
A Systematic Literature Review of the Digital Orientation of MSMEs

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Abstract. *Digital orientation is included in the important capabilities that need to be possessed for the development of MSMEs. This needs to be supported by a focus on digital strategies to answer obstacles such as the lack of digital orientation and the lack of human resource capabilities to utilize information technology. This research uses a Systematic Literature Review approach, to answer about the concept of digital orientation, the development of research related to digital orientation and topics or variables related to digital orientation. The results found that research on the topic of digital orientation has only accelerated in 2020 and indeed digital orientation has an influence on MSME business processes.*

Keywords: *Digital Orientation, MSME, Systematic Literature Review*

Abstrak. Orientasi digital termasuk dalam kemampuan penting yang perlu dimiliki untuk pengembangan UMKM. Hal ini perlu didukung dengan fokus pada strategi digital untuk menjawab kendala seperti lemahnya orientasi digital dan rendahnya kemampuan sumber daya manusia dalam memanfaatkan teknologi informasi. Penelitian ini menggunakan pendekatan Systematic Literature Review, untuk menjawab tentang konsep orientasi digital, perkembangan penelitian terkait orientasi digital dan topik atau variabel terkait orientasi digital. Hasilnya ditemukan bahwa penelitian mengenai topik orientasi digital baru mengalami akselerasi pada tahun 2020 dan memang orientasi digital memberikan pengaruh terhadap proses bisnis UMKM.

Kata Kunci: Orientasi Digital, UMKM, Tinjauan Pustaka Sistematis

INTRODUCTION

In today's era, many studies imply that in order for SMEs to fulfill their potential and overcome barriers in the digital age, they must adopt a digital orientation. To help SMEs in their digital transformation, Graf (2019) suggests a structured framework known as the transformation compass. The framework includes elements such as customer centricity, business model, operational excellence, and organizational excellence. To fully utilize digital technologies and improve the performance of small and medium-sized enterprises (SMEs), Quinton (2018) highlights the importance of a digital orientation that integrates learning, market, and entrepreneurial orientations.

The adoption of digital technologies by SMEs for sustainability and value creation is examined in Vrontis (2022), focusing on the moderating effects of entrepreneurial orientation. The dual approach to digitalization and environmental sustainability may have a negative influence on process innovation performance, according to Ardito (2021), who investigated the effects of digital and environmental orientation on innovation performance in SMEs. These articles highlight the need for SMEs to have a strategic digital focus in order for them to thrive in the digital economy.

Digitalization (2022) is seen as a way to help MSMEs grow, according to Bank Indonesia. As a result, Bank Indonesia is still working to promote more MSME transactions by growing the digital ecosystem and accelerating the pace of inclusive digitalization. Via MSME onboarding is one among them. By digitalizing the marketing of MSME products through online marketplaces and platforms, this program supports the empowerment of MSMEs.

The digitization of MSMEs still confronts a number of challenges in its implementation, including issues with human intellectual capital because most MSMEs do not yet have the available resources to employ information technology. Network issues (relational capital), infrastructure and information system issues (structural capital). Even in cases when MSME actors already have access to the internet, networks, social issues, and behavioral issues (social capital) are still largely untapped for the acquisition of information crucial to the expansion of MSME operations.

Based on this background, research regarding the importance of digital orientation for MSME players is still important to discuss. This article attempts to offer novelty by trying to look at the current situation with the concept of financial literacy itself and human capital theory which aims to strengthen MSMEs as critical engines of the country's economy.

THEORETICAL STUDIES

Digital Orientation

Digital orientation is an organization's guiding principle to pursue digital technology-enabled opportunities to achieve competitive advantage. It encompasses the dimensions of digital technology scope, digital capabilities, digital ecosystem coordination, and digital architecture configuration (Kindermann et al., 2021).

RESEARCH METHODS

The focus of this research is to understand the digital orientation of MSMEs using the Systematic Literature Review (SLR) method. SLR is a methodical approach to locating, assessing, and interpreting previous studies in a particular domain is the systematic literature review (García-Peñalvo 2022, White & Schmidt 2005, Dresch 2015, Višić 2022). Planning, carrying out, and reporting the review are some of its crucial stages (García-Peñalvo 2022). The procedure is intended to reduce prejudice and guarantee that all pertinent data is included (White 2005). This approach is especially crucial in the social sciences, and modifications could be required to meet the particular needs of the discipline (Višić, 2022).

Identify Research Statement

This research question focuses on revealing the concept of digital orientation in MSMEs, where the SLR approach will explore the following questions:

R1. What does digital orientation mean?

