

## Optimization of Halal Industrial Products with the Assistance of Digital Technology in the Industrial Revolution Era 4.0

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Ariq Putra Fauzan<sup>1\*</sup>, Anton Athoillah<sup>2</sup>, Annisa Nur Salam<sup>3</sup>

<sup>1,2,3</sup>Faculty of Sharia and Law, Sunan Gunung Djati State Islamic University, Bandung, Indonesia  
[\\*ariqpf@gmail.com](mailto:*ariqpf@gmail.com)

### Abstract

**Introduction to The Problem:** Digital transformation brings great influence and change in many sectors, and the industrial sector is no exception. However, the halal industry must be able to adapt to technological developments to seek a wider market share.

**Purpose/Objective Study:** This research aims to discuss the optimization of the halal industry in order to maintain and be able to compete in the era of digital technology.

**Design/Methodology/Approach:** This research aims to discuss the optimization of the halal industry to maintain and be able to compete in the era of digital technology. This research uses a qualitative descriptive method with literature study data collection techniques, by reading articles in journals, books, and other media as a reference source.

**Findings:** The large number of technology users in the form of the internet can be used by business people engaged in the halal industry to do marketing via the internet. Business people in the halal industry who carry technology in it will have a greater chance of success.

**Paper Type:** Research Article

**Keywords:** digital transformation; halal industry; internet

### Introduction

The halal industry has experienced significant development and improvement in various parts of the world, both in Muslim-majority and Muslim-minority countries. The halal industry will not be separated from the halal label, with this halal label it can guarantee product quality from the materials and tools used. Muslims use products labeled halal for religious observance and also as a guarantee, of cleanliness, safety, and product quality. The current development of halal industry has developed in several products, namely food, finance, tourism, fashion, cosmetics, pharmaceuticals, media and entertainment, care, health, and the education sector (Mubarok & Imam, 2020).

The trend of Islamic life continues to develop in various parts of the world. The high growth of the Muslim population, especially young people affects the halal industry sector, due to the high consumption of halal products among young people. Indonesia is a country with the largest Muslim population in the world. Indonesia is recorded as occupying the first position as a consumer of halal food products, which is equal to \$ 154.9 billion, but the Indonesian government has not been able to manage and maximize the market potential of the halal industry and Indonesia only ranks 10th as a

halal food producer. Based on data from The Pew Forum on Religion & Public Life, the Muslim population in Indonesia is the largest share of the total population in this country. It is recorded that 209.1 million people or 87.2 percent of the total population are Muslims. The Muslim population in Indonesia represents 13.1 percent of all Muslims in the world (Mubarok & Imam, 2020). At the end of the paragraph, the author/s should end with a comment on the significance concerning the identification of the issue and objective of the research.

According to research, the world's Muslim population will increase to 2.2 billion in 2030 from 1.6 billion in 2010. In 2017, Indonesia spent US\$218.8 billion on the Islamic economic sector. From this data, Indonesia has a great opportunity to become a world halal product country (Mubarok & Imam, 2020). Prasetiantono (in Abdullah, 2019, p. 48) explains, the life of modern society is experiencing rapid changes entering 2018. This is a marker of the fourth industrial revolution or called the industrial revolution 4.0. The Revolution 4.0 era combines automation technology and cyber technology. Chief Executive Officer (CEO) of Siemens AG, Joe Kaeser at the World Economic Forum explained that although Industry 4.0 is still in its infancy, this era has had a significant impact. This impact brings great goodness and benefits to human life in the future (Suryana & Perdana, 2020, p. 5).

The presence of digital technology is a form of the industrial revolution 4.0, technology is growing from year to year which has changed the order of human life. The presence of technology has many positive impacts that can make it easier for humans to carry out activities and fulfill their various needs. Purba, Yahya, & Nurbaiti (2021, p. 93) revealed that internet users in Indonesia have increased during the 2015-2019 period. In 2015, internet users in Indonesia were around 21.98% and this increased in 2019 to 47.69%.

The development of digital technology in the era of the industrial revolution 4.0 can be utilized in various fields, one of which is in doing business. Business competition and challenges in the era of technological development are increasing, therefore business people are required to make changes to maintain their businesses. Business people can take advantage of various developments digital, by diverting various conventional activities into activities related to the internet, one of which is by conducting online business marketing. People are now accustomed to making buying and selling transactions online, this is a golden opportunity for business people to find and find more consumers. Digital technology assistance can make it easier for business people to do marketing and maintain their business (Wahyuningsih, 2021, p. 15).

