

Analyzing the Challenges, Options, and Implementation Strategies for Halal Supply Chain Management in Indonesian Cosmetics Sector Companies: A Literature Analysis

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Abstract: The halal industry's prospects are improving year after year, mirroring the growth of the Muslim population, which is increasing year after year. The halalness of a product is a must for consumers, particularly Muslim consumers. Beginning with food and beverages, fashion, tourism, medicines, cosmetics, media, and so on. The halal cosmetics industry is one of the halal industries that is currently developing. The cosmetics industry is also expanding in Indonesia, and it is now one of the industrial sectors the government focuses on. This is demonstrated by the cosmetic industry being designated as a mainstay sector by the Ministry of Industry of the Republic of Indonesia in the 2015-2035 National Industrial Development Master Plan (RIPN). However, the government's role in developing infrastructure and facilities to implement Halal Supply Chain Management, such as in the cosmetics sector, remains limited. This research aims to identify the barriers to implementing Halal Supply Chain Management in Indonesian cosmetics companies. This study employs a qualitative approach in conjunction with a literature review method. Process, packaging, warehousing, transportation, fundamentals, policy, and technology are all barriers to Halal Supply Chain Management in the Halal Cosmetics sector. While the solution is being developed, warehousing, transportation, fundamentals, and technology are being implemented. Finally, strategy can be found in transportation, fundamentals, and technology.

Keywords: Halal Cosmetics, Halal Supply Chain Management, Halal Cosmetics, Literature Analysis

INTRODUCTION

The proportion of the world's Muslim population continues to grow from year to year as well as the proportion of the Muslim population in Indonesia, which is the country with the largest Muslim population worldwide. Based on data from The Royal Islamic Strategic Studies Center (RISSC) or MABDA in its report entitled "The Muslim 500" in 2020 (The Royal Islamic Strategic Studies Centre, 2020). The total Muslim population in Indonesia is 87.2% of the total population in Indonesia. The proportion of the Muslim population in Indonesia reaches 11.92% of the total world Muslim population, which is 1.93 million people, this number is estimated to reach 22% of the total world population which is estimated to reach 8.94 million people. As a Muslim who lives in the largest Muslim country in the world, of course, you need to pay attention to the halal element of the products you consume.

The halalness of a product is a mandatory requirement for every consumer, especially Muslim consumers. Starting from food and beverage products, fashion, tourism, medicines, cosmetics, media and others (Charity, 2017). The halal concept associates the concept of "Toyyib" which means good. Halal means liberating, releasing, breaking and allowing. Although, in relation to sharia law, it means that the law is based on Islamic law, the word "halal" has two meanings. First, it shows that the word halal concerns the permissibility of using objects or anything that is used to fulfill physical needs, including food, drink, medicine. Second, concerning the permissibility of using, eating, drinking and doing something, all of which are determined based on Islamic law.

The halal industry is currently a world trend. This is evidenced by the prospect of the halal industry which continues to grow yearly.

In the Muslim fashion sector, Indonesia is the third consumer in the world with total consumption reaching \$6 billion. Indonesia's Muslim-friendly tourism sector occupies the sixth position with total consumption reaching \$11.2 billion. Indonesia's pharmaceutical and cosmetic (pharm & cosmetics) sector ranks sixth and second with total expenditures of \$5.4 billion and \$4 billion, respectively. The halal industry also contributes to the national economy, as evidenced by the increasing market share of the halal sector to GDP, which was 24.3% in 2016 and is expected to increase by 1.86% to 24.86% in 2020. Indonesia is referred to as the embodiment of from the world halal industry market.

