



Contents lists available at [Journal IICET](#)
JPPI (Jurnal Penelitian Pendidikan Indonesia)
ISSN: 2502-8103 (Print) ISSN: 2477-8524 (Electronic)
Journal homepage: <https://jurnal.iicet.org/index.php/jppi>



A bibliometric analysis of halal cosmetics consumer behaviour in Indonesia

Mahir Pradana^{*)}, Hanifah Putri Elisa
Universitas Telkom, Bandung, Indonesia

Article Info

Article history:

Received Mar 01st, 2023
Revised Nov 10th, 2023
Accepted Jun 04th, 2024

Keyword:

Islamic marketing,
Halal literature,
Halal cosmetics

ABSTRACT

The increasing number of halal cosmetics companies in Indonesia meets consumer demand for products that comply with halal standards. Therefore, this study aims to examine the viewpoints of academics towards the literature on halal cosmetics. This research uses bibliometric analysis to examine the results and then visualize the results. This research uses the Google Scholar database, Microsoft Excel for statistical analysis, and VOSviewer, a network map generator program, for bibliometric analysis. The conclusion of this study is that in the coming years, the halal cosmetics market in Indonesia is expected to expand significantly. Increasing consumer knowledge of halal cosmetics and their advantages is the driving force. The demand for halal products is also met by the increasing number of businesses in Indonesia that sell halal cosmetics. These businesses can concentrate on creating cosmetics that are not only halal but also safe and healthy for the skin by using natural components.



© 2024 The Authors. Published by IICET.
This is an open access article under the CC BY-NC-SA license
(<https://creativecommons.org/licenses/by-nc-sa/4.0>)

Corresponding Author:

Mahir Pradana,
Universitas Telkom, Bandung, Indonesia
Email: mahir.pradana@gmail.com

Introduction

Islamic law includes the idea of halal and haram, with halal denoting permissible and legal and haram denoting unlawful (Dewi & Tarigan, 2022). The notion of Halalan-toyyiban refers to items that are declared halal, include wholesome ingredients, and pose no health hazards when utilized. The term "halal" also includes cleanliness and wholesomeness (Madiawati & Pradana, 2016). This idea of halal and haram, which applies to all facets of life, not just food, is thought to be crucial for people's bodily and spiritual wellbeing. Muslims emphasize consuming halal products because they think it affects their level of religiosity (Hashim & Mat Hashim, 2013).

The market for halal cosmetics is anticipated to reach USD 54.03 billion by 2027, expanding at a CAGR of 6.8% from 2020 to 2027. Largely Muslim nations like Indonesia are leading the way in this trend in the Asia Pacific area. According to a Grand View Research (2018) analysis, the Indonesian market for halal cosmetics is predicted to reach USD 2.71 billion by 2025, expanding at a CAGR of 15.8% from 2018 to 2025. Growing consumer knowledge of halal cosmetics and the advantages of using them is what is driving the growth. Additionally, Indonesia is home to an increasing number of halal cosmetic businesses that are meeting consumer demand for goods that adhere to halal standards (Rubiyanti, Mohaidin, & Murshid, 2022). These businesses concentrate on creating cosmetics that are not only halal but also secure and healthy for the skin and employ natural components (Madiawati & Pradana, 2016).

In addition to Muslim consumers, halal cosmetics are popular among non-Muslims as well since they are seen as having better standards for quality assurance and being produced responsibly (Hashim & Mat Hashim,

2013; Yusuf & Yajid, 2017). Ingredients from prohibited sources, such as swine, carrion, blood, human body parts, and predatory animals, among others, are not permitted in halal cosmetics. For ingredients to be considered halal, they must be derived from animals that were killed in accordance with Islamic law (Yusuf & Yajid, 2017). Halal cosmetic items must be prepared, processed, manufactured, stored, and transported under strict adherence to cleanliness and purity criteria. Halal certification is the procedure of verifying items or services as compliant with shariah law. The implementation of a Halal certification and verification system is considered essential in instilling confidence among Muslim consumers regarding the quality of Halal products (Khan & Haleem, 2016). The purpose of halal certification is similar to the purposes of the majority of quality assurance practices, including cGMP and HACCP (Hashim et al., 2013). The halal mark is therefore acknowledged as a sign of quality, safety, purity, and cleanliness for halal cosmetic items. In Indonesia, halal certification on products, including medicines, is mandatory under this JPH Law, as Article 4 emphasizes that "products that enter, circulate, and are traded in the territory of Indonesia must be halal certified" (Sholeh, 2018).

