

DIGITAL MARKETING IN MSMEs: BIBLIOMETRIC ANALYSIS

Rizal Muttaqin¹, Hadiah Fitriyah²

^{1,2} Faculty of Business, Law, and Social Sciences, Muhammadiyah University of Sidoarjo
email: 216110100016@umsida.ac.id
hadiah@umsida.ac.id

Abstract

The Covid-19 pandemic has forced us to change marketing patterns to survive amid difficulties for MSMEs to face the impact of mobility restrictions in dealing with Covid-19. The intensity of consumers, and the flow of goods and services that have decreased resulted in reduced income. This condition makes business actors adopt digital technology in the transformation of marketing into digital marketing. The use of digital technology is needed for the sustainability of MSMEs to survive during the pandemic. The purpose of this study is to find out trends and research themes in digital marketing for MSMEs as well as to classify and identify literature themes and trends that are directly related to digital marketing and MSMEs over the last 7 years. This research method is bibliometric analysis, articles found from the Publish and Perish (PoP) software with a Scopus-indexed database. Of the 161 articles found from 2016 to 2022, 101 articles were analyzed in this study. The selected articles are then managed using Mendeley software. After managing the database, it is classified and visualized using VOSviewer software. Overall, this review provides an appropriate reference point for further research on digital marketing in MSMEs.

Keywords: MSMEs, Digital Marketing, Transformation technology

INTRODUCTION

Micro, small and medium enterprises (MSMEs) have a major contribution to the economy in Indonesia, especially the expansion of employment. MSMEs provide benefits in improving the economy of low-income people through a productive economy. The existence of MSMEs plays a very important role in improving the community's economy, this sector was chosen because it has been proven to be tested in dealing with situations of economic instability including the monetary crisis so that it can prosper the community. MSMEs also contribute to increasing GDP (Gross Domestic Product). Based on data from the Ministry of Cooperatives and Small and Medium Enterprises (KemenkopUKM) in March 2021, the number of MSMEs reached 64.2 million with a contribution to gross domestic product (GDP) of 61.07 percent or IDR 8,573.89 trillion. MSMEs can absorb 97 percent of the total existing workforce, and can collect

up to 60.42 percent of the total investment in Indonesia. MSMEs in research play an important role in national economic development, and MSMEs in the national economy have an important and strategic role. This condition is very possible because the contribution of MSMEs is quite dominant to GDP in Indonesia. (Srijani, 2020)(Hartarto, 2021)(Sarfiyah, Atmaja and Verawati, 2019)

The growth rate of MSMEs has many obstacles, including the Covid-19 pandemic that has hit the world, especially in Indonesia, which has had an impact on all business sectors, MSMEs have become the affected sector due to this pandemic. The implementation of various government policies including restrictions on the mobility of goods and people will have an impact on limiting direct interaction between producers and consumers in the last two years to reduce the income of MSME actors. A total of 37,000 MSME actors reported to the Ministry of Cooperatives and SMEs affected by the COVID-19 pandemic. The difficulties experienced by MSMEs during the pandemic have four problems: there is a decrease in sales due to reduced community activities outside as consumers, capital difficulties due to difficult capital turnover due to declining sales levels, obstacles to product distribution due to restrictions on the movement of product distribution in certain areas, difficulties in raw materials because some MSMEs depend on the availability of raw materials from other industrial sectors. (Sugiri, 2020)

The decline in consumer purchasing power during the Covid-19 pandemic was conveyed in research conducted by it must be admitted that the Covid-19 pandemic caused a decrease in people's purchasing power. Because the public has reduced outdoor interactions to suppress the spread of the pandemic. This phenomenon has made changes in people's consumption behaviour, many consumers then adapt to the pattern of purchasing daily necessities by shifting purchases digitally. So that many MSMEs have to close their businesses because of the decline in purchases because they are still dependent on conventional sales while people's habits have changed. (Arianto, 2020)

There is still a lack of use of social media and digital marketing, largely due to the lack of knowledge and skills in this area. Nevertheless, if implemented effectively, digital marketing and social media can be the strengths that allow MSMEs to win business from larger competitors(Malesev and Cherry, 2021). Utilizing digital marketing and social media as a marketing model is currently a must as an MSME player, as well as synergizing with consumers in marketing products and services. The development of MSMEs with digital marketing and social media can be an alternative to saving business actors in the post-Covid-19 pandemic era.

