

DIGITALISING HALAL CERTIFICATION: The Dynamic of Regulations and Policies Concerning Halal Certification in Indonesia

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Abstract

The global halal product market is proliferating, fuelling increased demand for quality halal products. To fulfil halal certification requirements, Micro, Small and Medium Enterprises (MSMEs) in East Java Province, Indonesia face challenges in the certification process which is manual, time-consuming and inefficient. To overcome these problems, this study aims to explore the urgency of digitalising halal certification for optimal impact on improving the quality of halal products for MSMEs in East Java. This research employed a qualitative method with a literature and conceptual juridical approach. This research used primary and secondary data, namely BPJPH data, the Office of Cooperatives and SMEs of East Java Province. The results of this study indicate that government regulations and policies related to halal certification provide legal certainty for digital transformation in the implementation of halal certification in East Java Province. Although the achievements of MSMEs in East Java Province are low compared to those of other provinces, the digitalisation of halal certification can effectively help the MSMEs in East Java Province to reduce costs, expedite halal certification processing time, and increase compliance with

halal requirements so that acceleration and increase in the number of halal certifications for MSMEs can take place properly.

Pasar produk halal global terus berkembang dengan pesat dan mendorong peningkatan permintaan terhadap produk halal yang berkualitas. Untuk memenuhi persyaratan sertifikasi halal, Usaha Mikro, Kecil, dan Menengah (UMKM) di Provinsi Jawa Timur, Indonesia menghadapi tantangan dalam proses sertifikasi yang manual, memakan waktu, dan kurang efisien. Untuk mengatasi masalah tersebut, penelitian ini bertujuan mengeksplorasi urgensi digitalisasi sertifikasi halal sehingga berdampak optimal terhadap peningkatan kualitas produk halal UMKM di Jawa Timur. Metode penelitian yang digunakan adalah penelitian kualitatif dengan pendekatan netnografi dan yuridis konseptual. Penelitian ini menggunakan data hasil wawancara dengan pegiat sertifikasi halal dan data dari situs BPJPH, Dinas Koperasi dan UKM Provinsi Jawa Timur. Hasil penelitian ini menunjukkan bahwa regulasi dan kebijakan pemerintah terkait sertifikasi halal memberikan kepastian hukum terhadap transformasi digital dalam pelaksanaan sertifikasi halal di Provinsi Jawa Timur. Walaupun capaian pelaku UMKM di Provinsi Jawa Timur tergolong rendah dibandingkan dengan provinsi lainnya, namun digitalisasi sertifikasi halal efektif dapat membantu UMKM Provinsi Jawa Timur untuk mengurangi biaya, mempercepat waktu sertifikasi halal, dan meningkatkan kepatuhan terhadap persyaratan halal sehingga percepatan dan peningkatan jumlah sertifikasi halal bagi UMKM dapat terlaksana dengan baik.

Keywords: *certification, digital, halal, enterprises*

Introduction

Indonesia serves as a role model and the centre of halal industries globally¹. Halal product industrialisation renders Indonesia the biggest halal product producer worldwide, particularly in food products.² The State of the

¹ Latifah Adnani et al., "The role of innovation and information sharing in supply chain management and business performance of halal products in tourism destinations," *Uncertain Supply Chain Management* 11, no. 1 (2023): 195–202, <https://doi.org/10.5267/j.uscm.2022.10.007>.

² Mutiara Fajrin Maulidya Mohammad, "Pengaturan Sertifikasi Jaminan Produk Halal Di Indonesia" 15 (2021): 9; Hendri Hermawan Adinugraha dkk., "Halal Tourism in Indonesia: An Indonesian Council of Ulama National Sharia Board Fatwa Perspective," *The Journal of Asian Finance, Economics and Business* 8, no. 3 (2021): 665–73, <https://doi.org/10.13106/jafeb.2021.vol8.no3.0665>.

