based on the results of the citation analysis with the author analysis unit on VOSviewer, we identified a total of 101 authors. Considering the highest number of citations, we present the top 10 influential authors in Table 5.

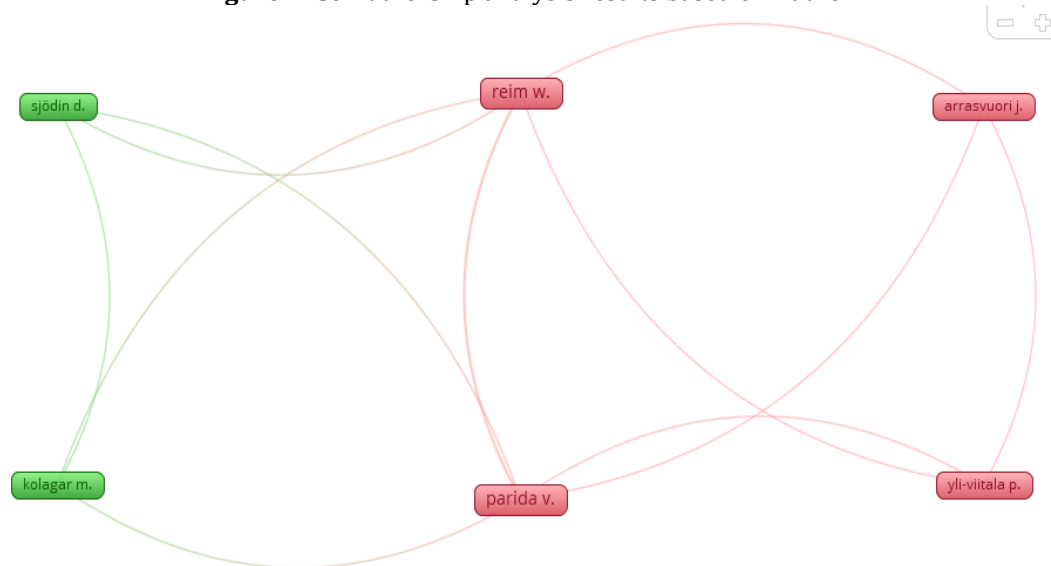
Table 5. Ten influential authors

No	Author name	Document	Number of citations
1	Manolova t.	1	88
2	Pergelova a.	1	88
3	Simeonova-ganeva r.	1	88
4	Jordanova d.	1	88
5	Denicolai s.	1	88
6	Magnani g.	1	88
7	Zucchella a.	1	88
8	Del Giudice m.	1	78
9	Garcia-perez a.	1	78
10	Messeni Petruzzelli a.	1	78

Source: VOSviewer (2023)

However, based on the results of the co-authorship analysis using the author unit analysis, the data reveals that there is a lack of strong connections among the authors. Out of the 101 authors, only 6 authors demonstrate significant links with other co-authors, as depicted in Figure 2.

Figure 2. Co Authorship analysis results based on Author



Source: VOSviewer (2023)

As for the authors with the most significant link strength of authorship with other authors, Parida V. and Reim W. stand out, with each having 24 citations and 2 publications, as indicated in Table 6.

Table 6. Largest Co-Authorship

No	Author name	Document	Number of citations
1	Parida v.	2	24
2	Reim w.	2	24
3	Kolgar m.	1	13
4	Sjodin d.	1	13
5	Arrasvuori j.	1	11
6	Yli-viitala p.	1	11

Source: VOSviewer (2023)

Influential articles

Table 7 below presents the 10 influential articles based on the number of citations related to digital and internationalization. The article by Pergelova et al. (2019) is the most influential, with approximately 170 citations. It was published in the journal "Journal of Small Business Management," which is the second most influential journal listed in Table 4 above. Following that is the article by Denicolai et al. (2021) with 160 citations, published in the number one

most influential journal as shown in Table 4, namely the journal "Technological Forecasting and Social Change."