The change in direct sales strategy or commonly known as offline sales to online sales is also a mixed strategy between the two, thus requiring MSME players to learn to combine their abilities and skills. This is also due to changes in people's habits of buying online, so marketing methods using digital technology must be followed by developments. The use of digital technology in meeting daily needs is conveyed in research conducted which cannot be denied that all have switched to digital. The interaction between humans and technology is inevitable.

All fulfilment needs are available digitally, from buying and selling goods and services to payment transactions. (Rosita, 2020)

The use of digital technology then becomes an absolute requirement in aligning the wheels of the economy during a pandemic. This was conveyed in research conducted by MSME activities in the conditions of the Covid-19 pandemic, which provides challenges as well as opportunities for the development of the Indonesian economy. The challenge in question is the (Arifqi and Junaedi, 2021) need for a short-term solution to help stakeholders or MSME actors to continue to run optimally with various limitations of government policies. Meanwhile, the opportunity can be interpreted as a government project to design MSME economic activities easily by adjusting to technological developments. Indonesia, which is also in the industrial era, indirectly demands a form of community economic activity based on technology or known as the digitization of MSMEs. Similar things regarding the use of digital technology in the world of MSMEs during this pandemic need to include the support of several related parties to familiarize MSMEs with the use of digital technology to be able to continue to survive, conveyed in research that MSME workers need to adapt to the use of new production technology and digital technology, development of telecommunications infrastructure and internet programs in villages, involvement of the world of academia and large businesses in mentoring introductions and the use of production technology and digital media, as well as reviving the partnership program of large businesses and MSMEs. (Nalini, 2021)

The use of digital technology in the form of E-commerce in meeting the needs of goods in Indonesia for 1 year has increased by 14.9% or equivalent to 21 million people, with a nominal transaction of 20 billion US Dollars which has increased by 59.4% for 1 year. This provides an overview of the future of digital technology that must continue to be utilized by MSME players. After the pandemic, business actors who have managed to survive are business actors who can take advantage of digital platforms and social media. As conveyed in the study. The use of digital platforms by MSME players in Indonesia is quite increasing, social media is a means of development in its sustainability. The use of digital media in marketing was also conveyed in the research that almost all people's needs were met by shopping using e-commerce or online and social media. (Kemp, 2022)(Arianto, 2020)(Dwijayanti and Pramesti, 2021)

Considering the aforementioned reasons, this paper aims to fill the research gap by providing an extensive bibliometric analysis of the literature about digital marketing in MSMEs. Articles published and indexed by Scopus are analyzed and categorized based on the distribution and affiliation of their authors. This analysis can see what research topics are the subject of more publications, and digital marketing topics on MSMEs in the future that provides opportunities for further research. The methodology used to perform the analysis is to use bibliometric analysis, including method steps related to the implementation of Scopus and publish or perish (PoP) data-driven software. Then present the results using VOSviewer followed by a discussion session and conclusions from literature studies using bibliometric analysis that has been carried out.

RESEARCH METHOD

Bibliometrics is a field of literature and information science research that studies bibliographic material using a quantitative approach (Shukla *et al.*, 2020). All articles used in this study are taken from the Scopus data base, where Scopus is one of the most complete peer-reviewed journal databases in the world and can also provide good scientific academic information. Article collection is carried out in July 2022 with the keyword "digital marketing, SME or SMEs" with criteria in the form of titles, keywords, and abstracts in 2016-2022. Initially, 161 articles were found using the publish or perish application because it proved to be the most effective way to search for articles (Clapper & Weak, 2018) (Baneyx, 2008). The results are then compiled in research information systems (RIS) format. Furthermore, using the VOSviewer application to visualize and analyze trends in the form of bibliometric maps Vosviewer can also create publication maps, author maps, and journal maps based on co-citation networks or build keyword maps based on shared networks. The complete component of the article consists of: the year of publication, volume, number, page etc. Checked and added incomplete information to produce the appropriate output. Data analysis is carried out so that articles can be classified by year and publisher. VOSviewer software can be used for data mining, mapping, and grouping of articles derived from data sources. (van Eck and Waltman, 2010) (Nur *et al.*, 2020) (Xie *et al.*, 2020)