R2. How is the development of research related to digital orientation?

R3. What research topics or variables are related to digital orientation?

Study Identification and Selection

To find relevant studies used various tools such as watase uake, science direct and others, with the following criteria:

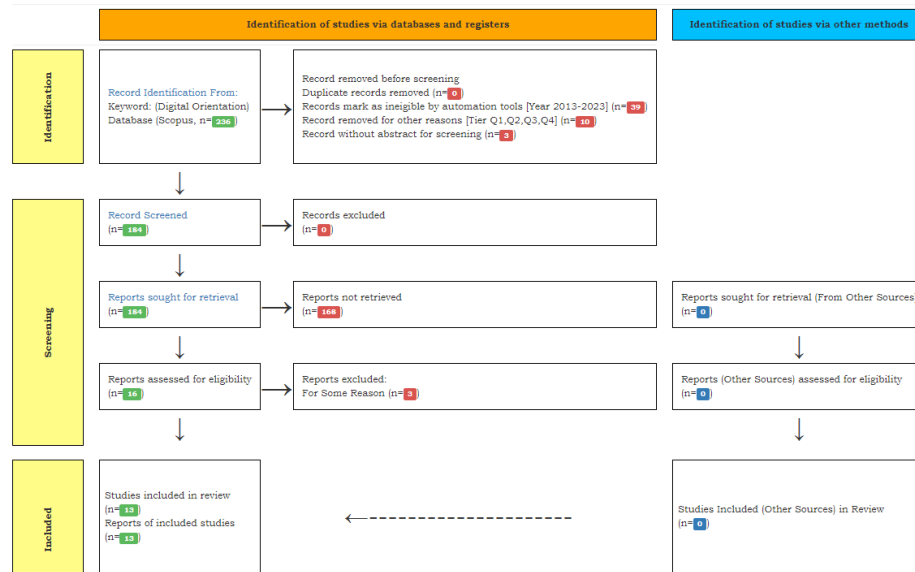
Criteria	Limitation
Year from	2013
Year to	2023
Tier (Q1,Q2,Q3,Q4)	Q1,Q2,Q3,Q4

Searching relevant studies using the keyword "Digital Orientation" with the criteria mentioned above so that 184 articles were found out of 236 articles from the Scopus database, where there are 39 articles that do not meet the requirements for the publication year, namely

in the period from 2013 to 2023, then a total of 10 articles did not meet the tier requirements and 3 articles did not have abstracts.

Study Screening and Extraction

At the screening stage, the author determines 16 articles that are considered relevant. Furthermore, extraction of each article is carried out by analyzing variables, hypotheses, article production processes, country origin, methods, data collection, research design, novelty, limitation, future research and other analyses.



Generate from Wase Uake Tools, based on Prisma 2020 Reporting

One of the extraction results was to issue 3 articles because they were not relevant to the research topic, so finally 13 articles were obtained as follows:

No	Author	Year	Title	Journal
1	Quinton, Sarah; Canhoto, Ana; Molinillo, Sebastian; Pera, Rebecca; Budhathoki, Tribikram	2018	Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy,	Journal of Strategic Marketing
2	Kopalle, Praveen K.; Kumar, V.; Subramaniam, Mohan	2020	How legacy firms can embrace the digital ecosystem via digital customer orientation,	Journal of the Academy of Marketing Science
3	Rupeika-Apoga, Ramona; Petrovska, Kristine; Bule, Larisa	2022	The Effect of Digital Orientation and Digital Capability on Digital Transformation of SMEs during the COVID-19 Pandemic,	Journal of Theoretical and Applied Electronic Commerce Research