Table 7. Ten most influential articles

No	Author name	Article	Journal	Number of citations
1	(Pergelova et al., 2019)	Democratizing Entrepreneurship? Digital Technologies and the Internationalization of Female-Led SMEs	<i>Journal of Small Business Management</i>	170
2	(Denicolai et al., 2021)	Internationalization, digitalization, and sustainability: Are SMEs ready? A survey on synergies and substituting effects among growth paths	<i>Technological Forecasting and Social Change</i>	160
3	(Tolstoy et al., 2021)	The development of international e-commerce in retail SMEs: An effectuation perspective	<i>Journal of World Business</i>	117
4	(Fraccastoro et al., 2021)	The integrated use of social media, digital, and traditional communication tools in the B2B sales process of international SMEs	<i>International Business Review</i>	109
5	(Del Giudice et al., 2019)	Shifting Wealth II in Chinese economy. The effect of the horizontal technology spillover for SMEs for international growth	<i>Technological Forecasting and Social Change</i>	108
6	(Jin & Hurd, 2018)	Exploring the Impact of Digital Platforms on SME Internationalization: New Zealand SMEs Use of the Alibaba Platform for Chinese Market Entry	<i>Journal of Asia-Pacific Business</i>	101
7	(Eid et al., 2019)	Antecedents and consequences of social media marketing use: an empirical study of the UK exporting B2B SMEs	<i>Journal of Business & Industrial Marketing</i>	89
8	(Makrides et al., 2020)	The Gold Rush of Digital Marketing: Assessing Prospects of Building Brand Awareness Overseas	<i>Business Perspectives and Research</i>	73
9	(Wang, 2020)	Digital marketing capabilities in international firms: a relational perspective	<i>International Marketing Review</i>	67
10	(Hervé et al., 2020)	Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises	<i>Technology Innovation Management Review</i>	63

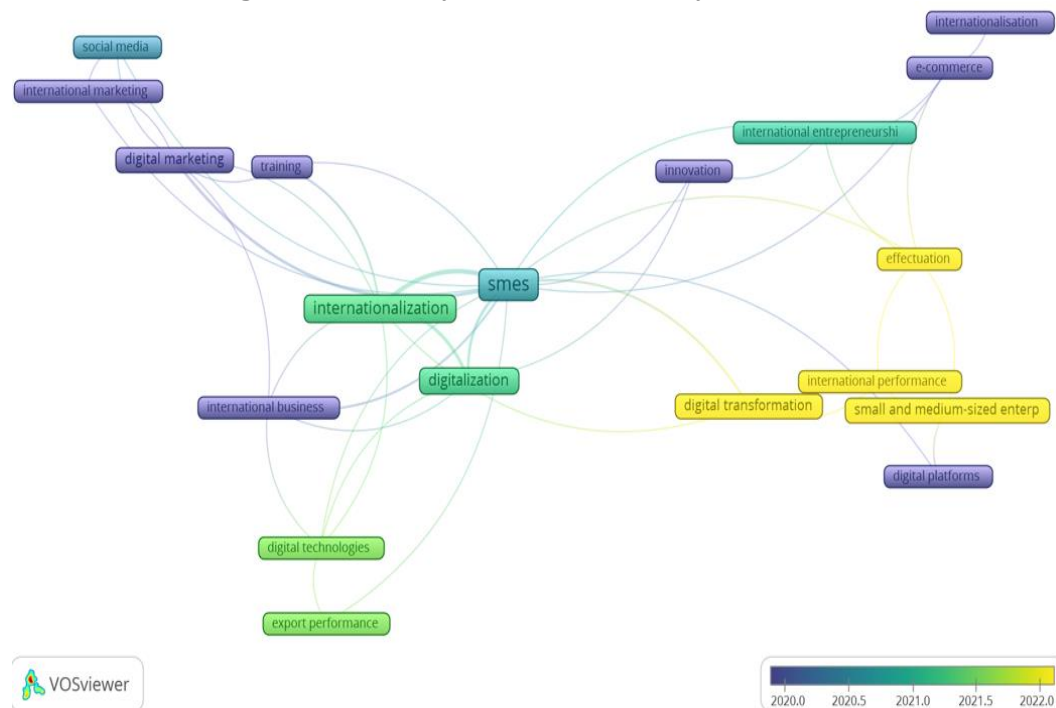
Source: VOSviewer (2023)

Scientific mapping

Keyword analysis

Based on the results of Co-occurrence Analysis with author keyword unit analysis on VOSviewer, a total of 131 keywords were obtained. The threshold for keyword occurrences was set at least twice, and no manual keyword waiver was applied. As a result, 19 important keywords were identified, as shown in Figure 3.