Cahyadi, et al. (2022, p. 2) revealed that business comes from English, namely business, which comes from the word busy which means busy. Business in the realm of economics can be defined as an organization that has the goal of selling products or services to consumers for profit. Harjadi & Fatmasari (2015, p. 3) defines a business as an institution in which it produces goods or services needed by society. According to Musnaini, Junita, Wijoyo, & Indriawan (2020, p. 1), digital comes from the Greek word *Digitus* which means fingers. Digital is a depiction of numbers that consist of 0 and 1 or can be called off and on (binary numbers).

Currently, in the world of the business industry, the role of digital is needed to support, facilitate, and maintain business in the era of technological onslaught. The use of digital in the business industry has many benefits, one of which is to get lots of consumers, open a business easily and anywhere, easily accessible to young people, and so on. The existence of these technological developments can be used to maintain and improve the halal industry in an era of technological

onslaught. Use of technology for industry This halal product can be easily reached by young people so the consumption of halal goods will increase and the producers of halal goods will also increase.

The halal industry is no longer limited to products related to food but also includes pharmaceutical products, cosmetics, health products, toiletries, and service sector components such as logistics, marketing, print and electronic media, packaging, branding, and financing (Azam & Abdullah, 2020). Halal certificates are needed to ensure products are halal. This model of strengthening halal certificates is given to strengthen the halal industry sector, one of which is in Indonesia. This halal certificate protects Human Rights (HAM), strengthens legal configuration, and Halal nationalization, is realized through halal zones by Islamic economists (legitimacy, interpretation) (Wahyudi et al, 2020). The halal industry emerges from two sectors, namely products and services. From the product side, these sectors include food and beverage, fashion, and cosmetics. On the other hand, the service sector consists of banking, tourism, media and entertainment (Mujahidin, 2020).

The halal industry has become a new development sector that creates potential in the global economy. Islamic Financial Institutions (LKS) have an important role in facilitating transactions between deficit and surplus units in the economy, under Sharia principles (Mubarok & Imam, 2020). As the halal product and industry continue to develop, LKS is becoming increasingly important in promoting the growth, knowledge, and potential of the halal industry (Rachman, 2019).

The development of the halal industry is increasing, accompanied by an increasing Muslim population in the world, especially young people. This research discusses the halal industry in the era of digital transformation 4.0, this research is different from previous research, where this research discusses the halal industry, halal certification, various sectors of halal industrial products, digital transformation, and digital opportunities and benefits to improve the world's halal industry the use of digital in developing the halal industry and how to maintain a halal business in an era of the technological onslaught.

### **Methodology**

This research was conducted in Bandung in 2023 using a qualitative descriptive method. A qualitative descriptive is a research approach that focuses on understanding phenomena by analyzing their quality. This research is used to examine objects that have never been studied or gain a deeper understanding of objects that have been studied before but from a different perspective. This research collects and analyzes data in the form of words, visuals, or other types of non-numeric information. According to Mukhtar (2013: 10), qualitative descriptive research is a data collection technique that is used as a way to find an understanding of the theory at a certain time.

This research uses literature study data collection techniques. A literature study is a data collection technique using a qualitative descriptive method using literary sources, such as books, articles in journals, and other media as reference sources. A literature study is used to enrich the research literature so that a conclusion can be drawn.

### **Results and Discussion**

Currently, the halal industry is becoming very popular, as evidenced by the increase from year to year. According to report data from the 2019 State of the Global Islamic Report, it is stated that consumers of industrial halal products reach 1.8 billion Muslim residents. Projections from the Compound Annual Growth Rate (CAGR) state that in the 2018-2024 period, the halal industry will

increase to reach 6.2 percent. Apart from that, there has also been an increase in the amount of expenditure for the consumption of halal products amounting to USD 3.2 trillion in 2024 (Fathoni & Syahputri, 2020). The data above shows that the halal industry is currently a trend. From year to year, consumers in the halal industry have experienced a significant increase. The trend of the halal industry has penetrated various parts of the world, both Muslim-majority and minority countries, and Indonesia is no exception. Indonesia is a country with the largest Muslim population in the world. Abdus Sjafoer, Eko and Mas'ud (2022, 1) revealed that the Muslim population in Indonesia is 13 percent of the world's population and 87.2 percent of the total population in Indonesia.