According to a report from the State of The Global Islamic Report in 2020/2021, Muslim consumer spending on cosmetic products has increased, in 2019 Muslim consumer spending on cosmetic products of \$66 billion grew 3.4% from 2018. As a result of the impact of the Covid-19 pandemic, it is estimated Muslim consumer spending on cosmetic products will decline by 2.5% to reach \$64 billion. However, Muslim consumer spending is expected to grow to \$76 billion in 2024 with a 5-year Compound Annual Growth Rate (CAGR) from 2018 to 2024 of 2.9%. As the country with the highest Muslim population in the world, Indonesia occupies the second position as the largest consumer of halal cosmetics with total expenditures estimated at \$4 billion. However, according to data from the Institute for the Study of Food, Drugs and Cosmetics of the Indonesian Ulema Council (LPPOM MUI) as of August 2021, the number of cosmetic products that are halal-certified in Indonesia is 34,469 products with a total of 711 halal certifications and a total of 286 units of companies. Meanwhile, based on data from Kemenperin.go.id in 2020 the number of cosmetic companies in Indonesia is 797 large cosmetic industry units and Small and Medium Industries (IKM) in Indonesia. Therefore, it can be said that only about 35% of cosmetic companies in Indonesia have been certified

halal.

The halal cosmetics industry should meet the main requirements for halal cosmetic products based on Islamic law at all stages of the supply chain, including receiving, preparing, processing, storing, packaging, labeling, controlling, handling, transporting, and distributing. Cosmetic products are halal if the process begins with the selection of raw materials, continues with product processing, packaging, and storage of finished products in a warehouse, and then proceeds with product delivery by transportation to transport the product from the producer to the consumer, all of which must be ensured and the integrity of the halal is maintained. This study aims to map the barriers to implementing Halal Supply Chain Management in Cosmetics Sector companies in Indonesia.

CONCEPTUAL FRAMEWORK

The cosmetic sector is one of the halal industrial sectors that the government is currently prioritizing. It is demonstrated by the Ministry of Industry of the Republic of Indonesia designating the cosmetic industry as a mainstay sector in the National Industrial Development Master Plan (RIPIN) from 2015 to 2035. The cosmetic industry is one of the industries that is experiencing growth according to the Ministry of Industry of the Republic of Indonesia. This is because now people are starting to realize and pay attention to body care products, nowadays cosmetics have become one of the primary needs, especially for women who are the main target of the cosmetic industry.

Halal integrity is one of the main characteristics and characteristics of halal products. Halal products are produced according to religious needs based on the concept of *halalan toyyiban*, which means that they are in accordance with the principles of Islamic law and health quality. This concept requires products to meet the critical elements of high quality *toyyib* and halal for human

consumption. The halal integrity of a product is the result of various activities in the supply chain, for that it is important to ensure the integrity of halalness at the point of consumption through a supply chain approach or commonly referred to as Halal Supply Chain Management. From a scientific point of view, research studies related to Halal Supply Chain Management are one of the themes of halal studies that are currently developing. However, it is still relatively limited in the cosmetic sector, especially in the halal cosmetic area.

METHODOLOGY

This study used a qualitative approach, and qualitative methods were chosen in this study. One of the best methods in designing the theoretical framework and conceptual model is the literature review method. Literature review can be broadly described as a systematic way of collecting and synthesizing previous research. An effective and well-conducted literature review as a research method can create a solid basis for advancing knowledge and synthesizing previous research. The literature review can also help provide an overview of the different areas of research. In addition, literature review is also the best way to synthesize research findings to show evidence at the meta level and to reveal which areas require more research. The literature is taken from Google Scholar and several well-known online publishers (Snyder, 2019). The literatures selected in this study were selected by considering competence and having good relativity with the latest Halal Supply Chain Management conditions, especially in the halal cosmetics sector.

As for this research was conducted by collecting data from previous literature related to obstacles in the application of Halal Supply Chain Management, specifically the Halal Supply Chain Management in the halal cosmetics sector. Then a literature analysis was carried out. In this analysis the researcher focuses on the barriers, solutions and strategies for each of the literature taken. The last step is

to write a literature review, which is written based on obstacles, solutions and strategies from each literature that has previously been grouped for each particular category.

RESULTS AND DISCUSSION

This study found several obstacles, solutions, and strategies based on the previous literature that the researcher had analyzed. Each obstacle, solution, and strategy is grouped into seven categories: process, packaging, warehousing, transportation, fundamentals, policy and technology. The process in this case refers to the procurement of raw materials to the manufacture/process products. Packaging is a material used to accommodate, protect, and handle goods during the delivery and distribution of goods (Talib & Johan, 2012). Warehousing includes receiving, storing, and shipping goods or materials from one place to another. Transportation refers to the movement of products from one location to another.