To the best of the authors' knowledge, there has been no research that specifically examines and analyzes the field of halal cosmetics in Indonesia using bibliometric methodology and network analysis, although there has been research on halal topics (Yusuf & Yajid, 2017). By reviewing the literature that has been published in the field of halal cosmetics since 2012, identifying key contributors, journals, and keywords through bibliometric analysis, and suggesting future research directions related to various subfields of halal cosmetics research, this study seeks to close this gap. By mining and auditing the footprint of an extensive literature database, this analysis aims to assess academics' viewpoints towards the literature on halal cosmetics using bibliometric analysis, where bibliometrics aims to eliminate research bias and assess research in a systematic, repeatable, and transparent manner in order to inform current and future researchers about the patterns and evolution of their field of study. The next section of this study reviews related literature to gain more insight into various halal concepts and research techniques.

Method

This study's main goal is to provide a bibliometric analysis of the body of knowledge regarding halal cosmetics research. A research technique called bibliometric analysis uses quantitative analysis and statistics to find patterns and trends in publications. This approach can also be used to get a general understanding of the subject, spot knowledge gaps, and guide future research (Donthu et al., 2021). This study makes use of Google Scholar databases, Microsoft Excel for statistical analysis, and VOSviewer, a network map-making program, for bibliometric analysis. The bibliometric analysis conducted in this study adheres to the recommendations made by Donthu et al (2021).

Step 1

Choosing the precise procedures to be employed is the first stage in the bibliometric analysis. Performance analysis and science mapping are the two main methods frequently used in bibliometric investigations, according to Donthu et al. (2021). Science mapping is used to look at the relationships between these actors while performance analysis is used to assess the contributions of different research actors to a specific subject.

Step 2

The documents' selection criteria and keywords are identified during this stage. Because Google Scholars is the largest bibliographical resource, this analysis uses the keyword "halal cosmetics" there. In this investigation, we only searched between the years of 2012 and 2023. The results were improved by removing conferences, book chapters, quick surveys, and magazine pieces. Only scientific books, papers, and reviews are evaluated by us. After duplicate data is removed, the findings show 847 pertinent documents.

Step 3

Data were examined using VOSviewer for scientific mapping and Microsoft Excel for performance analysis.

Step 4

The findings are evaluated by looking at the growth trajectory of halal cosmetics research and a list of its themes since 2012. Research gaps in halal cosmetics are given and identified.

Results and Discussions

This study reviews 847 articles related to halal cosmetics in Indonesia, during the publication period from 2012 to 2023. During this period, the most research on halal cosmetics occurred in 2021 with as many as 190 articles. In 2012 there were only 5 publications on halal cosmetics and there was an increase in the number of publications

every year from 2013 to 2021. However, in 2023 the number of publications decreased dramatically, only 6 publications on halal cosmetics in Indonesia (Table 1).

Table 1. Number of Paper

Year	Number of Paper
2012	5
2013	10
2014	10
2015	15
2016	28
2017	53
2018	84
2019	120
2020	140
2021	190
2022	186
2023	6
Total	847

Figure 2 below shows the tendency for the number of articles to continue to increase every year, but there has been a decline in 2022, and the peak of the most published articles occurred in 2021, namely 190 articles about halal cosmetics in Indonesia. Our data is still temporary because 2023 will not be completed until December 2023, so it is still possible to add and add to the collection of papers in this research.