Indonesia is a country with very large consumption of halal products. Indonesia is a member of the Organization of the Islamic Conference (OIC), Indonesia exports halal products to OIC member countries by 10.7 percent, which places Indonesia as the third largest exporter of halal products. On the other hand, Indonesia also exports halal products to the global market by 3.8 percent. The 2016-2017 Global Islamic Economy Report states that Indonesia is a country that occupies the 10th position as a global halal producer. Research in the Sector of Islamic Economics reveals that optimizing the halal industry will increase the State Revenue and Expenditure Budget (APBN), with a large Muslim population in Indonesia which can be a significant potential in developing various products from the halal industry. Industrial estates in Indonesia have been planned by the Ministry of Industry to pay attention to and respond to the large increase in consumers from the halal industry (Waharini & Purwantini, 2018, p. 1-13). From this presentation, Indonesia needs to develop halal products, seeing the many potentials that Indonesia has, especially as a Muslim-majority country.

Halal certification is important in halal industrial products. Halal certificates are familiar to the Muslim population, this is the main factor when a Muslim ensures and buys halal products. According to Melisa & Lailatul (2021, p. 68) in the life of the Muslim population, halal certification is shown through the existence of a halal label on product packaging. The existence of this halal label is a sign that the product is under beliefs originating from Islamic law for Muslim residents. Apart from Muslim residents, non-Muslim residents consider this halal label as the eligibility of the product.

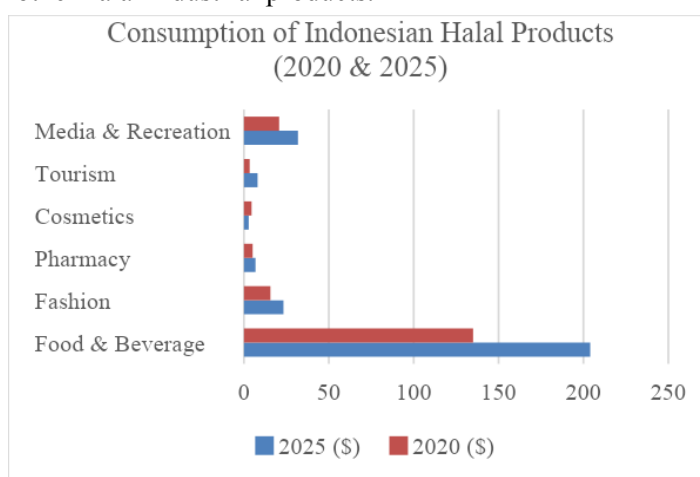
Batu and Regenstein stated that halal certification serves as a security guarantee for Muslims to consume halal food or beverage products according to Islamic principles. Salindal revealed that the certification process which is based on Islamic law aims to answer every concern of Muslim consumers regarding the halal status of a product. The Indonesian Ulema Council (MUI) conducts a strict evaluation under Sharia law to provide halal certification. This certification process involves a comprehensive examination of various aspects including preparation, ingredients, cooking process, kitchen presentation, cleanliness, and labeling which culminates in the issuance of a fatwa by the Indonesian Ulema Council to confirm the passing status. Products that have successfully passed the halal certification test by the Indonesian Ulema Council can be identified by the presence of a halal logo on their packaging (Devi & Ridlwan, 2020, pp. 55-60).

The halal industry must comply with Islamic economic principles based on Islamic sharia. In the halal industry, the raw materials used must be halal and may not use haram raw materials. This principle is in line with the provisions contained in the Koran, such as in the letter Al-Baqarah verse 168, which directs believers to eat good and lawful food (Zainul, 2023).

Allah SWT. said: "*O people, eat what is lawful and good from what is on earth, and do not follow the steps of satan. For in fact, satan is a real enemy to you*" (QS Al-Baqarah: 168).

The conclusion that can be drawn from the verse above is that Allah SWT. ordered everyone to choose food carefully. It is recommended to choose food that meets the two main requirements, namely *tayyib* (good) and *halal* (permissible). By fulfilling these two main conditions, the food consumed will provide benefits (Zainul, 2023).