Global Islamic Economy Report 2022 reported that Indonesia was ranked second in global halal food and drink industries, while it was ranked 4 previously.³ The Royal Islamic Strategic Studies Centre (RISSC) recorded that there were 237.56 Muslims in 2022 of the total population of 275,361,267 people according to the data issued by Population and Civil Registration of the Ministry of Home Affairs,⁴ indicating that 86.7% were Muslims.

Law Number 33 of 2014 concerning Halal Product Guarantee implies that halal certification is mandatory for all businesses to expedite the development of the halal ecosystem in Indonesia.⁵ However, halal labelling is always deemed costly, requiring lengthy processes and registration to OSS with a Business Registration Number as one of the requirements for registration. Moreover, the verification and validation process may take time and may not guarantee that all applicants can be granted halal certificates.⁶ However, from the perspective of policies, halal certification is intended to leave only positive impacts that may better halal product quality.⁷ Quality halal products represent compliance with religious provisions in Islam and this policy has been welcomed with open arms by most people, including non-Muslims.⁸

The trends in halal industries have always been parallel to massive studies on halal certification, particularly from the perspective of the economy and policies. These trends represent responses to the rising

³ <https://www.dinarstandard.com>, accessed December 2022.

⁴ <https://dataindonesia.id>, Oktober 2023

⁵ Bintang Dzumirroh Ariny, "Dampak Positif Undang-Undang Nomor 33 Tahun 2014 Tentang Jaminan Produk Halal Dalam Menciptakan Sistem Jaminan Produk Halal Di Indonesia" 3, no. 2 (2020): 21.

⁶ Rooza Meilia Anggraini dan Anis Hidayatul Imtihanah, "The Legal Protection of The Spiritual Rights of Muslim Consumers in The Halal Industry Development Through Self-Declare," *Justicia Islamica* 20, no. 2 (8 November 2023), <https://doi.org/10.21154/justicia.v20i2.5003>.

⁷ Yuli Agustina et al., "Pentingnya Penyuluhan Sertifikasi Jaminan Produk Halal Untuk Usaha Kecil Menengah (UKM)," *Jurnal Graha Pengabdian* 1, no. 2 (30 November 2019): 139–50, <https://doi.org/10.17977/um078v1i22019p139-150>.

⁸ Koeswinarno dkk., "Non-Muslim Acceptance of Halal Products in the Context of Business Development," dalam *Digitalization in Halal Management*, ed. oleh Ahmad Rafiki, Contributions to Environmental Sciences & Innovative Business Technology (Singapore: Springer Nature, 2023), 193–207, https://doi.org/10.1007/978-981-99-5146-8_13.

consumers' need for halal products in a global world. A study conducted by A. Nurdiansyah mentions the soaring need for halal products in the tourism sector in Thailand. This increase is parallel to the increase in foreign exchange and national revenue of Thailand.⁹ Yamaguchi also witnessed that Japan has been positively affected by the demands for halal-certified products since the Tokyo Olympiad 2020. Since then, tourism spots in Japan have considered providing halal-labelled food products and other products, and prayer chambers for Muslims to accommodate Muslim tourists. Companies in Japan have also increased the production of halal products to be imported to countries with major Muslim populations.¹⁰

Furthermore, Shaheed Tayob holds that industries and institutional practices of halal certification in South Africa are growing competitive. Nevertheless, halal certification to set the standard, trace, and trade halal products in South Africa is restricted by communal halal practices at an empirical level, emphasising between-Muslims trade and exchange.¹¹ A study conducted by Haslinda Hasan et al. in Kinabalu-Sabah finds that the Malaysian Government recognises the essence of the role of small-medium enterprises (henceforth referred to as SMEs) in halal certification. Some policies and measures of and introduction to halal programs have helped expedite the growth of the products of SMEs. With this acceleration, the distribution of halal products is growing more competitive in the market.¹²

Another study by Humaira Naznii also finds that halal certification initiated through the collaboration between Muslim organizations in Australia and the Australian Government leaves positive results. Halal certification was released for exported meat products consumed by those in

⁹ A. Nurdiansyah, "Halal Certification and Its Impact on Tourism in Southeast Asia: A Case Study Halal Tourism in Thailand," *KnE Social Sciences*, 23 Mei 2018, 26–43, <https://doi.org/10.18502/kss.v3i5.2323>.