Transportation also plays a role in temporarily storing products from the origin of delivery to the destination. Fundamental refers to the basic or most important things on which other things depend. Policy refers to the concepts and principles that serve as guidelines and the basis for the plan in this case the halal supply chain. Finally, technology refers to technology that plays a role in logistics both in terms of transportation, warehousing and procurement of goods.

After conducting the analysis, the researcher saw that Halal Supply Chain Management had obstacles in terms of processes. The obstacles in terms of the process are as follows. First, during the product manufacturing process, the product comes into physical contact with non-halal products, unclean and hazardous materials (Talib et al., 2013); (Gambles, 2022); (Iberahim et al., 2012). Second, product processing using tools or equipment contaminated with non-halal and unclean substances (Talib et al., 2013); (Gambles, 2022).

In addition, there are obstacles in terms of packaging as follows. First, product packaging cannot protect products from cross-contamination with non-halal and unclean substances (Iberahim et al., 2012). Second, the product packaging material is not considered for its halal status (Iberahim et al., 2012); (Potluri & Potluri, 2018). Third, the halal logo on product packaging is doubted by consumers because of the many halal logos from various countries and certification bodies (Talib & Johan, 2012); (Potluri & Potluri, 2018).

Barriers also occur in the warehousing areas mentioned below. First, there is cross-contamination between halal products and non-halal products in the storage room (Talib et al., 2013); (Hafizan & Karim, 2021); (Ngah et al., 2019). Second, the lack of standardization and guidelines in the application of halal warehousing (Talib et al., 2013).

The next obstacle is in terms of transportation. First, it is difficult to track the procedures and attitudes of drivers during the product delivery process (Talib et al., 2013). Second, there is cross-contamination during the shipping process between halal products and non-halal products because the transportation used has been contaminated (Ngah et al., 2013); (Gambles, 2022); (Pahim et al., 2012).

From a fundamental point of view, it has the following obstacles. First, the negative perception that halal services add more costs (Talib et al., 2013); (Talib et al., 2015); (Kasim et al., 2011). Second, upper management does not provide financial support to adopt halal services and train employees to better understand halal (Ngah et al., 2020). Third, the lack of training and human resource development (M. I. Khan et al., 2022). Fourth, the lack of communication and cooperation between the authorities and Halal LSPs has created doubts among Muslim consumers. For example: when a company deals with foreign consumers and is required to import halal products to other Muslim countries, in the country of origin the product has obtained halal certification by the respective halal authorities,

but it becomes a problem if the country that will export the halal product does not recognize foreign certification (Talib et al., 2015); (Potluri & Potluri, 2018). Fifth, no model or examples of successful implementation of halal logistics can be used as a benchmark (Talib et al., 2013); (Talib et al., 2015). Sixth, halal producers have basic knowledge and understanding of the halal concept. However, they are still not ready to commit to halal at a higher level (halal transportation and halal warehousing) (Ngah et al., 2020).

From a policy perspective, it has the following obstacles. First, there are no guidelines for halal standards, international standards because each country has different standards (Talib et al., 2013); (Gambles, 2022); (Johan, 2018). In terms of technology has the following obstacles. Lack of traceability system for halal products (M. I. Khan et al., 2022); (Talib et al., 2015).

Apart from the obstacles in several areas in Halal Supply Chain Management, many solutions are offered. The solution in terms of process is to maintain halal products by separating halal products from non-halal products at all stages of manufacturing and manufacturing processing. If this is not possible manufacturers can minimize the risk of contamination by assessing the risk and implementing adequate controls to avoid it (Gambles, 2022). Then the solution in terms of warehousing is to use separate containers for halal cosmetic products and put a "HALAL" sign/code on each container (Gambles, 2022); (Hafizan, 2021).