4	Arias-Perez, Jose; Velez-Jaramillo, Juan	2022	Ignoring the three-way interaction of digital orientation, Not-invented-here syndrome and employee's artificial intelligence awareness in digital innovation performance: A recipe for failure,	Technological Forecasting and Social Change
5	Bullini Orlandi, Ludovico	2016	Organizational capabilities in the digital era: Reframing strategic orientation,	Journal of Innovation and Knowledge
6	Nasiri, Mina; Saunila, Minna; Rantala, Tero; Ukko, Juhani	2022	Sustainable innovation among small businesses: The role of digital orientation, the external environment, and company characteristics,	Sustainable Development
7	Nasiri, Mina; Saunila, Minna; Ukko, Juhani	2022	Digital orientation, digital maturity, and digital intensity: determinants of financial success in digital transformation settings,	International Journal of Operations and Production Management
8	Upadhyay, Nitin; Upadhyay, Shalini; Al-Debei, Mutaz M.; Baabdullah, Abdullah M.; Dwivedi, Yogesh K.	2023	The influence of digital entrepreneurship and entrepreneurial orientation on intention of family businesses to adopt artificial intelligence: examining the mediating role of business innovativeness,	International Journal of Entrepreneurial Behaviour and Research
9	Ipsmiller, Edith; Dikova, Desislava; Brouthers, Keith D.	2022	Digital Internationalization of Traditional Firms: Virtual Presence and Entrepreneurial Orientation,	Journal of International Management
10	Lee, Jeoung Yul; Yang, Young Soo; Ghauri, Pervez N.; Park, Byung Il	2022	The Impact of Social Media and Digital Platforms Experience on SME International Orientation: The Moderating Role of COVID-19 Pandemic,	Journal of International Management
11	Rosamartina, Schena; Giustina, Secundo; Domenico, De Fano;	2022	Digital reputation and firm performance: The moderating role of firm orientation towards	Journal of Business Research

	Pasquale, Del Vecchio; Angeloantonio, Russo		sustainable development goals (SDGs),	
12	Castell, Carolin; Kiefer, Jasmin; Schubach, Sebastian; Schumann, Jan H.; Graf-Vlachy, Lorenz; Konig, Andreas	2023	Integrating digital platform dynamics into customer orientation research: A systematic review and research agenda,	Journal of Business Research
13	Sultoni, Mohammad Hamim; Sudarmiatin, Sudarmiatin; Hermawan, Agus ; Sopiah, Sopiah	2022	Digital marketing, digital orientation, marketing capability, and information technology capability on marketing performance of Indonesian SMEs,	International Journal of Data and Network Science

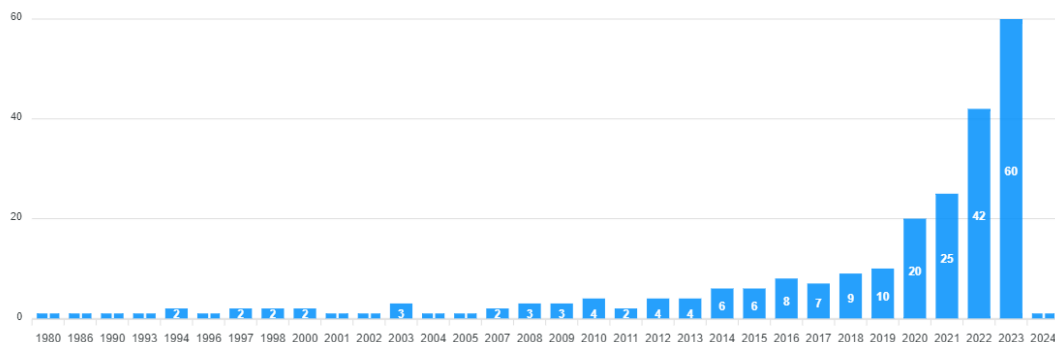
RESULTS AND DISCUSSIONS

R1. Digital Orientation Concept

More academics and working managers are becoming interested in the idea of digital orientation, or DO. Scholars' growing interest in the concept of DO may stem from their presumption that firms with a digital orientation can gain a competitive edge by utilizing flexible resources (Dantsoho et al., 2020).

Digital orientation has been cited as one of the primary facilitators of sustainable innovation in numerous studies that address the social, environmental, and economic aspects of sustainability (Nasiri et al., 2022). According to Quinton (2018), DO is the deliberate strategic positioning of an SME to take advantage of the opportunities presented by digital technologies. This positioning includes the attitudes and behaviours that support the generation and use of market insight, proactive innovation, and openness to new ideas.