RESULTS AND DISCUSSION

This research provides an in-depth analysis of the structure of journal citations and the development of bibliographic connections over time. To visualize those results, we use VOS viewer software (van Eck and Waltman, 2010). It allows us to create graphic maps to explain the relationships of the bibliography, the citations and analysis of co-quotes, co-authoring, and the similar occurrence of keywords that the author created. (Merigó *et al.*, 2016) The output of the article is analyzed based on PoP software, and then use VOSviewer software to determine the keywords that appear most often. The number of keywords that appear most frequently is adjusted to the needs of data collection and analysis. VOSviewer is used to visualize bibliometric maps, the software displays bibliometric mappings on three different visualizations namely, network visualization, overlay visualization, and density visualization. Before filtering the 161 articles from PoP software, then filtering the appropriate articles was carried out to 101 articles. The display of data network visualization results with the keyword "digital marketing, SME or SMEs" can be seen in figure 1., the results of overlay visualization in figure 2., and the results of density visualization in figure 3.

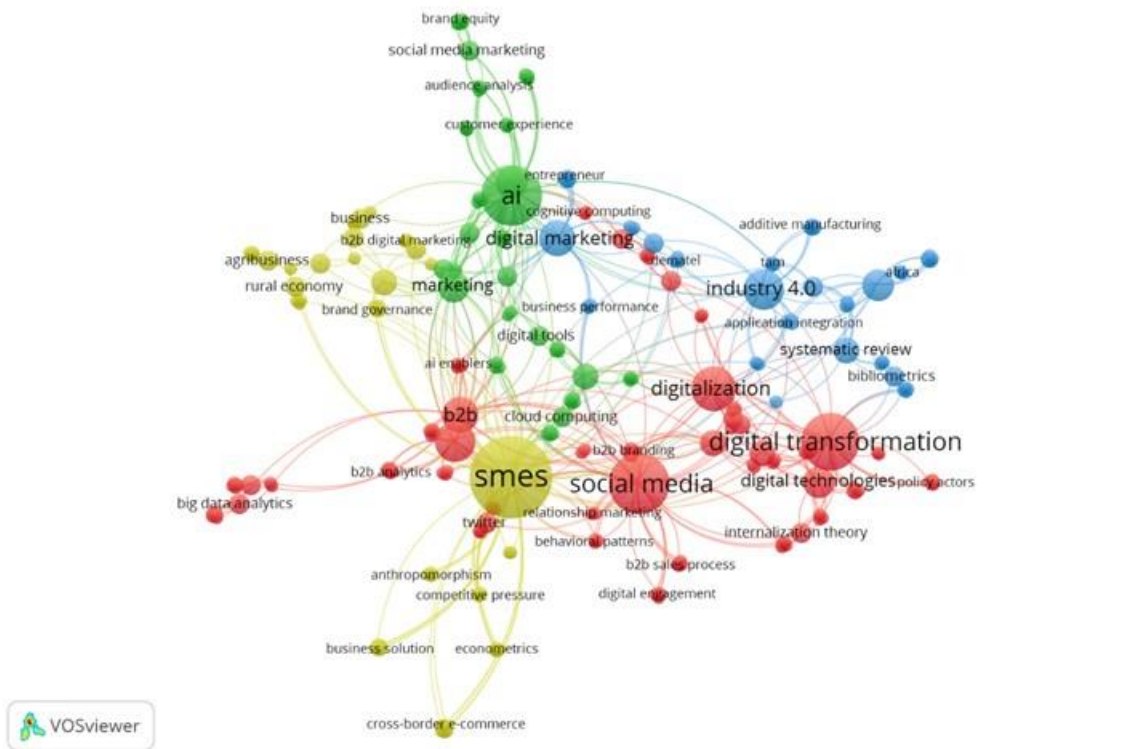


Figure 1. Network visualization in the database

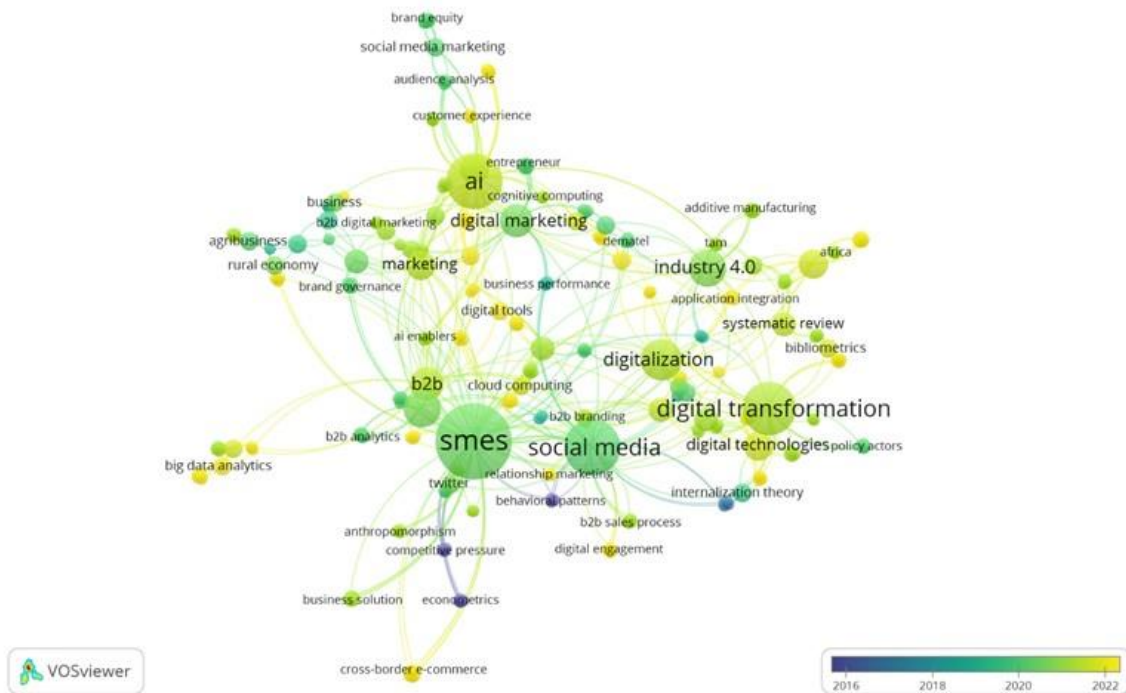


Figure 2. Visualization of overlays on the database

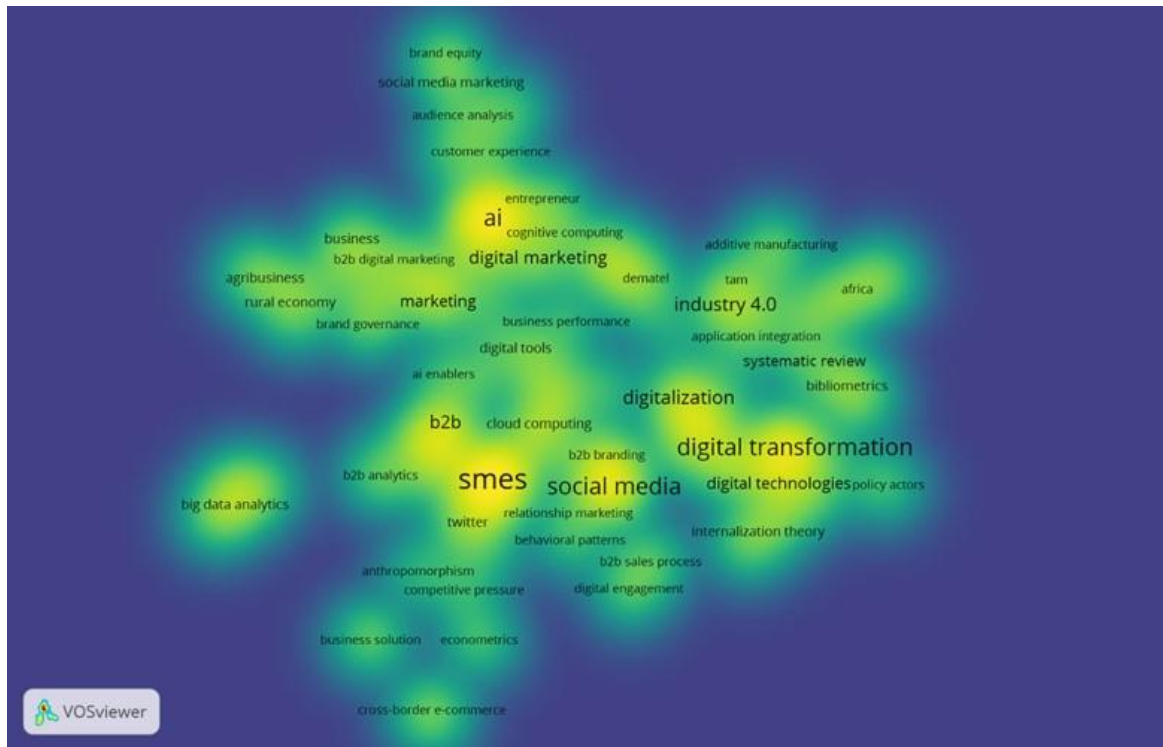


Figure 3. Density visualization on the database

The results extracted from titles, keywords, and abstracts with the minimum number of events set to 1 found 262 items with a cluster number of 4 showing the relationship between one topic and another. The size of the letters and circles is determined by the frequency of occurrence, the more often the keyword appears, the larger the size of the letters and circles. Figure 1 shows clusters in each of the subject areas studied, showing that the keywords SMEs, social media, ai, and digital transformation show a larger circle than others. Figure 2. Shows the trend from year to year of making this study, the results of which many studies were made in 2020-2022 to provide an overview of the novelty of the research results. Figure 3. Shows the depth of the study, that the dense the yellow colour produced, the more research related to the topic also increases in number. Figures 1-3 show that the keywords that often appear are SMEs, social media, ai and digital transformation. From this data, we can look for novelty digital marketing research on SMEs which is still little done by other researchers. For this reason, researchers can contribute to the application of digital marketing to SMEs that are still not widely known about the study. Some results from researchers identify a total of seven uses of cutting-edge data science in digital marketing used by SMEs in online marketing strategies that are represented and analyzed graphically. (Saura, Ribeiro-Soriano and Palacios-Marqués, 2021)