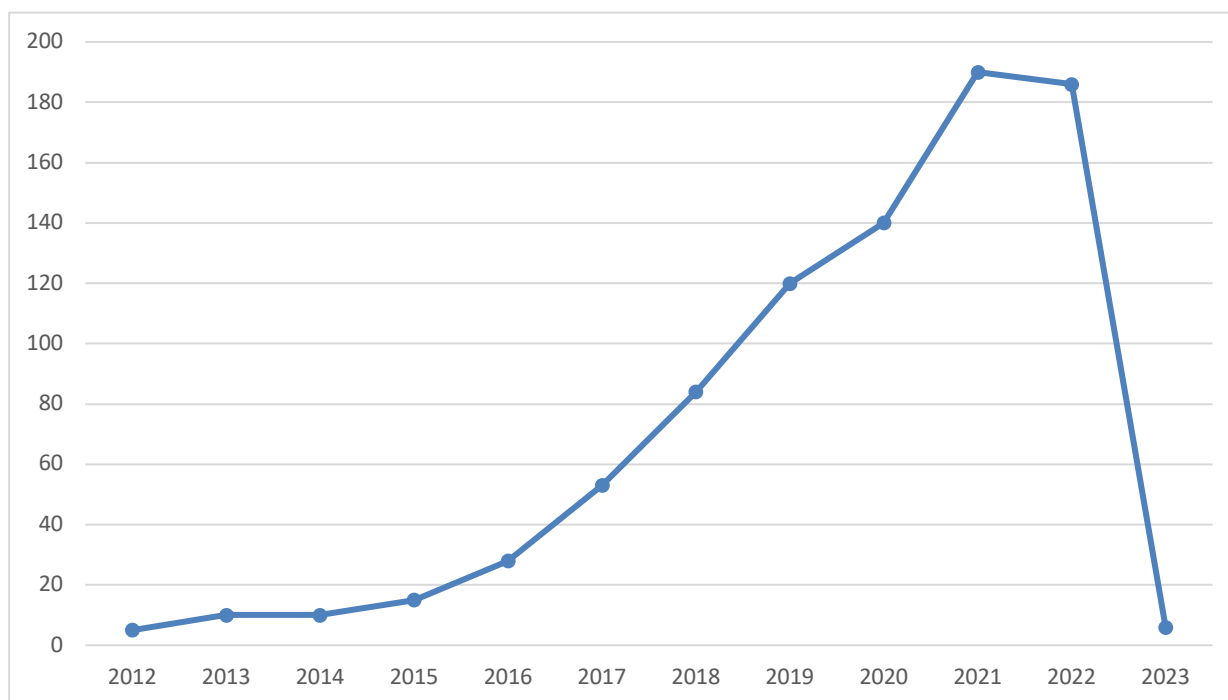


Figure 2. Number of Paper

This study intends to investigate the halal cosmetics in Indonesia in greater detail, sources from Google Scholar database. In this study, the co-authorship, co-accuracy, and citations were presented as three different features of the data analysis using VOSviewer. The explanation that follows shows the findings of the analysis that was done.

Co-Authorship

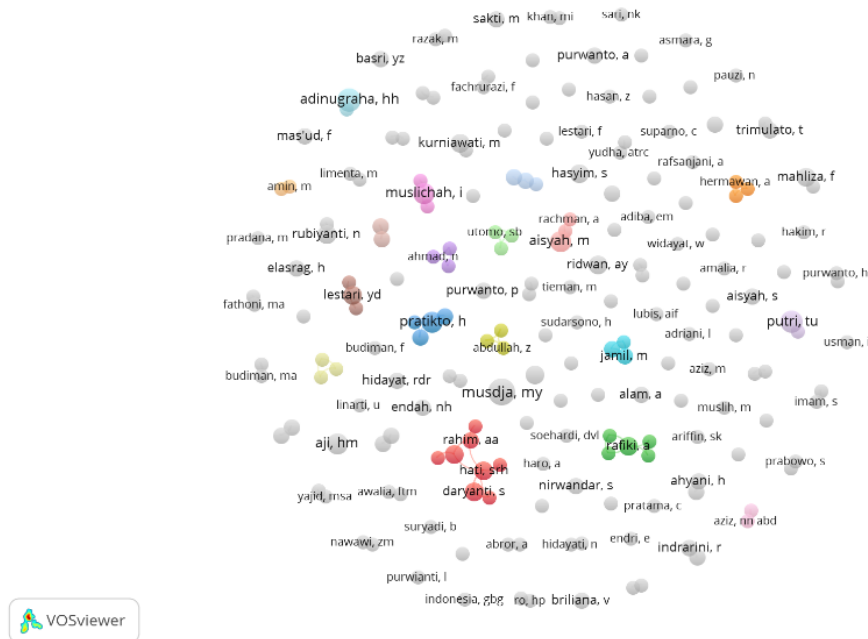


Figure 3. Co-Authorship

Figure 3 has been presented regarding the authors who have a connected network. In Figure 3 the authors take the theme related to halal cosmetics in Indonesia, there are still a few authors who are related to each other, so it is hoped that in the future more researchers will collaborate to obtain higher quality research results.