Consumers of halal industrial products are already very large, both in Indonesia and in various countries in the world. Indonesia is a country with high consumption of halal products, not only for food products but also for other halal industrial products.



Source: Databoks, 2020

**Figure 1.** Consumption of Indonesian Halal Products (2020 & 2025)

The data in figure 1.1 above comes from the Databoks website which shows an increase in consumption of halal products in Indonesia. Judging from each sector, food and beverages occupy the first position in the amount of consumption. Consumption of food and beverages in 2020 amounted to \$ 135 billion and is projected that in 2025 it will increase to \$ 204 billion. The second position is occupied by media and recreation which in 2020 amounted to \$20.73 billion and is projected to increase in 2025 to \$31.82 billion. Fashion is in third place with \$15.6 billion in 2020 and is projected to increase to \$23.28 billion in 2025. Pharmaceuticals in 2020 is \$5.13 billion, projected to be \$6.81 billion in 2025. Cosmetic products total 4.19 billion and are projected to increase to \$7.59 billion in 2025. The last position is occupied by tourism with \$3.37 billion in 2020 and is projected to increase in 2025 to \$8.02 billion.

Currently, the products of the halal industry that are in great demand include:

### 1. Halal Food

Indonesia is a country with the largest Muslim population in the world, making it a very promising market for the global halal industry. With a total population of 237.6 million people, around 87 percent or around 207 million people identify themselves as Muslims, according to the Central Statistics Agency (BPS). Therefore, Indonesia ranks first in terms of consumption of halal food products, which is \$154.9 billion, as reported by the State of the Global Islamic Economy from Thomson Reuters. Despite its enormous potential, Indonesia is currently ranked 10th in terms of halal food production. Therefore, it is very important for the Indonesian state to actively participate in increasing its halal products, especially in the food sector. As a country with a majority Muslim

population, Indonesia not only has the potential for a significant market share in the halal industry but also has a great opportunity to capitalize on this advantage. Halal food products play an important role in the halal industry, as the main and most well-known component (Hadi, 2019, p. 218-245).

However, Indonesia faces challenges in the halal industry, especially related to the tastes of consumer behavior with the preference of the Muslim population for halal food. Even though the halal market segment shows rapid growth and potential, research on consumption patterns in this segment is still neglected. Understanding and applying the principles of Islamic Sharia, especially in terms of the consumption of Halal food, is very important. This includes ensuring that the food supply chain, including sourcing, storage, transportation, manufacture, handling, and distribution strictly adheres to the *toyyiban* halal concept. Therefore, halal food products may not come into contact with non-halal products during the logistics process to enforce and maintain their halal status (Hadi, 2019, p. 218-245).

In the development of the halal food industry in Indonesia, several efforts and strategies have been made to ensure the production and supply of halal products. One tool used is the kosher test, which was originally designed to determine whether a food contains ingredients that are not kosher, particularly pork. This test involves observing the lines on the detector, where the presence or absence of the lines indicates the presence or absence of pork. In addition, Modern Halal Valley is one of the halal industries in Indonesia that focuses on food and other halal industries (Hadi, 2019, pp. 218-245).

For halal food producers, it is important to pay attention to the needs of Muslim consumers to develop and increase competitiveness. Ensuring product halalness from raw materials to ready-to-consume finished products is very important in the halal food industry. The main consumers of halal food are Muslims because halal food is designed to meet Islamic requirements. Therefore, the implementation of halal supply chain management is very necessary to guarantee the quality of halal products (Hadi, 2019, p. 218-245).

The perception that halal food is only for Muslims may no longer be relevant in today's international market. Food manufacturers who wish to market halal products internationally must comply with every regulation which must ensure that the product is certified by a valid halal authority. Karipidis et al (2009) consider certification as a tool to overcome trade barriers and facilitate international trade. Similarly, Mohamed et al (2013) emphasized that halal-certified food products are in great demand in the domestic and international markets (Ab Talib, Md. Sawari, Abdul Hamid, & Chin, 2016, p. 7).

Halal certification is not only important for Muslim consumers but also for non-Muslim consumers who are increasing the demand for halal food products. To take advantage of the growing market opportunities for halal food products, food manufacturers need to obtain halal certification not only to help overcome trade barriers, but also to strengthen consumer confidence and comply with market demands, both from Muslim and non-Muslim consumers (Ab Talib, Md. Sawari, Abdul Hamid, & Chin, 2016, p. 7).