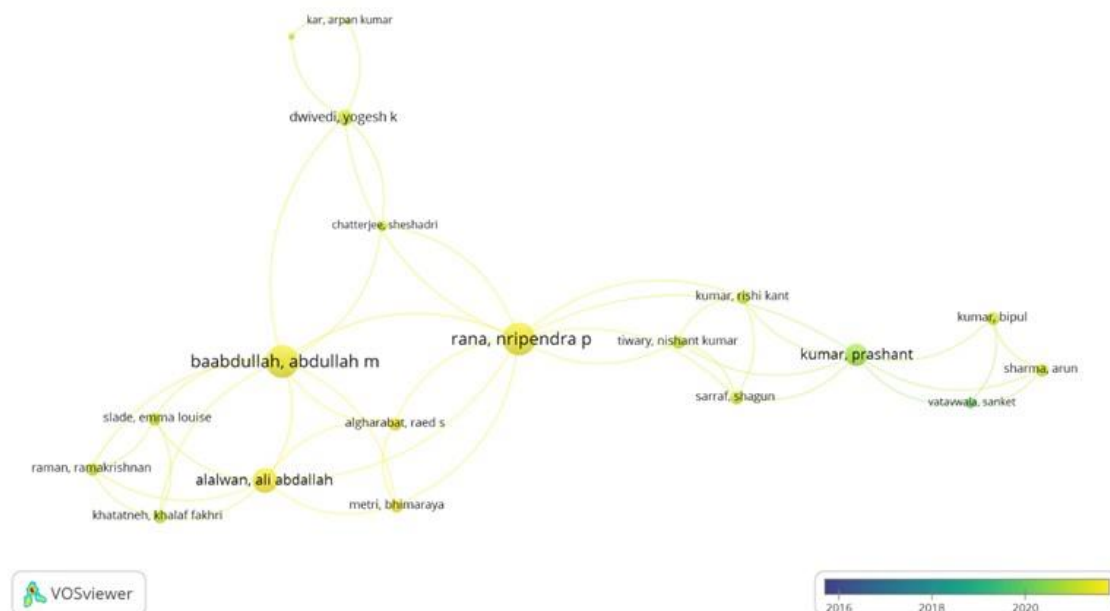


Figure 4. Visualization of author overlays and co-authorship relationships

Analysis of several joined authors and networks related to patterns of collaboration between individuals can be seen in figure 4. In this network, each node represents the author in his or her writing connections and shows an analysis of the author's network viewed from the year of creation with the other authors. The author Rana is the author with the most relationship with the others is also a recent study marked in yellow just like the author of baabdullah.

CONCLUSIONS

It is the summary of the results of the study and discussion. It is suggested to highlight the novelty as well as the breakthrough of the study. Recommendation may also be expressed in this section [Times New Roman – 11 – normal].

This research reviews journal articles whose themes are related to the keyword digital marketing SMEs. Articles were collected from the Scopus data base by PoP software and then there were 161 articles that were filtered again into 101 articles based on relevant keywords from 2016 to 2022. To meet the objectives of this study, all collected articles are classified by author, year of publication, and keywords. In this study, it was concluded that the authors who studied digital marketing in SMEs are still small, the gap in this study shows that digital marketing research in SMEs is very important to be studied and overall will increase from year to year to solve various problems related to the development of SMEs. Subsequent research is recommended to use a larger sample by expanding the keywords used and a more accessible database. Can also use comparisons of the results of different bibliometric analyses (such as

BibExcel and HistCite). It is recommended that further related research provide a more detailed explanation because there is still limited research that discusses digital marketing in MSMEs.

REFERENCES

- Arianto, B. (2020) ‘Pengembangan UMKM Digital di Masa Pandemi Covid-19’, *ATRABIS: Jurnal Administrasi Bisnis*, 6(2). Available at: <https://doi.org/10.38204/atrabis.v6i2.512>.
- Arifqi, Moh.M. and Junaedi, D. (2021) ‘Pemulihan Perekonomian Indonesia Melalui Digitalisasi UMKM Berbasis Syariah di Masa Pandemi Covid-19’. Available at: <https://doi.org/10.47467/alkharaj.v3i1.311>.
- Baneyx, A. (2008) ‘“Publish or Perish” as citation metrics used to analyze scientific output in the humanities: International case studies in economics, geography, social sciences, philosophy, and history’, *Archivum Immunologiae et Therapiae Experimentalis*, 56(6), pp. 363–371. Available at: <https://doi.org/10.1007/s00005-008-0043-0>.
- Dwijayanti, A. and Pramesti, P. (2021) *Pemanfaatan Strategi Pemasaran Digital menggunakan E-Commerce dalam mempertahankan Bisnis UMKM Pempek4Beradek di masa Pandemi Covid-19*.
- van Eck, N.J. and Waltman, L. (2010) ‘Software survey: VOSviewer, a computer program for bibliometric mapping’, *Scientometrics*, 84(2), pp. 523–538. Available at: <https://doi.org/10.1007/S11192-009-0146-3>.
- Hartarto, A. (2021) *Pemerintah Terus Perkuat UMKM Melalui Berbagai Bentuk Bantuan*, <https://www.kemenkeu.go.id>. Available at: <https://www.kemenkeu.go.id/publikasi/berita/pemerintah-terus-perkuat-umkm-melalui-berbagai-bentuk-bantuan> (Accessed: 29 January 2022).
- Kemp, S. (2022) *Reports digital 2022 indonesia, WE ARE SOCIAL*. Available at: <https://datareportal.com/reports/digital-2022-indonesia> (Accessed: 30 June 2022).
- Klapka, O. and Slaby, A. (2018) ‘Visual Analysis of Search Results in Scopus Database’, in, pp. 340–343. Available at: https://doi.org/10.1007/978-3-030-00066-0_36.
- Malesev, S. and Cherry, M. (2021) ‘Digital and Social Media Marketing - Growing Market Share for Construction SMEs’, *Construction Economics and Building*, 21(1), pp. 65–82. Available at: <https://doi.org/10.5130/AJCEB.v21i1.7521>.
- Merigó, J.M. *et al.* (2016) ‘Academic research in innovation: a country analysis’, *Scientometrics*, 108(2), pp. 559–593. Available at: <https://doi.org/10.1007/s11192-016-1984-4>.