Co-accuracy

The author used a co-occurrence analysis kind of term and retrieved 302 keywords using the full counting approach with a minimum of 2 co-occurrence. The frequency of words used in articles is displayed using the co-occurrence analysis of keywords (Gaviria-Marin, Merigo, & Popa, 2018). Figure 3 display of the co-occurrence data for keywords demonstrates this.

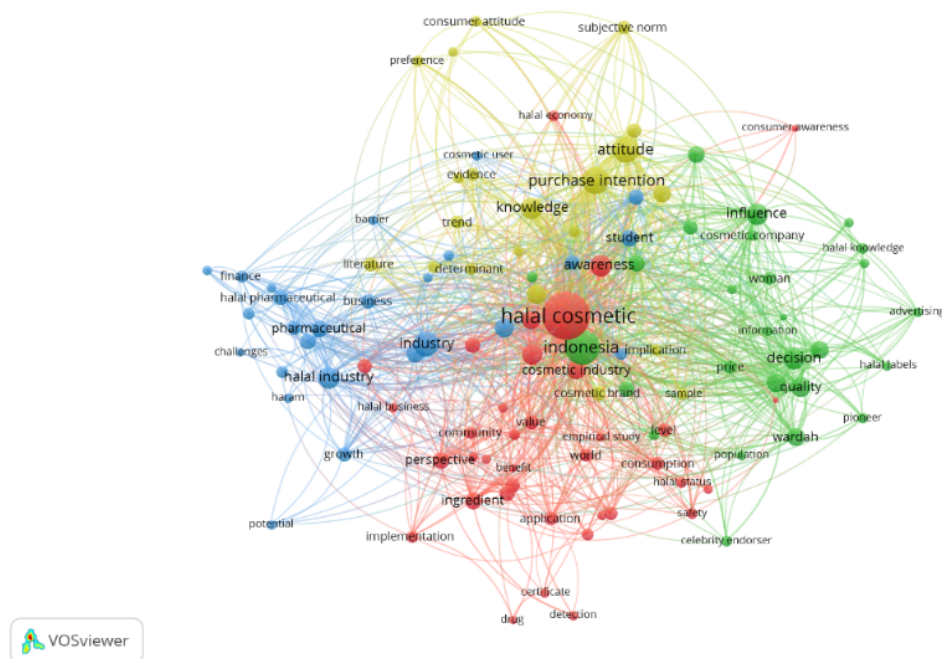


Figure 4. Co-Accurrence (Keywords)

Based on the circle size, Figure 4 is used to determine which terms are used frequently. An overview of the structure in the halal cosmetic research subjects is provided by the combined mapping and grouping in Figure 4. Different colors are used to symbolize each group, indicating their differences in importance, affinity, and relatedness. This means that 'the density of elements increases with the number of nearby elements and decreases with the distance between them and the point of interest' (Van Eck & Waltman, 2010). The terms that appear most frequently are 'halal cosmetic' 'Indonesia' and 'purchase intention', according to the co-occurrence analysis (co-occurrence keywords) shown in Figure 4. Given these findings, which indicates a significant correlation between halal cosmetic in Indonesia and purchase intention.

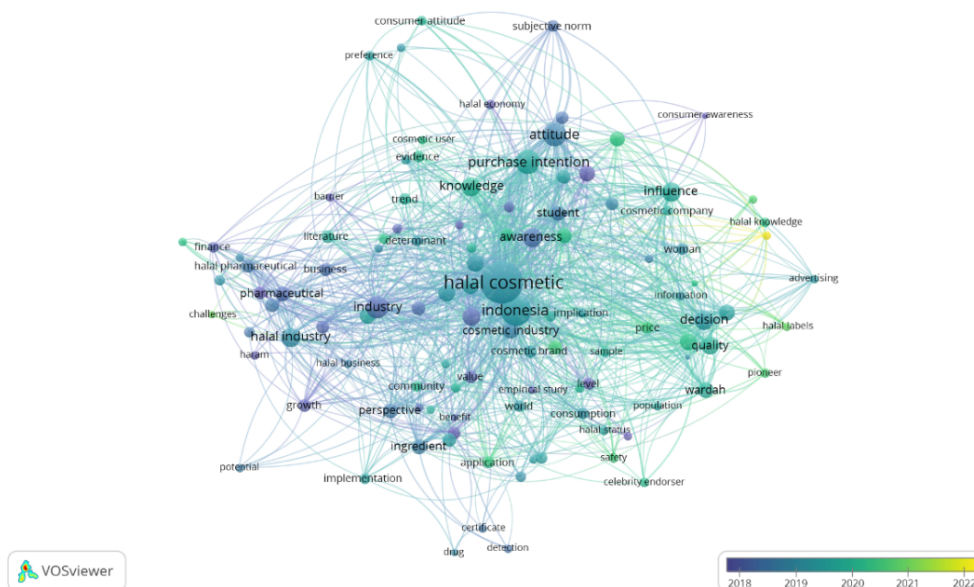


Figure 5. Overlay Visualization Co-Accurance (Keywords)

