

OVERVIEW OF HALAL FOOD SMEs: A BIBLIOMETRIC ANALYSIS

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Abstract

The increasing demand for halal food encourages the need to increase the potential of halal food SMEs in the global halal industry competition. This paper aims to reduce research articles related to halal food SMEs. The data used are articles from the Scopus database for 2014-2023. Data were analyzed using bibliometrics with the VOSviewer application displayed in graphical form. The results of the study show that in the last 10 years, researchers have received positive attention to the study of halal food SMEs. Based on the co-authorship criteria, three groups of writers were obtained. While the co-occurrence criteria used 69 keywords, nine clusters were obtained. The nine clusters are halal food, halal food industry, SMEs, food, logistics, halal, business, performance and halal food certification.

Keywords: Halal Food, SMEs, Bibliometrics, VOSviewer, Scopus, Entrepreneur

INTRODUCTION

Small and Medium Enterprises are trading businesses that refer to productive economic businesses. SMEs can be managed by individuals or business entities. In recent years, SMEs have experienced positive developments. This can be seen from the increasing proportion of channeling of financing to SMEs by banks (Fadhli Nursal et al., 2019; Untari, 2023). Not a few governments in various countries have issued regulations that are considered to have provided wider space for SMEs to continue to develop.

The halal industry is currently developing very rapidly and has become a trend in various countries. The State of the Global Islamic Economy Report estimates that the world's Muslims who spend their money on the halal industry will continue to increase to reach US \$ 2.8 trillion by 2025 (Dinar Standard, 2021). The sizeable Muslim population and increasing public awareness of the consumption of halal products have also encouraged the development of the halal industry, including the small and medium enterprises (SMEs) sector of halal food. So that the potential of halal food SMEs needs to be increased in the global halal industry competition.



The development of halal food SMEs is believed to be able to drive the country's economy. Previous studies stated that the development of halal food SMEs has the potential to boost the economy (Siregar & Razali, 2022; Azmi et al., 2018; Kamisah et al., 2018). Product halal certification for halal food SMEs has guaranteed product halalness for consumers. Product halal certification has now become a consumer need to ensure that the product is truly halal, clean, and safe for consumption (Suharko et al., 2018; Othman et al., 2016). This makes halal food SMEs even more attractive to Muslim consumers.

The author's research found that the development of halal food SMEs in the halal industry was also followed by the development of publications related to halal food SMEs. Elias et al., (2019) in his research stated that the business performance of halal food SMEs was getting better. However, the characteristics of religiosity practiced in the management of UKM halal food are not the main factor driving UKM performance. Deku et al., (2022) added that the Entrepreneurial Marketing Dimension (EMD) innovation as an alternative marketing approach has a significant effect on the performance of halal food SMEs.

However, the authors have not found research that specifically uses the bibliometric method to study halal food SMEs. The focus of previous research studies related to halal food SMEs is on the performance of halal SMEs, the application of halal traceability in MSEs, the implementation of halal in food SMEs, the halal food supply chain, and halal logistics services in SMEs. Penelitian-penelitian tersebut diantaranya oleh Giyanti et al., (2021), Elias et al., (2019), Khairuddin et al., (2020), Sapry & Yusof, (2019), Elias et al., (2018), Kamarulzaman et al., (2022), Muhamad et al., (2020), Giyanti et al., (2021), Azmi et al., (2018), dan Mahidin et al., (2019).

Therefore, a bibliometric analysis was carried out on the development of halal food SMEs. In this paper, bibliometric analysis is presented in data related to journals that publish articles related to halal food SMEs. In addition, data related to the author, year of publication, and keywords are also presented. Then analyze the development of halal food SMEs based on keyword clusters.

METHOD

This section presents the procedure for performing a bibliometric analysis. The bibliometric analysis used aims to map articles. In addition, bibliometric analysis can also provide information regarding trending research topics, the number of published articles, and research clusters related to these topics. (Tupan et al., 2020). The articles that have been collected are followed by making bibliometric maps and represented in graphical form. Both of these are the main aspects of conducting bibliometric analysis (Boyack et al., 2005; Kusmayadi et al., 2021). The first stage is to collect articles or

documents that match the search keywords. Then review the bibliography of articles that have been collected before to add references and data that are more appropriate to the research topic. (Shinkafi et al., 2017).