Figure 3. Author keyword results - Overlay Visualization



Source: VOSviewer (2023)

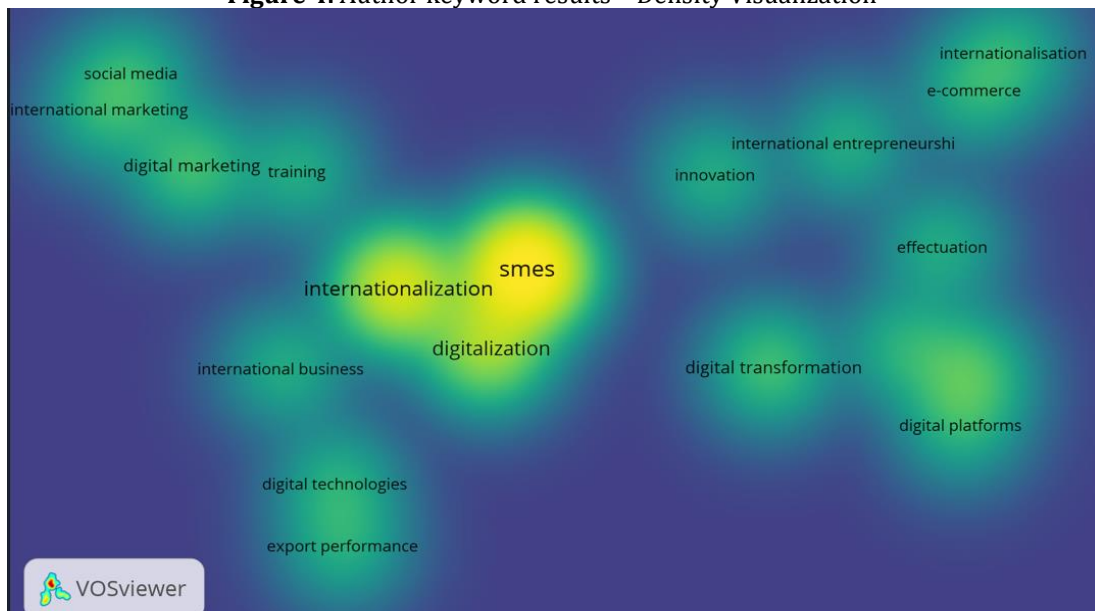
In Figure 3, these keywords can be grouped into five clusters represented by different colors. The darkest color, purple, represents the year 2020, indicating a research trend focused on international marketing, digital marketing, training, international business, innovation, e-commerce, internationalization, and digital platforms. In mid-2020, the focus shifted to social media and SMS. In 2021, the research emphasis shifted to internationalization, digitalization, and international entrepreneurship, and in mid-2021, the focus turned to digital technology and export performance. The latest research in 2022 showed a research trend focusing on effectuation, international performance, digital transformation, and Small and Medium-sized Enterprises.

When examining the VOSviewer results regarding the level of density, the highest density is indicated by the bright yellow color, followed by yellow to

green, green, and purple. Green and purple colors represent low density, indicating that these topics are rarely explored in research studies (see Figure 4).

Based on the Overlay Visualization and Density Visualization results of the author keywords in Figures 3 and 4, it can be observed that themes such as effectuation, international performance, digital transformation, digital technologies, and export performance are relatively new and have received less research attention compared to other themes. These areas present opportunities for further exploration and investigation in the field of digitalization and internationalization.