The visualization overlay in Figure 5 can illustrate the extent to which keywords are growing from year to year, the more yellow the cluster means the newer the research. From Figure 5 it can be seen that the development of keywords in recent years has decreased, this can be seen in most of the keywords appearing in blue, indicating that keywords have developed a lot since before 2021. Keywords in yellow are almost invisible. These findings can be used as input for further research to further develop keywords related to halal cosmetics in Indonesia.

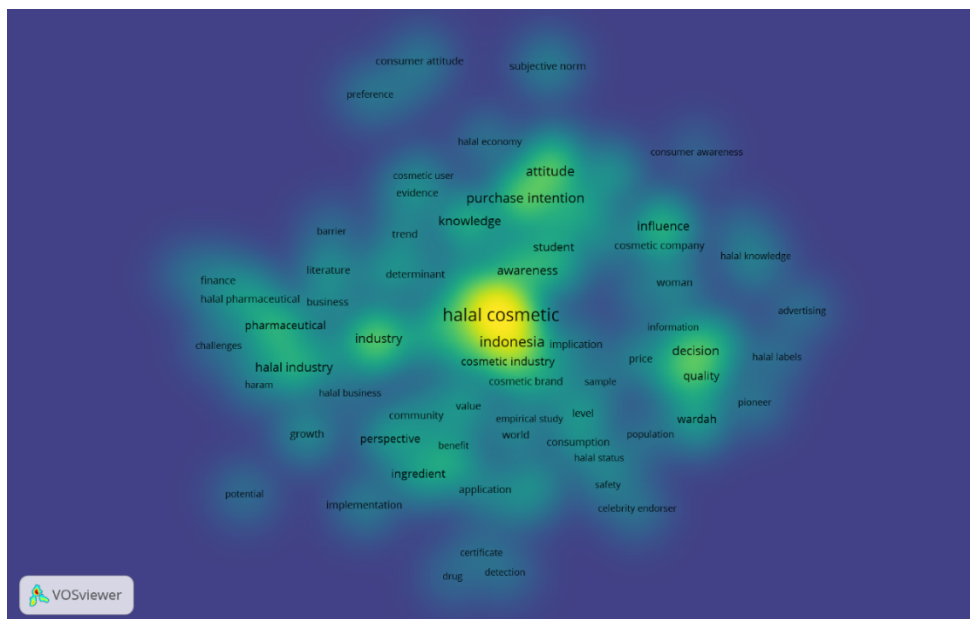


Figure 6. Density Visualization Co-Accurance (Keywords)

Figure 6 shows the density of related terms as well as the number of nodes that are close to one another (Amier & Pradana, 2022). Yellow nodes that represent the level of saturation show the number of frequently occurring phrases. The yellow node, where the keyword "halal cosmetic" most frequently appears, shows that this topic is the most thoroughly researched. Subjects like "knowledge," "benefit," and "trend" are different from those on the green node. If a node is green, it means that little research has been done on that subject. Based on the size of the yellow nodes, which suggest a frequently occurring issue, the editor will assess this subject to see if it is still relevant to the discipline mentioned by the reviewer. The review's outcomes won't be ideal, especially in terms of substance, if each reviewer's scholarly interests are not adequate. The inclusion of this topic gives editors evaluative information they may use to help the journal focus and become more specialized. Additionally, the editors choose Editors and Reviewers whose scientific specialization matches the issue shown in Figure 6 on the basis of this density visualization. According to the 2018 Scientific Journal Accreditation Guidelines, journals with the most specialized or superspecialized scope will receive the highest rating when requesting for national accreditation (Kemenristekdikti, 2018).

Citation

The analysis was used to determine which articles had the greatest influence on halal cosmetics in Indonesia. Table 2 provides further detail on the top 10 cited on the topic of halal cosmetics.