¹⁰ Hiroko Kurosaki Yamaguchi, "The Potential and Challenge of Halal Foods In Japan," *Journal of Asian Rural Studies* 3, no. 1 (28 Januari 2019): 1–16, <https://doi.org/10.20956/jars.v3i1.1712>.

¹¹ Shaheed Tayob, "Trading Halal: Halal Certification and Intra-Muslim Trade in South Africa," *Sociology of Islam* 8, no. 3–4 (2020), <https://doi.org/10.1163/22131418-08030003>.

¹² Haslinda Hasan, Rini Suryati Sulong, dan Geoffrey Harvey Tanakinjal, "Halal Certification Among the SMEs in Kinabalu, Sabah," *Journal of Consumer Sciences* 5, no. 1 (28 Februari 2020): 16–28, <https://doi.org/10.29244/jcs.5.1.16-28>.

Islamic countries, and this has positioned Australia as the biggest meat exporter worldwide.¹³ On the other hand, in the context of halal certification in Indonesia, some studies investigate the matter from a policy perspective. Hery Purwanto et al. have found that in 2019, the Ministry of Religion stipulated the Regulation of the Minister of Religion of the Republic of Indonesia Number 26 of 2019 concerning Halal Product Guarantee. As a consequence, halal certification for distributed products is mandatory, but setting the general regulations concerning this matter has been facing issues, and this situation requires far-reaching studies and consultations involving the affected parties. That is, there is a gap between the empirical conditions of the halal certification policy and the ideal condition of a new policy.¹⁴

Fatkul Muin and Palmawati Tahir, in their study, attempt to explore legal policies regarding halal products for micro, small, and medium enterprises (henceforth referred to as MSMEs) following the stipulation of the Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation. This study confirms that in order to meet the demand for halal products, the government policy is required to simplify the process of halal product application without ruining the production of MSMEs in Indonesia. The obligation of halal certification has transformed in terms of its implementation, where the registration process can be done online or through an application. Such digital transformation in halal certification responds to the challenges and demanding process of halal certification, including the lengthy and manual processes, which hamper the acceleration of halal certification in Indonesia.

Furthermore, the Government, through the Halal Product Assurance Body (henceforth referred to as BPJPH) has created a breakthrough in the digitalisation of self-declare or regular halal

¹³ Humaira Naznii, "Halal Certification Process by Local Governments and Muslim Organizations in Australia," *Journal of International Islamic Business Studies* 1, no. 01 (7 Maret 2023): 46–54.

¹⁴ Hery Purwanto, Sumunar Jati, dan Ahmad Rofiq, "Policy Analysis of Enforcement of Halal Product Guarantee Regulations Through The Regulatory Impact Analysis (RIA) Approach," *Journal of Digital Marketing and Halal Industry* 3, no. 2 (31 Oktober 2021): 149–64, <https://doi.org/10.21580/jdmhi.2021.3.2.9345>.

certification.¹⁵ All the application processes are done digitally on a website <https://ptsp.halal.go.id/login>. This digitalisation helps boost the number of halal-certified MSEs due to the ease of accessing the process anywhere anytime. The BPJPH provides this service without charge and this ease repeats.¹⁶ The increased capacity of halal product certification without charge for MSMEs is deemed positive in improving the quality of halal products, considering that this certification is expected to provide legal protection and guarantee of and information on halal products instrumental to businesses, consumers, and producers, on which the establishment of trust among consumers is based.