The articles used in this paper were collected based on the selected keywords, namely “halal food SMEs” in the Scopus database. Article searches are carried out using the Publish or Perish (PoP) application. Articles published from 2014-2023 and found using these keywords were 47 articles. Furthermore, articles are evaluated based on the title, abstract conclusion, and bibliography. Some articles that are not in accordance with the topic will be deleted so that only 24 articles that are relevant to the topic of halal food SMEs remain. Furthermore, the 24 articles were analyzed bibliometrically using the VOSviewer application. The VOSviewer application is an application commonly used to visualize bibliometric networks (van Eck & Waltman, 2017).

RESULTS AND DISCUSSION

Publication Output, Journals and Citation

In this study, 24 articles discussed halal food for SMEs. The distribution of articles for each year from 2014-2023 is shown in Table 1. The most published articles in 2016 and 2020 were 4 articles each (17%), followed by 2018 and 2019 with 3 articles each (13%).

Table 1. The Number of Documents Halal Food SMEs

Years	No. of Studies
2014	2
2015	1
2016	4
2017	1
2018	3
2019	3
2020	4
2021	2
2022	2
2023	2
Total	24

Source: Author's Study, 2022



Of the 24 articles, the journal of Islamic Marketing published the most articles related to halal food SMEs with 6 articles (25%), followed by the International Journal of Supply Chain Management with 4 articles (17%) and Food Research with 3 articles (13%).

Table 2. The Most Dominant Publication of Journals

Publisher	No. of Studies
<i>Uncertain Supply Chain Management</i>	1
<i>Journal of Islamic Marketing</i>	6
<i>SEARCH Journal of Media and Communication Research</i>	1
<i>Food Research</i>	3
<i>International Journal of Supply Chain Management</i>	4
<i>International Journal of Innovative Technology and Exploring Engineering</i>	1
<i>International Journal of Mechanical Engineering and Technology</i>	1
<i>International Food Research Journal</i>	1
<i>International Journal of Production Economics</i>	1
<i>International Journal of Entrepreneurship</i>	2
<i>British Food Journal</i>	1
<i>Advances in Environmental Biology</i>	1
<i>International Journal of Economics and Management</i>	1
Total	24

Source: Author's Study, 2022

Articles related to halal food SMEs that are widely cited are the article entitled "Sustainable food production: Insights of Malaysian halal small and medium-sized enterprises" by Ali & Suleiman, (2016) with a total of 57 citations. The top five articles with the highest number of citations with the keyword "halal food SMEs" are shown in Table 3.

Table 3. Articles Based on the Most Number of Citations

Authors	Article Title	Journals	No. of Citations
(Ali & Suleiman, 2016)	<i>Sustainable food production: Insights of Malaysian halal small and medium sized enterprises</i>	<i>International Journal of Production</i>	57

		<i>Economics</i>	
(Ismail & Kuivalainen, 2015)	<i>The effect of internal capabilities and external environment on small- and medium-sized enterprises' international performance and the role of the foreign market scope: The case of the Malaysian halal food industry</i>	<i>Journal of International Entrepreneurship</i>	25
(Othman et al., 2016a)	<i>Evaluation of knowledge, halal quality assurance practices and commitment among food industries in Malaysia</i>	<i>British Food Journal</i>	24
(Hendijani Fard & Seyyed Amiri, 2018)	<i>The effect of entrepreneurial marketing on halal food SMEs performance</i>	<i>Journal of Islamic Marketing</i>	21
(Mohd Nawawi et al., 2020)	<i>The emergence of halal food industry in non-Muslim countries: a case study of Thailand</i>	<i>Journal of Islamic Marketing</i>	14