Table 2. Top Citations

Ranking	Citation	Tittle	Author	Year
1	791	Intention to choose Halal products: the role of religiosity	(Mukhtar & Butt, 2012)	2012
2	504	Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention	(Abd Rahman, Asrarhaghighi, & Ab Rahman, 2015)	2015
3	178	Exploring antecedents and consequences of Indonesian Muslim youths' attitude towards halal cosmetic products: A case study in Jakarta	(Briliana & Mursito, 2017)	2017
4	145	A new look at faith-based marketing: The global halal market	(Izberk-Bilgin & Nakata, 2016)	2016
5	141	Personal intrinsic religiosity and product knowledge on halal product purchase intention: Role of halal product awareness	(Nurhayati & Hendar, 2020)	2020
6	140	Factors influencing attitude towards halal cosmetic among young adult Urban Muslim women: A focus group analysis	(Musa, 2014)	2012
7	140	Halal industry: Key challenges and opportunities	(Elasrag, 2016)	2016
8	116	Understanding "Halal" and "Halal Certification & Accreditation System"-A Brief Review	(Khan & Haleem, 2016)	2016
9	115	Building holistic brands: an exploratory study of Halal cosmetics	(Aoun & Tournois, 2015)	2015
10	115	A review of cosmetic and personal care products: Halal perspective and detection of ingredient	(Hashim & Mat Hashim, 2013)	2013

The top 10 most-cited articles are listed in Table 2 from the time of their publication until the drafting of this work. Papers published in 2016 account for the majority of citations. Table 2 shows that the article with the greatest number of citations was "Intention to choose Halal products: the role of religiosity," published by Mukhtar & Butt (2012), and it received 791 citations in total. The goal of Mukhtar & Butt (2012) research is to examine how Muslim attitudes and views concerning halal products, as well as societal norms and religion, affect consumers' intentions to buy these goods. This is especially important in multicultural communities because there is a greater awareness of and concern for whether or not a product is legal under Islamic law. However, as worldwide businesses that make food, cosmetics, and pharmaceutical products, it has repercussions for the expansion of global trade. Research Mukhtar & Butt (2012) appeared in Volume 3 of the Journal of Islamic Marketing. A journal's reputation depends on its number of citations because it enables one to assess the journal's impact on scientific advancement (Di Bitetti & Ferreras, 2017). The factors that influence citations in the text must be taken into consideration by journal management because the number of citations

is also a good indicator of an article's quality (Bai, Zhang, & Lee, 2019). The journal administration must do a desk review as soon as possible to identify whether the submitted paper has the potential to be cited in other articles after it is published online. The essential emphasis and breadth of the magazine cannot in any way be separated from this.

Numerous past research have examined or made predictions about potential future citation patterns. Machine learning approaches have been used in numerous studies, including Gradient Boosting Decision Tree (Sandulescu & Chiru, 2016), Support Vector Machine (Adankon, Cheriet, & Biem, 2009), and XGBoost (Chen & Guestrin, 2016). In a number of citation prediction studies, generative models have been used to represent the notion that works published for longer periods of time often gain more citations (Newman, 2009). The authors who have contributed to publishing their papers on the subject of halal cosmetics in Indonesia are also classified according to the reviewed papers; table 3 lists the authors who have been the most productive.

Table 3. Top Authors

Author	Number of Paper
Hasyim, S	3
Masood, A	2

According to the aforementioned table, there are two authors who each wrote three papers and had two titles on the topic of halal cosmetics published. Three papers were written by the best writer, Hasyim S., and one of them was titled "Becoming a Global Halal Hub: Is Indonesia Ready? The politics of "halal": From cultural to structural shariatization in Indonesia are two topics covered in the articles "Halal concerns, ijtiid, and fatwa-making in Indonesia and Malaysia." "Identifying Growth Constraints in Halal Cosmetics Ecosystem and Adapting to New Norms" and "Empowerment of SME's Sustainability in Halal Cosmetics' Ecosystem by Diagnosing Growth Constraints" are the titles of two papers written by Masood, A., the second-place writer.