R2. Development of Digital Orientation Research

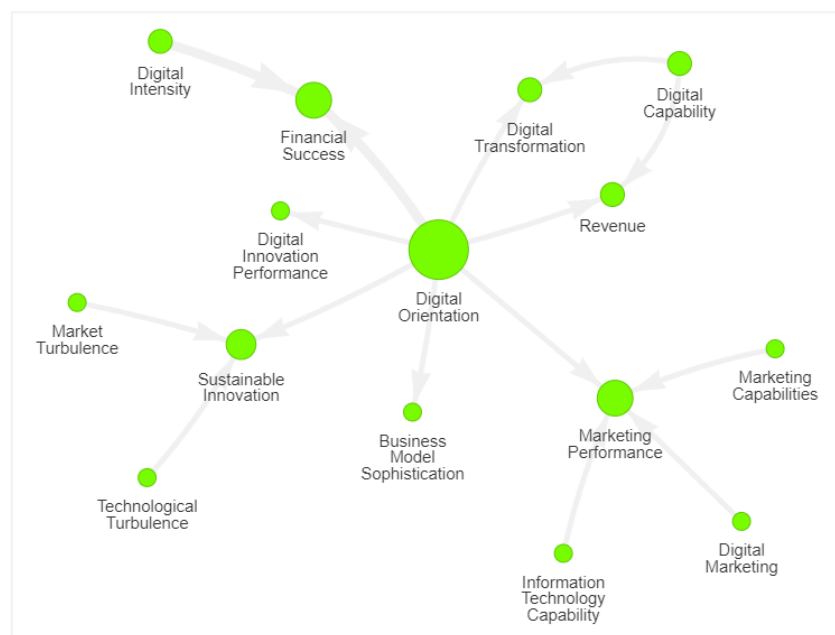


Result from Keyword Search

Based on the search results with the keyword "Digital Orientation", it is implied that the selection of research topics with the keyword digital orientation will only begin to increase in 2020 to 2023, this is different from the period from 1980 to 2019.

In addition, it can be seen that there are 2 novelties from 2 articles, namely related to the sense and respond capabilities model in the digital era (Bullini Orlandi, 2016), which can be used in future research. Then also related the components of the Digital Orientation which briefly describes, the market orientation, learning orientation and entrepreneurial orientations have complementary characteristics which help SMEs succeed in the digital economy (Quinton et al., 2018).

R3. Topics or Variables Related to Digital Orientation



Report Social Network Analysis (Watase Network)

If you look at the social network analysis report, it can be seen that digital orientation has an influence on financial success, digital innovation performance, sustainable innovation, business model sophistication, marketing performance, revenue, digital transformation.

A complex relationship is revealed by research on the impact of digital orientation on financial success. According to Nasiri (2022), digital intensity even mitigates the performance effects of digital orientation, suggesting that neither digital orientation nor intensity directly contribute to financial success. Digital maturity, though, may act as a mediator in this relationship. Bali (2023) delves deeper into the elements that contribute to a digital orientation, highlighting learning, technology, market, and entrepreneurial orientations as important precursors. A different viewpoint is provided by Cao (2017), who demonstrates how decisions about personal finance information sources can affect financial satisfaction. These decisions

are influenced by things like impulse control and financial planning. Lastly, Hair (2012) highlights how critical it is to have a strong market orientation in the digital world, especially when it comes to using electronic community technologies for productive communication.

CONCLUSION

From the SLR results, it is illustrated that the discussion of digital orientation topics began to increase in 2020 which coincided with the initial period of the Covid-19 pandemic. Furthermore, digital orientation has an influence on 7 MSMEs business processes. Of course, this research has limitations, especially related to the depth of extraction analysis which can be further explored in future research.

REFERENCES

- Ardito, L., Raby, S., Albino, V., & Bertoldi, B. (2021). The duality of digital and environmental orientations in the context of SMEs: Implications for innovation performance. *Journal of Business Research*, 123(October 2020), 44–56. <https://doi.org/10.1016/j.jbusres.2020.09.022>
- Bali, B., & Joshi, R. M. (2023). Digital Orientation and Practices Adopted by the New Startups: Antecedents and Influences on Firm's Performance. *Global Business Review*, 0(0). <https://doi.org/10.1177/09721509231163015>
- Bullini Orlandi, L. (2016). Organizational capabilities in the digital era: Reframing strategic orientation. *Journal of Innovation and Knowledge*, 1(3), 156–161. <https://doi.org/10.1016/j.jik.2016.01.002>
- Cao, Y., & Liu, J. (2017). Financial Executive Orientation, Information Source, and Financial Satisfaction of Young Adults. *Journal of Financial Counseling and Planning*, 28(1), 5–19. <https://doi.org/10.1891/1052-3073.28.1.5>
- Castell, C., Kiefer, J., Schubach, S., Schumann, J. H., Graf-Vlachy, L., & König, A. (2023). Integrating digital platform dynamics into customer orientation research: A systematic review and research agenda. *Journal of Business Research*, 163(October 2021). <https://doi.org/10.1016/j.jbusres.2023.113911>
- Dantsoho, M. A., Adamu, A. A., Yazeed, M., Abdullahi, N., Ringim, K. J., & Umar, S. (2020). Digital Orientation Scale: Development and Validation. *2020 International Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy, ICDABI 2020*. <https://doi.org/10.1109/ICDABI51230.2020.9325678>
- Dresch, A., Lacerda, D. P., & Antunes, J. A. V. (2015). Design science research: A method for science and technology advancement. *Design Science Research: A Method for Science and Technology Advancement*, 1–161. <https://doi.org/10.1007/978-3-319-07374-3>
- García-Peñalvo, F. J. (2022). Developing robust state-of-the-art reports: Systematic Literature Reviews. *Education in the Knowledge Society*, 23, E28600.