Figure 4. Author keyword results – Density Visualization



Source: VOSviewer (2023)

Discussion

Content analysis

In this sub-section, we conducted a systematic content analysis using cluster analysis to explore and identify themes related to digitalization and internationalization. The themes were derived from the results obtained through VOSviewer analysis. These themes are categorized into five clusters, and we will analyze and explain each cluster as follows:

Cluster 1: Digitalization and use of digital technologies in increasing export performance in international business at SMEs

Digitalization is a driving factor behind the emergence of companies engaging in early-stage internationalization. It not only motivates SMEs to undergo structural and strategic transformations but also provides new opportunities for success in foreign markets. The development of digital service offerings and partnerships facilitates the internationalization process of SMEs by leveraging digital services. Certification, digitization, and interconnected ecosystems further support SMEs in expanding into international markets.

Several studies have explored the benefits of digitalization for the early internationalization of SMEs and investigated the determinants of digital orientation. These studies have yielded valuable insights into the characteristics of entrepreneurs, products, technologies, and markets that influence the digital orientation of SMEs in international contexts ([Y. Y. Lee et al., 2022](#)).

Furthermore, research has examined the impact of digitalization on the internationalization experience of companies, shedding light on its transformative effects ([Gaweł et al., 2023](#)).

Meanwhile, research on digital services enabling the internationalization of SMEs in the industrial sector has been conducted ([Kolagar et al., 2022](#)). The study reveals three phases associated with the maturity of SME digital services, namely awareness, service innovation, and mass customization of digital services. Additionally, the research identifies three synergy phases that enhance ecosystem engagement, including knowledge, integration, and ecosystem value creation. Moreover, the study develops three process frameworks specifically designed for SME internationalization, namely innovation strategy, ecosystem strategy, and digital service scaling strategy.

Digital technology is also exerting a significant influence on the international expansion of Small and Medium Enterprises (SMEs). These technologies possess the potential to grant SMEs access to international market knowledge and facilitate customer and partner relationships. In the pursuit of business development, numerous SMEs diversify their offerings to cater to global market demands. However, internationalization poses various challenges to the business model. In this context, digital technology emerges as the key enabler, facilitating resource-efficient business development and accommodating SMEs. Research focusing on how digitalization can address business model challenges associated with SME internationalization has been conducted, and its findings deconstruct digitization into manageable activities perceived by SMEs ([Reim et al., 2022](#)).

The utilization of digital technology presents novel opportunities for development and success in international markets. Research investigating the impact of digital technology on the internationalization process of SMEs has been conducted through in-depth analyses of five recent scientific papers. These studies have yielded significant insights into how SMEs derive benefits from digital technology in foreign markets ([Hervé et al., 2020b](#)). Furthermore, digital technology has been found to have a positive impact on SME internationalization, mediated by international market intelligence ([Pergelova et al., 2019](#)).

Cluster 2: Digital platform and digital transformation towards international performance in Small and Medium-sized Enterprises with effectuation theory

The process of effective market creation in the digital landscape involves the development of digital market offerings. Companies must explore methods of engaging with customers, facilitating transactions, and presenting their products and services on digital platforms. The digital realm offers great flexibility for providing services and showcasing product content.

Digital platforms have revolutionized cross-border operations for companies. However, the impact of digital platforms on international business entry strategies remains an area with limited research. One study investigated how digital platforms influence the entry of Small and Medium-sized companies into foreign markets ([Jin & Hurd, 2018](#)). The findings indicate that digital platforms can help overcome certain entry barriers by addressing resource limitations and providing access to networks. Nevertheless, successful market entry still necessitates the involvement of local staff as a crucial component.

Establishing a presence for e-commerce in foreign markets poses a challenge. Relying solely on physical stores, product demonstrations, and local presence is no longer sufficient for companies. Concurrently, businesses must undergo a digital transformation process, transitioning from traditional practices to new business models that appeal to new markets. In the modern economy, the importance of digital transformation as a catalyst for innovation has been emphasized, particularly for established Small and Medium Enterprises ([Denicolai et al., 2021](#)).