Understanding halal cosmetics in Indonesia is crucial for the development and growth of the sector. Around 209.1 million people, or 87.2% of Indonesia's total population, identify themselves as Muslims, making Indonesia the country with the largest Muslim population in the world (Mubarak & Imam, 2020). There are currently 1.3 billion Muslims in the world, or 13.1% of the total population. The projected increase in the Muslim population from 1.6 billion in 2010 to 2.2 billion in 2030 (Mubarak & Imam, 2020) reflects the global commercial potential of halal businesses. The Islamic economy also received USD 218.8 billion in spending from Indonesia in 2017. Based on these figures, Indonesia has the potential ability to become the country with the largest share of the global halal market.

Regulations for halal certification, customer opinions and preferences, industry trends and opportunities, and studies on the efficacy and safety of halal cosmetics are all included in this information. In this scenario, the government should step in. An rise in halal certification is needed to back up this initiative, as are efforts from the industry to prioritize customer pleasure and trust in order to grow market share and remain competitive (Nasution, 2020).

In Indonesia, the advantages of halal cosmetics include conforming to the nation's cultural and religious norms and being more appealing to non-Muslim customers who view them as ethically produced and having a better degree of quality assurance. Indonesia's halal cosmetics market is expected to expand significantly in the coming years due to rising consumer awareness and an increase in businesses selling sharia-compliant goods. These businesses place a high value on using natural ingredients and creating skin-safe cosmetics. The possibility or willingness of customers to purchase these goods is referred to as their purchasing intention for halal cosmetics. Consumer faith in the halal certification process, product quality and safety, consumer perceptions and attitudes, and brand reputation are all factors that affect purchase intention. Companies in the halal cosmetics sector can more successfully sell and create their products by being aware of these characteristics.

Conclusions

Co-authorship, co-occurrence, and citation are the three crucial components in this study that were determined utilizing a bibliometric analytical strategy. These papers were located in the Google Scholar database between the years of publication 2012 and 2023. All studies that were redundant, irrelevant, whose keywords weren't in the abstract or title, or that weren't the right kind of paper, were excluded (for example, book chapters). 847 articles were derived from the clauses that were subject to keyword and other restrictions. In the upcoming years, Indonesia's market for halal cosmetics is anticipated to expand significantly. Increased consumer knowledge of halal cosmetics and their advantages is what is driving this. The demand for halal products is also being satisfied by an increasing number of businesses in Indonesia that sell halal cosmetics. These businesses can concentrate

on creating cosmetics that are not only halal but also secure and healthy for the skin by using natural components.

Future studies in this field should concentrate on using bibliometrics and tissue analysis to review and assess the Indonesian halal cosmetics industry. This will identify important contributing authors, journals, and keywords as well as vital information on the trends and development of the area. The effectiveness and safety of these goods, as well as consumer attitudes and purchase intentions regarding halal cosmetics, might all be studied. It's crucial to comprehend studies on the standardization of halal cosmetics as well as the difficulties the sector faces in Indonesia, such as a lack of customer awareness and education.