## **2. Halal Cosmetics**

Halal cosmetics are products made from halal ingredients and produced under the halal system, which are used to beautify, clean, protect, and change the appearance of the body in certain parts, whether a product is left on or rinsed off. Cosmetics consist of a variety of ingredients such as



water, oil, surfactants, polymers, solvents, organics, dyes, proteins, vitamins, plant extracts, preservatives, antioxidants, etc. Cosmetic manufacturers must evaluate ingredients and their sources carefully before development and production. The source of materials for halal cosmetics has an important role in the final product. Manufacturers have a responsibility to ensure the safety of ingredients used in halal cosmetic products (Sugibayashi, et al., 2019, p. 2-3).

Halal cosmetic products are increasingly popular and have experienced an increase in demand by 2.4 billion Muslim consumers worldwide. The global halal market is expected to grow by an annual growth rate of 6.8 percent until 2024. Halal cosmetics have a wider appeal beyond the Muslim population, as non-Muslim consumers relate to these halal cosmetics as a high standard. Halal cosmetic products must comply with certain conditions, including the exclusion of prohibited substances such as pork, carrion, blood, human body parts, wild animals, reptiles, and insects. If ingredients come from permissible animals, they must be slaughtered according to Islamic law to be considered halal. During the process of manufacturing, storing, and transporting halal cosmetics, attention must be paid to cleanliness and the absence of impurities. The certification process for halal cosmetic products is in line with quality assurance provisions (Sugibayashi, et al., 2019, p. 1-2).

Economicaonline (2016) states that an increase in preference for local halal cosmetic brands and various products from abroad with halal certification indicates that consumer demand for halal cosmetics in Indonesia is increasing. As the largest Muslim population in the world, it is not surprising that halal cosmetics are so popular in Indonesia (Aisyah, 2017, p. 127).

Halal cosmetic products that have a halal logo function as indicators of cleanliness, safety, purity, and quality. In addition, halal certification is also a benchmark in trade transactions with Muslims regarding the suitability of product quality. Overall, the demand for halal cosmetics is increasing globally (Sugibayashi, et al., 2019, p. 1-2).

It can be concluded that halal cosmetics have many enthusiasts, including Indonesia as a Muslim-majority country. Halal cosmetics must consider the ingredients and any existing regulations to guarantee halalness. In addition, halal certification is also important to ensure product halalness.

### **3. Halal Tourism**

Tourism in Indonesia is one sector that makes an important contribution to increasing the country's foreign exchange. According to the Ministry of Tourism and Creative Economy of the Republic of Indonesia in 2019, tourism in Indonesia accounts for around 5.5 percent of the national Gross Domestic Product (GDP), or around Rp. 280 trillion, this number has increased compared to the previous year of Rp. 270 trillion. The ministry also reported that in 2019, the tourism sector absorbed around 13 million workers. In addition, the Central Statistics Agency (BPS) noted that the number of foreign tourist visits in the same year reached 16.3 million visitors. In the tourism industry, there are developments and updates, one of which is halal tourism (Nuralamsyah, 2020, p. 83).

Indonesia is a country with the largest Muslim population in the world, halal tourism is being developed in several tourist destinations. Even in 2019, Indonesia was ranked first in the Global Muslim Travel Index by Mastercard-Crescent Rating after previously being in second place after Malaysia. Halal tourism destinations that are being developed in Indonesia include Nangroe Aceh Darussalam, Lombok (West Nusa Tenggara), Riau, West Sumatra, West Java, DKI Jakarta,

Central Java, Yogyakarta, Malang (East Java), and Makassar (South Sulawesi). This proves that Indonesia is a friendly halal tourist destination for Muslim tourists (Nuralamsyah, 2020, p. 84).

Perbawasari in 2019 revealed that the concept of halal tourism must be in line with Islamic values and ethics which involve issues of halal and haram. According to Chookaew in 2019, the concept of halal tourism is a form of actualizing Islamic values which includes halal and haram as the main benchmark, so that all aspects of halal tourism must obtain halal certification which is a guarantee for tourists and business people. Thus, the broad application of the concept of halal tourism is very complex and must comply with legal teachings and Islamic values (Nuralamsyah, 2020, p. 85).