- Nalini, S.N.L. (2021) ‘Dampak Dampak covid-19 terhadap Usaha Mikro, Kecil dan Menengah’, *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(1), pp. 662–669. Available at: <https://doi.org/10.36778/jesya.v4i1.278>.
- Nur, M. *et al.* (2020) ‘Low Carbon Education: A Review and Bibliometric Analysis’, *European Journal of Educational Research*, 9(1), pp. 319–329. Available at: <https://doi.org/10.12973/eu-jer.9.1.319>.
- Rosita, R. (2020) ‘PENGARUH PANDEMI COVID-19 TERHADAP UMKM DI INDONESIA’, *JURNAL LENTERA BISNIS*, 9(2), p. 109. Available at: <https://doi.org/10.34127/jrlab.v9i2.380>.
- Sarfiah, S., Atmaja, H. and Verawati, D. (2019) ‘UMKM Sebagai Pilar Membangun Ekonomi Bangsa’, *Jurnal REP (Riset Ekonomi Pembangunan)*, 4(2), pp. 1–189. Available at: <https://doi.org/10.31002/rep.v4i2.1952>.
- Saura, J.R., Ribeiro-Soriano, D. and Palacios-Marqués, D. (2021) ‘Setting B2B digital marketing in artificial intelligence-based CRMs: A review and directions for future research’, *Industrial Marketing Management*, 98, pp. 161–178. Available at: <https://doi.org/https://doi.org/10.1016/j.indmarman.2021.08.006>.
- Shukla, N. *et al.* (2020) ‘Half a century of computer methods and programs in biomedicine: A bibliometric analysis from 1970 to 2017’, *Computer Methods and Programs in Biomedicine*, 183, p. 105075. Available at: <https://doi.org/10.1016/j.cmpb.2019.105075>.
- Srijani, K.N. (2020) ‘Peran UMKM (Usaha Mikro Kecil Menengah) Dalam Meningkatkan Kesejahteraan Masyarakat’, *EQUILIBRIUM: Jurnal Ilmiah Ekonomi dan Pembelajarannya*, 8(2), p. 191. Available at: <https://doi.org/10.25273/equilibrium.v8i2.7118>.
- Sugiri, D. (2020) ‘Menyelamatkan Usaha Mikro, Kecil dan Menengah dari Dampak Pandemi Covid-19’, *Fokus Bisnis : Media Pengkajian Manajemen dan Akuntansi*, 19(1), pp. 76–86. Available at: <https://doi.org/10.32639/fokusbisnis.v19i1.575>.
- Xie, L. *et al.* (2020) ‘Bibliometric and Visualized Analysis of Scientific Publications on Atlantoaxial Spine Surgery Based on Web of Science and VOSviewer’, *World Neurosurgery*, 137, pp. 435–442.e4. Available at: <https://doi.org/10.1016/j.wneu.2020.01.171>.