# Halal Product: New Market Opportunity in Challenging the Industrial Revolution 4.0

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**Abstract.** Most people in Indonesia is Islam and becomes the market target for halal label product, either in food, tourism, to the pharmaceutical and cosmetic. This study aims to analyze development of halal products in the world and Indonesia as new market opportunity in face industrial revolution 4.0. The result showed that Indonesia has a big opportunity as a provider of halal product in the world with become top ten country of halal product expenditure. Labeling and certificating of halal products include food, tourism, cosmetics, and medicines is the obligation of the government and society which need competent human resources to support the continued growth of this industry.

Keywords: halal product, industrial revolution 4.0, expenditure

## **1** Introduction

Halal product in Industry 4.0 era becomes a sensitive discussion, especially in Muslim society. Most of Indonesian people is Islam [1] and becomes high consumer market potency for halal product, from food and tourism, pharmaceuticals to cosmetic as a life style [2]. The producer have many ways in this industry era to prepare and distribute their product through the machine processing. Therefore, in some cases, the producers are not aware on legitimacy product for Muslim [3]. The religion of Islam determine an absolute legitimacy and goodness of a product, because it will influence Muslim personality, either physically or spiritually. Quran and hadith have explicitly explained the halal or haram product based on the material, process, and outcome, known by haram lizatihi and haram ligairihi.

The emergence of new technology in the face of the industrial revolution 4.0 resulted in extraordinary changes in various disciplines, especially in science and technology which played a role of 75% [4][5][6]. Merging the physical and digital worlds is a dilemma for the halal label of a product. Collaborative knowledge becomes very important, mainly in processing of research commercialization which appropriate, safe, and applied for all things in this life,

includes in working activity, especially for the product (food, beverage, tourism, pharmaceutical, and cosmetic).

Thailand has established as the world's halal food industry of 24% with income of GDP per capita [7][8]. Australia has produced and exported 66% of halal meat with certificates issued by Islamic Coordinating Council of Victoria dan Supreme Islamic Council of Halal Meat in Australia Inc (NSW) [9][10]. South Korea which is famous for beauty brand also dominates the world's halal cosmetics industry by 13% [11], while 18% the halal garment and textile sector is dominated by China.

Consequently, a comprehensive understanding requires in product selection. The integration hadith on science explained a specific limitation between halal and haram is *syubhat* or *shubha* (doubtful/obscurity). Many people have no knowledge about the shubha. Based on the background, this paper will bring out that halal product as opportunity market againts the challenge of industrial revolution 4.0 based on hadith integrated science.

## 2 Material and Methods

The study of halal products in Indonesia is carried out in the following stages. First, tracing information on print and electronic media and literature on the development of halal products in the world and Indonesia. Second, collecting data of government policies on halal products. Third, analysis by describing data in general and based on hadith.

#### **3** Results and Discussion

The potential of global halal products provides various challenges and opportunities. The potential of halal products is essentially not only for Muslim countries or populations, also for consumers who have a preference for healthy and quality halal products. The potential of the global muslim market for halal product requirements is outlined in the following table:

	Country	Amount of expenditure (US \$)	Percentage of world muslim population
1	Indonesia	170 bn	12.6%
2	Turkey	127 bn	4.5%
3	Pakistan	118 bn	10.5%
4	Egypt	86 bn	4.8%
5	Bangladesh	76 bn	8.4%
6	Iran	63 bn	4.6%
7	Saudi Arabia	52 bn	2%
8	Nigeria	47 bn	4.8%
9	Russia	41 bn	8%
10	India	38 bn	11%

 Table 1. Ten countries with halal food expenditure [12][13]

Indonesia has spending in aggregate US\$170 billion across the halal food sectors with 215 million muslims representing 12.6% of muslim population in the world (Table 1). The large share of halal products market is due to the majority of Indonesia's population being Muslim. The demand for halal products is very high compared to other countries. Manufacturers who will market the halal products will not experience difficulties. This sector will become a major sector consistently and sustainably in a long period, also as a catalyst to develop other potential sectors.