#### **4. Halal Fashion**

Halal fashion trends in the current era are not only limited to headscarves and clothing but also extend to accessories, shoes, and bags which complement Muslim fashion. Abdurrahman Navis, Deputy Chair of the East Java PBNU Tahfidziya, expressed concern about the raw materials used in the fashion industry, whether they are halal and under Shari'a. Even though the problems in fashion are not as complex as food and cosmetics, halal fashion includes raw materials such as threads, fabrics, dyes, softeners, production processes, and the production environment. Muflihin also emphasized the importance of ensuring that the processes of production, storage, distribution, and marketing, to the hands of consumers are not mixed with illicit goods or objects (Hasan & Hamdi, 2022, p. 78-79).

To ensure the halalness of halal fashion products to consumers, halal certification is important. Therefore, the Indonesian government issued the Halal Product Guarantee Law No. 33 of 2014 and established the Halal Product Guarantee Agency (BPJPH) whose job is to guarantee product halalness and issue halal certificates. In addition, product quality assessment is also carried out based on the Indonesian National Standard (SNI) and International Organization for Standardization (ISO) certificates. However, behind the significant developments in halal fashion, there are problems related to clothing styles that are not under the Shari'a, such as wearing the hijab but wearing clothes that are narrow, body-shaping, or thin (jilboob). To overcome this problem, groups called hijabers have emerged, which aim to invite Muslim women to wear clothes according to the Shari'a. With the existence of these groups, Muslimah fashion trends in Indonesia are growing. The development of halal fashion in Indonesia is supported by several potentials, among others, the high demand and public need for halal products, the wide variety of available halal products, the existence of a clear legal framework, the large number of halal product offerings, and the high demand for export of halal products on the world market. With the support of a large government and the majority of Indonesia's population being Muslim, Indonesia has the potential to become the world's center for halal fashion, although currently, it is still in third place after the United Arab Emirates (UAE) and Turkey (Hasan & Hamdi, 2022, p. 78-79).

The Industrial Revolution 4.0 is a digital transformation that can change industrial order and processes. This era combines digital technology, information, and communication. The era of the industrial revolution 4.0 brought great opportunities in the world of business or industry. Today, people understand how to use technology not only as a medium of communication but also as a medium of information. There are many advantages of this industrial revolution 4.0, including the opportunity to develop oneself and the company is getting higher, the opportunity to recognize more products that people need while at the same time activating and streamlining services. In addition to

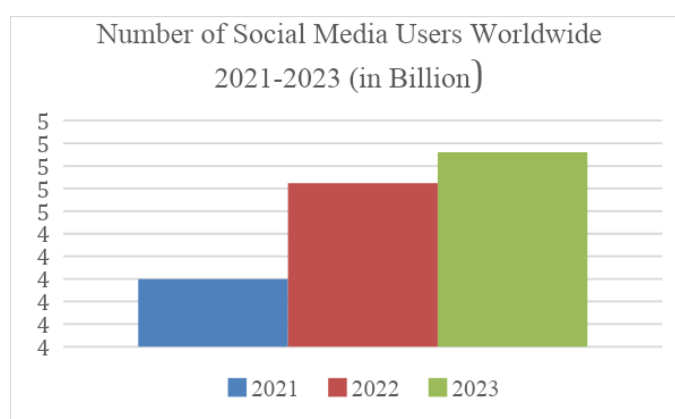


the great opportunities presented by the era of the industrial revolution 4.0, on the other hand, there are also threats such as the shifting of the business industry due to not being able to keep up with the transformation, economic disparity due to not being able to innovate, and the occurrence of criminal modes such as in transactions (Bakrun, 2018, p. 44- 47).

Utoyo (2020, pp. 5-6) reveals that currently the world is being shaken by turbulence, and almost all sectors are affected by this turbulence, one of which is the business industry. The business industry must be able to adapt to turbulence to survive, compete, and thrive. The World Economy Forum (WEF) revealed in a 2016 report that currently the world is entering the fourth industrial revolution. Technology has developed rapidly in the fields of physics, digital, and biology. In addition, genetics, robotics, nanotechnology, and also artificial intelligence (AI) are experiencing developments. The halal industry should be engaged in digital business, seeing the various positive potentials that can be generated with this digital business. Seeing the large number of residents, especially young people using digital technology, is a great opportunity to improve the halal industry by introducing it through technological assistance. Technological assistance has become the best choice in this industrial revolution 4.0 era.