In addition, in terms of transportation, several solutions were found as follows. First, ensure that equipment and transportation are clean and have been cleaned in a manner permitted by halal standards, and record details of all collection and inspection results that have been carried out (Gambles, 2022). Second, separate the transportation used for the distribution of halal products from non-halal products to avoid contamination. If it is not possible to separate, producers can provide a

minimum distance of 10 cm between halal and non-halal (Gambles, 2022); (Ngah et al., 2013)); (Hafizan & Karim, 2021)

Solutions are also found in terms of the fundamentals which are mentioned below. First, ensure that those involved in processing halal cosmetic products are fully trained for their tasks and aware of halal standards. Knowing about the importance of maintaining halal integrity throughout the manufacturing cycle (Gambles, 2022). Second, the government must fully support the halal logistics industry in all sectors, especially in the food, cosmetics, pharmaceutical, fashion, travel sectors by providing funding and providing socialization to business people about the benefits and great opportunities of halal products (Pradipta et al., 2018). Third, initiating a global halal label that can be accepted by Muslim consumers around the world (Potluri & Potluri, 2018). Fourth, the government should campaign more frequently regarding the adoption of halal services to increase understanding and the benefits that producers will get if producers adopt halal services (Ngah et al., 2020).

From a technological point of view, the following obstacles were found. First, adopting blockchain technology to increase visibility, transparency and traceability in the halal supply chain (Zain et al., 2018). Second, the government must motivate and support the Halal industry to adopt traceability technology by providing funding, technology, training and equipment (S. Khan et al., 2018).

Several strategies were found to strengthen the solutions that have been found. The strategy in terms of transportation is as follows. First, using Global Positioning System (GPS), Transportation Management System (TMS), Electronic Data Interchange (EDI) or Radio Frequency Identification (RFID) technology to monitor and track product movement (Talib et al., 2015). Second, encourage halal producers to adopt halal transportation, and ensure they will get better benefits than non-adopters (Ngah et al., 2020).

In addition, several strategies were found from a fundamental point of view. First, halal logistics companies should establish their philosophy of "early investment creates more opportunities in the future" (Kasim et al., 2011). Second, the World Halal Council (WHC) must take the initiative in creating a halal logo with universal acceptance by convincing and handling problems with the respective country's halal councils. Third, the government must cooperate with industry players such as the halal pharmaceutical and cosmetic industry leaders to adopt halal services such as halal transportation and halal warehousing. This will create pressure on their competitors and could be the main reason other halal producers do the same (Ngah et al., 2020). Then in terms of technology found the following strategy. First, the government facilitates the development of blockchain technology (Zain et al., 2018). Second, collaborate with blockchain associations to support the application of blockchain technology (Zain et al., 2018).

CONCLUSION

This study was conducted to examine the barriers, solutions and strategies for implementing halal supply chain in cosmetic sector companies using the literature review method. This study found that the obstacles to Halal Supply Chain Management in the Halal Cosmetics sector occurred in the process, packaging, warehousing, transportation, fundamentals, policy and technology. While the solution occurs in the process, warehousing, transportation, fundamentals and technology. Lastly for strategy occurs in transportation, fundamentals and technology.

As a suggestion, we believe that technology development to ensure the halal integrity of halal products should be supported and accelerated. Each party, both business actors and members of society, must respect Islamic Sharia and pay attention to the overall mechanism in the halal supply chain. The scope of this study is limited because it was only conducted in a few beauty clinics in one of

Indonesia's provinces. Future research can be conducted on a larger scale, on a national scale, and in other halal industrial sectors, such as the pharmaceutical industry.