The fundamental of halal and haram substance has been a clear boundary (either in activity or goods for consumption). However, there is shubha (obscurity) between both of two matters without a clear legitimation for most of people and sound a warning to careful from shubha. Additionally, halal and haram substances will also influence the condition of soul.

The hadith matters has three categories. First, halal matter with a clear case in legitimacy, such as, bread, fruit, oil, honey and so on. Second, haram matter with clear legitimacy, such as khamr or wine, pig, carcass, gossip, and so on. Third, shubha matter without a clear information, either it is halal or haram. As a result, the hadith above has three substances: 1. Halal substance with a clear argumentation or daleel that allowed by Quran and hadith, 2. Haram substance that forbidden clearly in Quran and hadith, and 3. Shubha substances without legitimacy or forbidden information from Quran and hadith. Therefore, all things on this earth is halal for man to consume (food and beverage) as long as no legitimacy from sharia or Islamic law (Quran, hadith, ijma, or qiyas) with prohibition rule. We can understand that halal food in Islam includes a good matter, based on material/substance only without a bad thing inside.

Indonesia has an institution that handles halal products, namely the Council of Indonesian Ulama (Majelis Ulama Indonesia, MUI). The MUI has a fatwa commission called the Institute for Food, Drug and Cosmetics Studies of the MUI (LPPOM MUI) which conducts studies and maintains the halal products circulating in the community. The Ministry of Religion of the Republic of Indonesia took over halal certification in 2017 by establishing a Product Assurance Agency (BPJPH). This agency will facilitate the administration process of halal certification, which involves receiving all applications, collecting fees, and issuing certificates [14]. Providing halal and safe food is a prospective business, because halal labels can invite loyal customers who are not only interested in Muslims but also non-Muslim communities. The existence of halal certification is not only aimed at giving inner peace to Muslims but also the calm of production for businesses.

No.	Country	Amount of expenditure (US \$)	Percentage of world muslim population
1	Saudi Arabia	21 bn	2%
2	UAE	16 bn	0.2%
3	Qatar	13 bn	0.1%
4	Kuwait	10 bn	0.2%
5	Indonesia	10 bn	12.6%
6	Iran	8 bn	4.6%
7	Malaysia	7 bn	2%
8	Russia	7 bn	8%
9	Turkey	6 bn	4.5%
10	Nigeria	6 bn	4.8%

**Table 2.** Ten countries with muslim travel expenditure [12][13]

Indonesia become top five country with muslim travel expenditure, spending 10 billion US\$, highest compared to other Asian countries (Table 2). The concept of halal tourism that can be developed is the Sharia tourism concept which the integration of Islamic values into all aspects of tourism activities, from accommodation, restaurants, to tourism activities [15][16]. Hence, the largest Muslim population in the world, Indonesia has ability to become a market for the Sharia tourism industry in the world and this should be realized by tourism businesses. The development of sustainable Sharia tourism will be able to provide a significant economic contribution to all economic actors involved. Absorption of labor in this sector is also quite significant thus creates an efficient workforce.

No.	Country	Amount of expenditure (US \$)	Percentage of world muslim population
1	India	5.4 bn	11%
2	Indonesia	3.9 bn	12.6%
3	Russia	3.6 bn	8%
4	Turkey	3.4 bn	4.5%
5	Malaysia	3.1 bn	2%
6	Bangladesh	2.9 bn	8.4%
7	Iraq	2.2 bn	1.9%
8	Kazakhstan	2.1 bn	0.5%
9	France	1.8 bn	0.3%
10	Iran	1.8 bn	4.6%

Table 3. Ten countries with muslim cosmetics expenditure [12][13]