Musnaini, Junita, Wijoyo, & Indriawan (2020, p. 1) revealed that digital business has elements, such as: (a) Business actors, are those who run or are business subjects; (b) tools and media, namely in the form of information and communication technology, such as computers, social media, and so on; (c) business activities, in the form of activities carried out by businesses, such as production, sales, promotions, and so on; (d) business goals, business goals are objects that are aimed at doing business; (e) business purposes, such as communication, management, promotion, and so on.

Sholihin (2019, pp. 14-17) states that technological developments have brought various changes, one of which is in marketing. The development of technology provides a challenge for the halal business industry to maintain and improve its business. Social media can be used to identify and choose the right market share because currently, consumers are very active on social media, therefore businessmen in the halal industry must adjust it and utilize social media as a marketing medium.



Source: We Are Social and Hootsuite, 2023

**Figure 2.** Number of Social Media Users Worldwide 2021-2023 (in Billion)

The data in figure 1.2 above is the result of the latest We Are Social and Hootsuite reports, which show an increase in the number of social media users in the world from 2021 to 2023. The

results of the report show that in 2021 there are 4,199,000,000 social media users in the world. users, then increase to 4,199,000,000 in 2022, and in 2023 the number of social media users in the world will again increase to 4,623,000,000 users (Annur, 2023).

Product marketing must be considered by business people. In the era of the industrial revolution 4.0, marketing should use technological assistance which is carried out online which can be referred to as e-marketplaces. Prasetyo, Hartanto, and Selo (in Husnurrosyidah, 2019, p. 228) explain that e-marketplaces are markets that use technological assistance in the form of networks in buying and selling transactions, or in short, are markets that are conducted online. The presence of this e-marketplace helps streamline information and transaction services.

Husnurrosyidah (2019, pp. 230-231) explains that online marketing can be done by: first, marketing products through social media. Nowadays social media users are increasing, this is a great opportunity to increase halal industry products. This can be done by using social media to create interesting content, which includes product offers or promotions. This will have the opportunity to expand the marketing of halal industrial products.

Second, using a website. Husnurrosyidah (2019, pp. 231-232) said websites can reach a broad market, this can be used for selling products and conveying product information. With a website, consumers will have more trust and confidence, because the website acts as a conveyer of information with integrity (Husnurrosyidah, 2019, p. 231-232). The website can be used as a medium to inform the various advantages of halal industrial products, this will make consumers more interested in buying these products. With the benefits of this website, it should be a marketing medium for halal industry products, this will increase halal industry sales.

Third, sending e-mail marketing. E-mail marketing is the delivery of product information, product discounts, and so on directly to consumers through online services. E-mail marketing can be done by sending messages via Facebook inbox, Instagram messages, and so on. This is to attract buyers to buy products because they have received information and discounts related to products (Husnurrosyidah, 2019, p. 231-232).

The many digital benefits and opportunities for the halal industry above should be applied to various halal industry products. This will create greater opportunities to be recognized, demanded, and consumed by consumers all over the world, especially in Indonesia. It is hoped that with digital assistance, the halal industry can develop and can provide positive feedback for the Indonesian economy. Indonesia has a great opportunity to become the world's halal industry, this can be realized by producing lots of halal products, cooperating with various countries regarding the halal industry, introducing halal industrial products with digital assistance, and collaborating between the government and the people to increase halal industrial products on the global stage international.

## **Conclusion**

Indonesia is a country with the largest Muslim population in the world. Indonesia is also a country with high consumers of halal products, besides that Indonesia is also an exporter of halal industrial products to the world market. With so much potential that Indonesia has, it is hoped that it will be able to become a world halal industrial country. The development of increasingly sophisticated digital technology due to the emergence of the industrial revolution 4.0 has had a positive impact on the halal industry sector. With digital assistance, it can be used to develop halal industrial products for the world stage. Indonesia has many halal products because the majority of the population is Muslim

and the demand for halal products is high. Halal products do not only cover food, but also include cosmetics, pharmaceuticals, tourism, fashion, media and entertainment, finance, and many more.

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