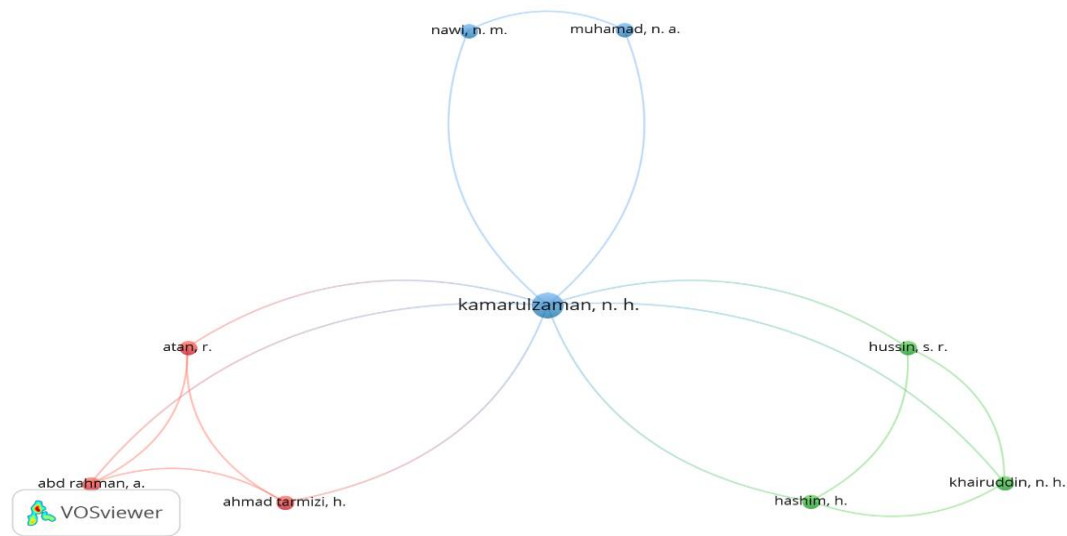
Source: Author's Study, 2022

Halal Food SMEs Bibliometric Analysis

This paper uses bibliometric analysis with the help of the VOSviewer application. The keywords used are “halal food SMEs”. The VOSviewer bibliometric results are presented in 3 visualization grid forms. The first is network visualization, the second is overlay visualization and the third is density visualization. The result of the visualization is a network based on keywords displayed with several colors and circle sizes. Each color that appears indicates a keyword cluster and the size of the circle indicates the number of times the keyword appears. Keywords that frequently appear in the document being analyzed are indicated by the size of the circle and letters that are getting bigger (Cahyani et al., 2022).

This paper uses 24 articles and a total of 59 authors. Based on co-authorship or co-authorship, there are 3 clusters of authors. The cluster consists of blue, green, and red which each consists of 3 authors. the first is blue, which consists of 3 authors: Kamarulzaman, Nawi, and Muhammad. The second green cluster consists of Hussin, Hasyim and Khairuddin. The third cluster in red consists of Atan, Abdul Rahman and Ahmad Tarmizi. The three colors that appear to form a pattern with 15 links. The distribution of co-authors is shown in Figure 1.