As the highest percentage of world population, Indonesia become the top two of country with muslim cosmetics expenditure (Table 3), 1.5 bn difference below India. Halal cosmetics have become a major requirement that is always sought by Muslim women. The growth in demand for halal products which shows a positive trend, makes Indonesia a potential market for cosmetic products. The segment of young women is usually targeted the main market for cosmetic producers. At this age level, consumers' awareness to appear attractive tends to be higher, driven by more social interactions compared to other ages [17]. Muslim consumers who have high religiosity generally tend to have a higher awareness of consuming halal products. Halal and goodness of a product is not only on the material substance and acquisition method. The product must also concern on the process method. The product must not combine with shubha material or definitely haram in material, as explained in the Prophet Muhammad (PBUH) hadith on bread dough with water from Al-Hijr hill. Halal cosmetics brands also face both challenges and opportunities as natural, organic, plant-based cosmetics, and avoid ingredients that are non-religiously permissible: porcine, cochineal and non-halal slaughtered animals.

Table 4. Ten countries with muslim pharmaceuticals expenditure [12][13]

No.	Country	Amount of expenditure (US \$)	Percentage of world muslim population
1	Turkey	10.3 bn	4.5%
2	Saudi Arabia	7.5 bn	2%
3	United States	6.8 bn	0.2%
4	Indonesia	5.2 bn	12.6%

5	Algeria	4 bn	2.2%
6	Russia	3 bn	8%
7	Iran	3 bn	4.6%
8	Germany	2.7 bn	0.2%
9	Pakistan	2.7 bn	10.5%
10	France	2.5 bn	0.3%

Demand for preventative medicine as well as a more healthy and halal lifestyle, driven by Muslim in Indonesia by spending 5.2 billion US\$ in pharmaceuticals expenditure (Table 4). Consumers of halal medicine in Indonesia are dominated by Muslims. The halal status of the drug is a demand in the ethics of drug consumption. The application of halal drug production processes will increase consumer acceptance of these products, which will have an impact on increasing sales [18]. In addition to the aspects of production, the aspects of packaging, storage and distribution that are able to guarantee the prevention of cross contamination of illicit ingredients into halal drugs are an urgency in consumer acceptance.

Specifically, pharmaceutical consumption is extremely urgent then food or cosmetic application. Sometimes, chemical substance in drug with biology tissue influence creates a temporary minded from the patient to consume the drugs, because a strong desire to recovering their health. In addition, most people only concern to the function and drug performance without concerning the substances inside the material (halal or haram) for rapid recovery reason.

There are many methods to know which product that will create a damage and harm to the consumer in this industry era presently. Halal and composition tag are compulsory include for the producer. So, the customers may concern on halal or haram of product and selecting and deciding the product compatibility for themselves. When buyer found no tag attach in the product then it would be a temporary conclusion for the consumer that the product is "ambiguous" in terms of material substance. Therefore, according to hadith of the Prophet Muhammad (PBUH), those ambiguous product category status is shubha or unknown. Muslim is better to avoid an ambiguous matter status, halal or haram.

Labeling halal products consisting of food, tourism, cosmetics and pharmaceuticals that circulate in Indonesian society is the duty of the government and society as a control over a lifestyle [19] that safeguards religious values. In facing the global market of industrial revolution 4.0, the implementation of the halal product system aims to provide comfort, security, safety, and certainty of the availability of halal products for the public in consuming and using products, as well as increasing added value for businesses to produce and sell halal products.

### 4 Conclusion

All available natural resource basically is halal for food or drink as long as no prohibition *daleel* in Quran, hadith, ijma, and qiyas. Indonesia has a big opportunity as a provider of halal product in the world. Halal product solution against the industrial revolution 4.0 challenge according to hadith is to ensure the legitimacy and goodness of product. which acquire from halal tag and product composition tag. Labeling and certificating of halal products consisting of food, tourism, cosmetics and medicines is the obligation of the government and society. In addition, competent human resources are needed to support the continued growth of this industry.

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