Research examining the behaviors and actions involved in the digital transformation of SMEs has been conducted by [Jafari-Sadeghi et al. \(2023\)](#). Drawing on the theory of planned behavior, their study contributes to the field of digital transformation research by presenting six propositions that explore the relationship between SMEs at the individual level.

To rapidly expand into multiple foreign markets, small companies can leverage cross-border e-commerce. However, a key challenge is how retail SMEs can effectively develop international e-commerce in foreign markets and create a market that positively impacts their international performance. Effectuation theory can provide insights into how small internationalized companies succeed in capitalizing on new opportunities abroad.

The performance of international cross-border e-commerce companies can be better understood through the lens of effectuation, where companies experiment with ideas that foster engaging digital customer experiences. Research has been conducted on the process of developing international e-commerce in foreign markets based on effectuation theory. The findings make a theoretical contribution by offering detailed insights into the driving factors of e-commerce internationalization and illustrating how capabilities underlie this development process (Tolstoy et al., 2021).

Similarly, research has examined how the creation of effective markets influences international performance based on the framework of effectuation theory. The findings indicate that the establishment of effective markets has a positive impact on the international performance of SMEs. Moreover, this positive effect is facilitated by insidership in international markets, which is manifested through activities such as international marketing and networking. Insidership represents a secure market entry approach that leverages company relationships and resources to pursue existing opportunities (Tolstoy et al., 2023).

Cluster 3: E-commerce, innovation, and internationalization in international entrepreneurship

Cross-border e-commerce refers to the process through which companies utilize information and communication technologies (ICTs) to sell their goods and services to customers located outside their domestic markets. In the context of SMEs, cross-border e-commerce serves as an example of how companies can navigate uncertainty by gradually developing their businesses, starting with the utilization of controlled resources and continuously refining their techniques through customer interactions, such as marketing content, service features, campaigns, automated transactions, integrity, and payment options.

Research investigating the impact of e-commerce on the internationalization of SMEs, employing the Uppsala internationalization model, has revealed insightful findings. The results indicate that SMEs utilizing the internet as an information source demonstrate a higher level of internationalization. Furthermore, the use

of the internet for transactions also positively influences the ratio of foreign sales to total sales. However, it is important to note that the effects of e-commerce usage are moderated by export barriers. This implies that e-commerce alone does not guarantee the automatic internationalization of SMEs ([Eduardsen, 2018](#)).

In the 21st century, innovation plays a crucial role in the growth and success of SMEs. The ability to innovate and expand globally are key factors for entrepreneurial success. Numerous studies have highlighted the positive relationship between R&D intensity and innovative entrepreneurship. R&D serves as a significant source of innovation for small and medium enterprises. By effectively accessing R&D resources, new businesses can enhance their competitiveness in the digital age and expand their operations across borders.

Furthermore, an empirical analysis focusing on the impact of International Open Innovation (IOI) on the international market success of SMEs in developing markets has been conducted. The results indicate that, from a resource-based view, International Open Innovation has a positive effect on international market success. Additionally, the researchers explore the moderating role of cross-cultural competence and digital alliance capabilities in the relationship between International Open Innovation and international market success ([Zahoor et al., 2022](#)).

Cluster 4: Social media, digital marketing, and international marketing

Social media platforms have emerged as powerful tools for companies to expand their reach to global markets and adapt their strategies and offerings in unique ways. Utilizing social media effectively, especially in the context of export activities, can provide SMEs with opportunities for B2B digital marketing.

Research has been conducted to examine the actual impact of social media usage on the export performance of international B2B SMEs. The findings, presented in a study by [Eid et al. \(2019\)](#), demonstrate that social media has a significant influence on the export performance of international B2B SMEs. Factors such as the quality of international business contacts, understanding customer preferences, building brand awareness, and gaining knowledge about competition in various international markets play crucial roles in this relationship.