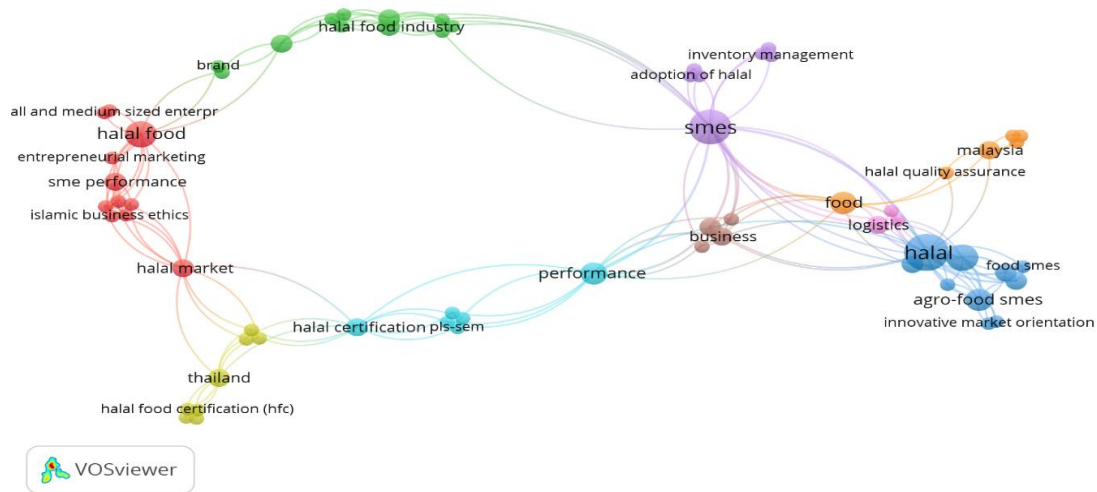




Source: Author's Study, 2022

Figure 1: Overlay Visualization Based on Co-Authorship Distribution

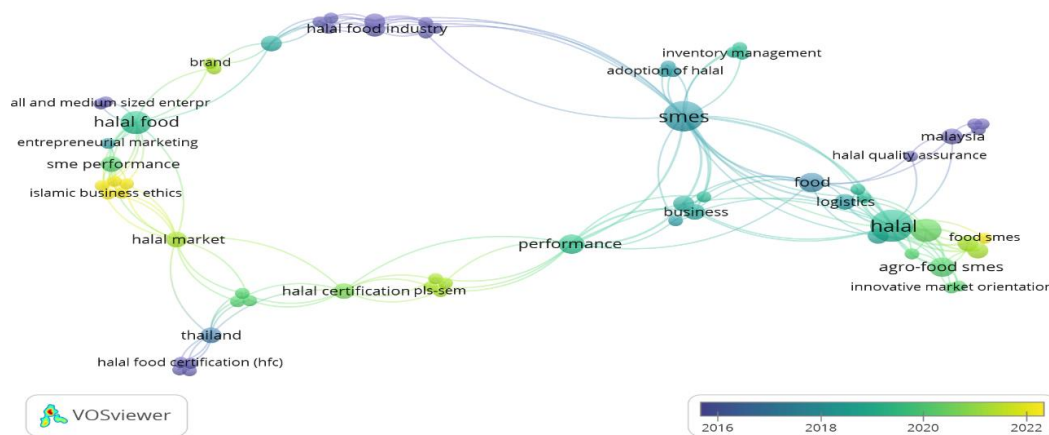
The research results based on keywords or co-occurrence can be seen in Figure 2. The keywords used in the 24 articles in this paper total 69 words. The distribution of keywords throughout the article can be seen in Figure 3. This figure shows that based on the keywords, 9 clusters were produced. The number of clusters produced by the co-authorship test consists of several different colors. The cluster consists of red (Halal Food), green (Halal Food Industry), purple (SMEs), orange (Food), pink (Logistics), dark blue (Halal), brown (Business), light blue (Performance), and yellow (Halal Food Certification). The nine colors have formed a pattern with a total of 199 links and a total of 299 links' strength.



Source: Author's Study, 2022

Figure 2: Network Visualization Based on Co-Occurance Distribution

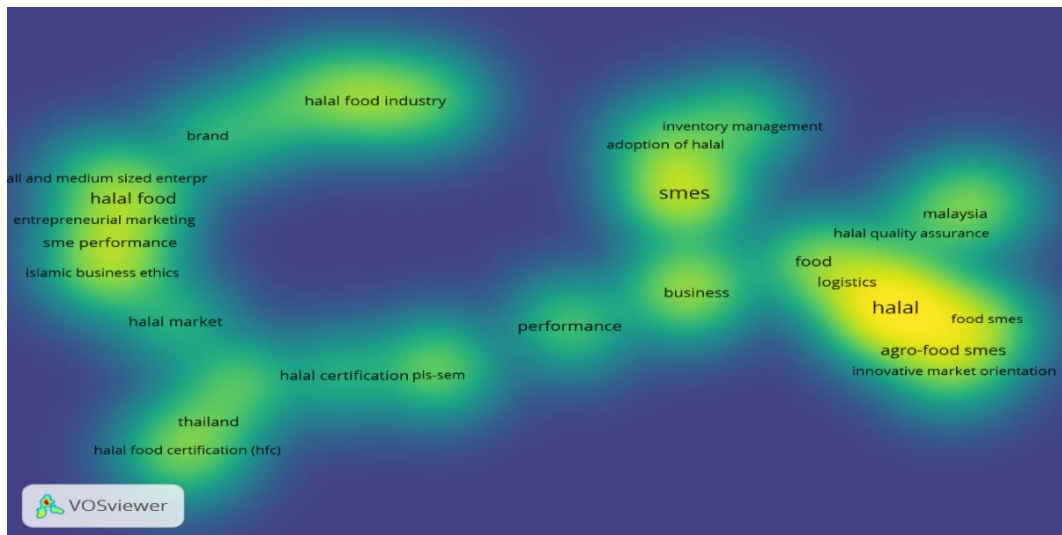
The results displayed by the Network visualization also show the frequency with which keywords appear. This can be seen from the size of the circles and letters shown in the image. Keywords that are increasingly used in research will be indicated by the size of the circle and letters that are getting bigger. Thus, the larger the circles and letters mean that many previous studies with these keywords have been carried out. Figure 3 shows the keywords that often appear, namely Halal Food, Halal Food Industry, SMEs, Food, Logistics, Halal, Business, Performance, and Halal Food Certification.