References

- Charity, M. L. (2017). JAMINAN PRODUK HALAL DI INDONESIA (HALAL PRODUCTS GUARANTEE IN INDONESIA). <http://www>.
- Gambles, M. H. (2022). Halal Personal Hygiene and Cosmetics. 183–196.
- Hafizan, F. R. M., & Karim, S. (2021). THE DEVELOPMENT OF HALAL LOGISTICS WAREHOUSE: A STUDY AT MASKARGO SDN BHD. In Malaysian Journal of Industrial Technology (Vol. 5, Issue 5). www.mitec.unikl.edu.my/mjit
- Iberahim, H., Kamaruddin, R., & Shabudin, A. (2012). Halal development system: The institutional framework, issues and challenges for halal logistics. ISBEIA 2012 - IEEE Symposium on Business, Engineering and Industrial Applications, 760–765. <https://doi.org/10.1109/ISBEIA.2012.6422993>
- Johan, E. (2018). NEW CHALLENGES IN ASEAN REGIONAL MARKET: INTERNATIONAL TRADE FRAMEWORK ON HALAL STANDARD. <http://halalmedia.net/unified-halal-standard->
- Kasim, S. R., Ali, A., Ishak, M. F., & Sharif, K. I. (2011). THE CRITICAL ISSUES OF ADOPTING HALAL LOGISTICS SERVICES.
- Khan, M. I., Khan, S., & Haleem, A. (2022). Analysing barriers towards management of Halal supply chain: a BWM approach. Journal of Islamic Marketing, 13(1), 66–80. <https://doi.org/10.1108/JIMA-09-2018-0178>
- Khan, S., Haleem, A., Khan, M. I., Abidi, M. H., & Al-Ahmari, A. (2018). Implementing traceability systems in specific supply chain management (SCM) through critical success factors (CSFs). Sustainability (Switzerland), 10(1). <https://doi.org/10.3390/su10010204>
- Ngah, A. H., Ramayah, T., Ali, M. H., & Khan, M. I. (2020). Halal transportation adoption among pharmaceuticals and cosmetics manufacturers. Journal of Islamic Marketing, 11(6), 1619–1639. <https://doi.org/10.1108/JIMA-10-2018-0193>
- Ngah, A. H., Thurasamy, R., Aziz, N. A., Ali, H., & Khan, M. I. (2019). MODELLING THE ADOPTION OF HALAL WAREHOUSING SERVICES AMONG HALAL PHARMACEUTICAL AND COSMETIC MANUFACTURERS. In Journal of Sustainability Science and Management (Vol. 14).
- Ngah, A. H., Zainuddin, Y., & Thurasamy, R. (2013). Barriers and enablers in adopting Halal transportation services: A study of Malaysian Halal Manufacturers. In Journal of Educational Technology & Society, International Journal of E-Adoption: Vol. II (Issue 2). JoPM.
- Pahim, K. M. bin, Jemali, S., & Mohamad, S. J. A. N. S. (2012). AN EMPIRICAL RESEARCH ON RELATIONSHIP BETWEEN DEMAND, PEOPLE AND AWARENESS TOWARDS TRAINING NEEDS: A CASE STUDY IN MALAYSIA HALAL LOGISTICS INDUSTRY. IEEE.
- Potluri, R. M., & Potluri, L. S. (2018). Halal packaging and certification in India: issues and challenges. International

Journal of Islamic Marketing and
Branding, 3(1), 35.
<https://doi.org/10.1504/ijimb.2018.09165>
5

Pradipta, A. R., Jeremy, J., Didiet, R., Hidayat,
R., Herdian, T., & Saidah, D. (2018).
Solutions for Gradual Development of
Halal Logistics in Indonesia.

Snyder, H. (2019). Literature review as a
research methodology: An overview and
guidelines. *Journal of Business Research*,
104, 333–339.
<https://doi.org/10.1016/j.jbusres.2019.07.039>

Talib, M. S. A., Hamid, A. B. A., Zulfakar, M.
H., & Chin, T. A. (2015). Barriers to
Halal logistics operation: Views from
Malaysian logistics experts. *International
Journal of Logistics Systems and
Management*, 22(2), 193–209.
<https://doi.org/10.1504/IJLSM.2015.071545>

Talib, M. S. A., & Johan, M. R. M. (2012).
Issues in Halal Packaging: A Conceptual
Paper. *International Business and
Management*, 5(2), 94–98.
<https://doi.org/10.3968/j.ibm.1923842820120502.1080>

Talib, M. S. A., Rubin, L., & Zhengyi, V. K.
(2013). Qualitative Research on Critical
Issues In Halal Logistics. www.jeeir.com

The Royal Islamic Strategic Studies Centre.
(2020). • PERSONS • OF THE YEAR
Muslim 500.

Zain, J. C., Nugraha, G. T., Didiet, R.,
Hidayat, R., Budiman, T., & Setiawan,
A. (2018). The Implementation of Halal
Supply Chain With Private Blockchain in
Indonesia.