Digital marketing, including advertising through various digital channels, has had a significant transformative impact on companies, particularly in terms of brand-consumer relationships and interactions. The ability to engage with

consumers anytime and anywhere has made digital marketing a powerful tool for increasing brand awareness and expanding international presence.

Research has been conducted to examine the impact of digital marketing on brand awareness at the international level. The findings suggest that digital marketing has immense potential for SMEs to enhance their internationalization efforts, particularly by leveraging digital platforms and adopting effective digital practices. The study by [Makrides et al. \(2020\)](#) highlights the importance of utilizing different digital marketing techniques to solidify market position and increase brand recognition in international markets.

Cluster 5: Training and internationalization in SMEs

In the context of national economic development, the importance of nurturing creative and innovative human resources, particularly within Small and Medium Enterprises (SMEs), cannot be understated. The sustainability and success of SMEs heavily rely on the capabilities and competencies of their workforce. Consequently, efforts are being made to develop models and strategies that enhance competitiveness in the global market, particularly through the establishment of sustainable creative industries that empower SMEs in the digital era.

Research has been conducted to examine models and strategies aimed at increasing the competitiveness of creative industries, particularly in terms of internationalization and network resources. The findings suggest that the performance of SMEs is not significantly influenced by variables related to internationalization. This indicates that the level of internationalization remains low, with limited market scope, low profits, and sales. Given the low level of internationalization and the need for leveraging network resources, the second part of the research focuses on the development of training modules, which were tested on respondents from SMEs in Kendal district. The results indicate a significant increase in knowledge related to creative knowledge, export-import, export financing institutions, and running a digital business as a result of the training. Additionally, the study examines the impact of training on workforce performance and SME performance ([Djastuti et al., 2020](#)).

CONCLUSION

We conducted a bibliometric analysis to examine current publication trends in the field of digitalization and internationalization in SMEs. Our analysis included the number of articles published per year, influential countries, influential

journals and articles, influential authors, and the largest co-authorships. To identify emerging themes among researchers, we employed co-occurrence-author keyword analysis using VOSviewer, which resulted in 19 keywords classified into 5 clusters. We identified both the latest themes that researchers are exploring and themes that are still under-researched. These themes include effectuation, international performance, digital transformation, digital technologies, and export performance.

In our research review, we utilized content analysis to develop new research themes related to digitalization and internationalization. These themes encompass various aspects, such as the role of digitalization and the use of digital technologies in enhancing export performance in international business for SMEs. Additionally, we explored the impact of digital platforms and digital transformation on international performance in small and medium-sized enterprises, employing the framework of effectuation theory. We also delved into the relationship between e-commerce, innovation, and internationalization in the context of international entrepreneurship. Furthermore, we investigated the influence of social media and digital marketing on international marketing. Lastly, we examined the intersection of training and internationalization in SMEs.

The literature sources for this Systematic Literature Review (SLR) study were limited to the Scopus database. However, we recommend that future research expands its scope by utilizing other databases and including articles that focus on Southeast Asian countries, including Indonesia. These countries have distinct cultures, digital capabilities, internationalization processes, as well as unique opportunities and barriers to internationalization compared to developed countries in Asia and Europe.

Based on the results obtained from VOSviewer, several new and rarely researched themes have emerged, which can serve as potential areas for further investigation. For example, exploring the influence of digital technology on the performance of international SMEs or examining the role of digital transformation in enhancing export performance could be promising research directions. These studies can be integrated with existing theories such as effectuation theory and the Uppsala theory.

Furthermore, it was observed that digital marketing through various platforms such as social media and e-commerce can act as catalysts for the internationalization of SMEs. However, there is still a lack of research on the impact of digital platforms on international business entry strategies. Additionally, gaining a deeper understanding of the internationalization process from the perspective of SMEs is crucial. Therefore, we suggest that future

researchers focus on developing a comprehensive theory of the internationalization process by incorporating insights from existing theories. Moreover, employing methodological approaches such as quantitative and qualitative analyses would further enrich the understanding of the relationship between digital marketing, digital transformation, and the internationalization of SMEs.

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