Source: Author's Study, 2022

Figure 3: Overlay Visualization Based on Co-Occurance Distribution

The distribution of keywords in the Overlay Visualization is shown in Figure 3. The Overlay Visualization shows the year the article was published based on the keywords. Articles published between 2021 and 2023 are shown in yellow. Instead, the keywords discussed in articles published in 2020 and in previous years will be displayed in a darker color. The keywords discussed in articles published in 2021 - 2023 include Food SMEs, Islamic Business Ethics, Islamic Markets, Entrepreneurial Marketing Dimes, and Traceability Systems. While the keywords discussed in articles published before 2020 and earlier include Halal, Halal Food, Halal Industry, Halal Food Industry, Halal Food Certification, SMEs, and Halal Tourism.



Source: Author's Study, 2022

Figure 4: Density Visualization Based on Co-Distribution

Figure 4 shows the distribution of keywords in the density visualization. Based on the picture, you can see the keywords that are most often used in article publications. The yellow color indicates that these keywords are widely used in published articles in the Scopus database. Based on Figure 4 can be identified research keywords whose number of publications is still limited. So that these keywords make it possible to be a topic for further research because it has a novelty from previous research.

Based on the results of the analysis above, it is known that researchers pay positive attention to the study of halal food SMEs. This can be seen from the number of articles published each year, although after that it has decreased. The keywords that are often used are in fact halal food, halal SMEs and halal food certification.

The growing halal industry has influenced various sectors. The composition of consumer spending is also affected by the development of the halal industry, especially for food consumption. Muslim spending on halal food reaches US\$1.27 billion and is predicted to continue to increase to US\$1.67 billion in 2025. Indonesia, Bangladesh, Pakistan, Egypt, and Nigeria are the five countries as the largest consumers of halal food. Spending on halal food is increasing followed by the amount of investment in the halal food industry which is also increasing. In 2021 investment in this sector has reached US\$3.97 billion (Dinar Standard, 2021).

The large halal industry market has been used by many countries to improve their country's economies. Public awareness for the consumption of halal food also has an impact on the increasing demand for halal food. This provides a more significant opportunity to encourage the potential of SMEs in the halal industry competition. Shahkat Ali et al., (2021) stated that SMEs have a role in developing the halal food industry which can encourage the socio-economic development of a country.

CONCLUSION

The results of the analysis show that articles related to halal food for SMEs experience positive developments. The most-cited article was entitled "Sustainable Food Production: Insight into Malaysian Halal Small and Medium Enterprises". Based on the keywords, nine clusters were obtained, namely halal food, halal food industry, SMEs, food, logistics, halal, business, performance, and halal food certification. The limitation of this study is only to analyze bibliometrics related to halal food for SMEs using 24 articles obtained from the Scopus database in the last 10 years. Future researchers can conduct studies related to the topic of strategies to improve halal food for SMEs and the determinants of optimizing the performance of halal food for SMEs. Finally, the academic implications of this paper can be used as a reference to find out the development of halal food SMEs. In addition, it serves as a reference in determining further research topics related to halal food for SMEs which have not been studied in previous studies.

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