References

- Abd Rahman, Azmawani, Asrarhaghighi, Ebrahim, & Ab Rahman, Suhaimi. (2015). Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, 6(1), 148–163.
- Adankon, Mathias M., Cheriet, Mohamed, & Biem, Alain. (2009). Semisupervised least squares support vector machine. *IEEE Transactions on Neural Networks*, 20(12), 1858–1870.
- Aoun, Isabelle, & Tournois, Laurent. (2015). Building holistic brands: an exploratory study of Halal cosmetics. *Journal of Islamic Marketing*, 6(1), 109–132.
- Bai, Xiaomei, Zhang, Fuli, & Lee, Ivan. (2019). Predicting the citations of scholarly paper. *Journal of Informetrics*, 13(1), 407–418.
- Briliana, Vita, & Mursito, Nurwanti. (2017). Exploring antecedents and consequences of Indonesian Muslim youths' attitude towards halal cosmetic products: A case study in Jakarta. *Asia Pacific Management Review*, 22(4), 176–184.
- Chen, Tianqi, & Guestrin, Carlos. (2016). Xgboost: A scalable tree boosting system. *Proceedings of the 22nd Acm Sigkdd International Conference on Knowledge Discovery and Data Mining*, 785–794.
- Dewi, Almira Kemala, & Tarigan, Tetty Marlina. (2022). Analisis Hukum Standar Akreditasi Terhadap Sertifikat Halal Luar Negeri Perspektif Fatwa MUI Nomor 4 Tahun 2003 Tentang Standardisasi Fatwa Halal. *Al-Manhaj: Jurnal Hukum Dan Pranata Sosial Islam*, 4(2), 631–640.
- Di Bitetti, Mario S., & Ferreras, Julián A. (2017). Publish (in English) or perish: The effect on citation rate of using languages other than English in scientific publications. *Ambio*, 46, 121–127.
- Elasrag, Hussein. (2016). *Halal industry: Key challenges and opportunities*. Hussein Elasrag.
- Gaviria-Marin, Magaly, Merigo, Jose M., & Popa, Simona. (2018). Twenty years of the Journal of Knowledge Management: A bibliometric analysis. *Journal of Knowledge Management*, 22(8), 1655–1687.
- Hashim, Puziah, & Mat Hashim, D. (2013). A review of cosmetic and personal care products: Halal perspective and detection of ingredient. *Pertanika Journals of Science and Technology*, 21(2), 281–292.
- Izberk-Bilgin, Elif, & Nakata, Cheryl C. (2016). A new look at faith-based marketing: The global halal market. *Business Horizons*, 59(3), 285–292.
- Kemenristekdikti. (2018). *Pedoman Akreditasi Jurnal Ilmiah 2018*. Direktorat Jenderal Penguatan Riset dan Pengembangan Kementerian Riset, Teknologi, dan Pendidikan Tinggi.
- Khan, Mohd Imran, & Haleem, Abid. (2016). Understanding “halal” and “halal certification & accreditation system”-a brief review. *Saudi Journal of Business and Management Studies*, 1(1), 32–42.
- Madiawati, Putu N., & Pradana, Mahir. (2016). The appeal of celebrity endorsers and halal certificates on customers' buying interest. *Madiawati, PN, & Pradana, M. (2016). The Appeal of Celebrity Endorsers and Halal Certificates on Customers' Buying Interest. Journal of Administrative and Business Studies*, 1(1), 28–34.
- Mubarok, Ferry Khusnul, & Imam, Muhammad Khoirul. (2020). Halal industry in Indonesia; challenges and opportunities. *Journal of Digital Marketing and Halal Industry*, 2(1), 55–64.
- Mukhtar, Arshia, & Butt, Muhammad Mohsin. (2012). Intention to choose Halal products: the role of religiosity. *Journal of Islamic Marketing*, 3(2), 108–120.
- Musa, Rosidah. (2014). Factors influencing attitude towards halal cosmetic among young adult Urban Muslim women: A focus group analysis. *Procedia-Social and Behavioral Sciences*, 130, 129–134.
- Nasution, Lokot Zein. (2020). Penguatan Industri Halal bagi Daya Saing Wilayah: Tantangan dan Agenda Kebijakan. *Journal of Regional Economics Indonesia*, 1(2), 33–57.
- Newman, Mark E. J. (2009). The first-mover advantage in scientific publication. *Europhysics Letters*, 86(6), 68001.
- Nurhayati, Tatiek, & Hendar, Hendar. (2020). Personal intrinsic religiosity and product knowledge on halal product purchase intention: Role of halal product awareness. *Journal of Islamic Marketing*, 11(3), 603–620.
- Research, Grand View. (2018). Halal cosmetics market in Indonesia: Industry trends, share, size, growth, opportunity, and forecast 2018-2025. Retrieved from Grand View Research website: <https://www.grandviewresearch.com/industry-analysis/indonesia-halal-cosmetics-market>

-
- Rubiyanti, Nurafni, Mohaidin, Zurina, & Murshid, Mohsen Ali. (2022). Purchasing Behaviour: Mediating Roles of Brand Personality and Religiosity in the Purchase of Halal Cosmetics. *Global Journal Al-Thaqafah (Special Issue)*, 113–120.
- Sandulescu, Vlad, & Chiru, Mihai. (2016). Predicting the future relevance of research institutions-The winning solution of the KDD Cup 2016. *ArXiv Preprint ArXiv:1609.02728*.
- Sholeh, Asrorun Ni'am. (2018). Jaminan halal pada produk obat: kajian fatwa mui dan penerapannya dalam uu jaminan produk halal. *Journal of Islamic Law Studies*, 1(1), 70–87.
- Van Eck, Nees, & Waltman, Ludo. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- Yusuf, Eddy, & Yajid, Mohd Shukri Ab. (2017). Related topic: Halal cosmetics. *Skin Permeation and Disposition of Therapeutic and Cosmeceutical Compounds*, 101–107.