<https://doi.org/10.14201/eks.28600>

- Graf, M., Peter, M., & Gatzju-Grivas, S. (2019). *Foster Strategic Orientation in the Digital Age*. Springer International Publishing. https://doi.org/10.1007/978-3-030-04849-5_37
- Hair, N., Wetsch, L. R., Hull, C. E., Perotti, V., & Hung, Y. T. C. (2012). Market orientation in digital entrepreneurship: Advantages and challenges in a web 2.0 networked world. *International Journal of Innovation and Technology Management*, 9(6), 1–18. <https://doi.org/10.1142/S0219877012500459>
- Ipsmiller, E., Dikova, D., & Brouthers, K. D. (2022). Digital Internationalization of Traditional Firms: Virtual Presence and Entrepreneurial Orientation. *Journal of International Management*, 28(4), 100940. <https://doi.org/10.1016/j.intman.2022.100940>
- Kindermann, B., Beutel, S., Garcia de Lomana, G., Strese, S., Bendig, D., & Brettel, M. (2021). Digital orientation: Conceptualization and operationalization of a new strategic orientation. *European Management Journal*, 39(5), 645–657. <https://doi.org/10.1016/j.emj.2020.10.009>
- Kopalle, P. K., Kumar, V., & Subramaniam, M. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, 48(1), 114–131. <https://doi.org/10.1007/s11747-019-00694-2>
- Lee, J. Y., Yang, Y. S., Ghauri, P. N., & Park, B. Il. (2022). The Impact of Social Media and Digital Platforms Experience on SME International Orientation: The Moderating Role of COVID-19 Pandemic. *Journal of International Management*, 28(4), 100950. <https://doi.org/10.1016/j.intman.2022.100950>
- Nasiri, M., Saunila, M., Rantala, T., & Ukko, J. (2022). Sustainable innovation among small businesses: The role of digital orientation, the external environment, and company characteristics. *Sustainable Development*, 30(4), 703–712. <https://doi.org/10.1002/sd.2267>
- Quinton, S., Canhoto, A., Molinillo, S., Pera, R., & Budhathoki, T. (2018). Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy. *Journal of Strategic Marketing*, 26(5), 427–439. <https://doi.org/10.1080/0965254X.2016.1258004>
- Rosamartina, S., Giustina, S., Domenico, D. F., Pasquale, D. V., & Angeloantonio, R. (2022). Digital reputation and firm performance: The moderating role of firm orientation towards sustainable development goals (SDGs). *Journal of Business Research*, 152(July), 315–325. <https://doi.org/10.1016/j.jbusres.2022.07.025>
- Rupeika-Apoga, R., Petrovska, K., & Bule, L. (2022). The Effect of Digital Orientation and Digital Capability on Digital Transformation of SMEs during the COVID-19 Pandemic. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(2), 669–685. <https://doi.org/10.3390/jtaer17020035>
- Sultoni, M. H., Sudarmiati, Hermawan, A., & Sopiah. (2022). Digital marketing, digital orientation, marketing capability, and information technology capability on marketing performance of Indonesian SMEs. *International Journal of Data and Network Science*, 6(4), 1381–1388. <https://doi.org/10.5267/j.ijdns.2022.5.013>

- Višić, M. (2022). Connecting Puzzle Pieces: Systematic Literature Review Method in the Social Sciences. *Sociologija*, 64(4), 543. <https://doi.org/10.2298/SOC2204543V>
- Vrontis, D., Chaudhuri, R., & Chatterjee, S. (2022). Adoption of Digital Technologies by SMEs for Sustainability and Value Creation: Moderating Role of Entrepreneurial Orientation. *Sustainability (Switzerland)*, 14(13). <https://doi.org/10.3390/su14137949>
- White, A., & Schmidt, K. (2005). Systematic literature reviews. *Complementary Therapies in Medicine*, 13(1), 54–60. <https://doi.org/10.1016/j.ctim.2004.12.003>