However, according to the data released by BPJPH of the Ministry of Religion of the Province of East Java, the achievement measured by the number of published halal certificates is ranked second, accounting for 24,757 from 20 May 2023. This figure indicates that notwithstanding its status as the second biggest province with a major Muslim population, the number of published halal certificates in East Java Province is lower than that of the Province of Central Java with a smaller Muslim population. The population of East Java Province in 2023 was recorded to be 41,416,407, with the Muslim population dominating the province (BPS Provinsi Jawa Timur, 2023). In addition, the data released by the Ministry of Religion reports that the Muslim population accounts for 39,925,335 people.¹⁷ The data released by the Small and Medium Business Cooperative Agency of the Province of East Java 2022, in the study by Christiayu Natalia and FX Gugus Febri Putranto, finds that the participation of MSMEs in exporting products overseas is considered too low, accounting for only one per cent, contrary to the fact that East Java has the biggest Muslim population second to the Province of West Java. East Java should benefit from this condition in developing the potential of halal industries.

¹⁵ Abdul Rachman, "Peluang Investasi Dana Haji Pada Industri Halal di Indonesia," *El-Bubuth: Borneo Journal of Islamic Studies*, 22 Juni 2021, 131–52, <https://doi.org/10.21093/el-buhuth.v3i2.3254>.

¹⁶ Hayyun Durrotul Faridah, "Halal Certification in Indonesia; History, Development, and Implementation," *Journal of Halal Product and Research (JPHR)* 2, no. 2 (21 Desember 2019): 68–78, <https://doi.org/10.20473/jhpr.vol.2-issue.2.68-78>.

¹⁷ <https://satudata.kemenag.go.id>, Oktober 2023

This research studies the distinction of digitalisation of halal certification viewed from regulatory and policy perspectives in East Java. This research focus departed from the fact that certification digitalisation is considered tenuous in terms of its regulations. This research also garnered samples represented by MSMEs in the Province of East Java as a measure to improve the quality of halal products. To date, according to the BPJPH database of the Ministry of Religion, the MSMEs granted halal certification in the Province of East Java are low in number, contrary to the huge number of MSMEs in the province and major Muslim population, the second to the population of West Java. In addition, East Java also has 40 facilitators (henceforth referred to as LP3H) to help with the halal certification process, the highest among other provinces. This research also contributes to the government to innovate policies regarding halal certification in East Java and to the stakeholders related to industry associations and other businesses in improving halal products for MSMEs in East Java.

Research Methods

This qualitative research employed a netnography and juridical-conceptual approaches, seeking to explore and unravel the phenomenon in natural social contexts and deep interaction between research subjects and objects.¹⁸ Primary data were garnered from interviews and secondary materials on the digitalisation of halal certification of MSMEs in East Java, including Halal Center Perguruan Tinggi, LSH, BPJPH, Cooperative and MSEs Agencies in the Province of East Java and other data resources. Data were collected from interviews, documents, and online observation. Both interviews and documentation involve the collection of primary and secondary data regarding the research topic, while online observation was performed to explore problematic regulations and policies in the matter of halal certification in Indonesia, followed by a qualitative analysis.¹⁹

¹⁸ Sugiyono, *Memahami Metode Penelitian Kualitatif* (Bandung: Alfabeta, 2014).

¹⁹ Johnny Saldana, *Fundamentals of Qualitative Research*, Understanding Qualitative Research (Oxford, New York: Oxford University Press, 2011).

The Development of Halal Industries in Indonesia

The development of halal industries in Indonesia has been quite massive due to its significant market share.²⁰ The potential for the growth of the halal industry in Indonesia is supported by the population factor, where Muslims constitute the major population in Indonesia.²¹ Halal is mandatory for all Muslims according to Islamic teachings.²² Consuming and using halal products are compulsory, and this teaching should not only be deemed something religious but also a commodity. Halal products can even be applied to those non-Muslims. Some countries such as Thailand, Singapore, the USA, Australia, Japan, and South Korea, with minor Muslim populations, are found to provide halal products. This reality indicates that “halal” has become a commodity that carries an added value to a product. Demands in halal industries also rise every year.²³

The application of halal products is far-reaching, encompassing food, medicines, fashion, tourism, logistics, lifestyles, and many others. To date, halal industries in Indonesia and globally have set the trend preferred by many due to high market share. Global Islamic Economy Report 2020/2021 reports that Muslim consumers spent US\$2.02 trillion in 2019, and this figure was mostly spent on halal products, ranging from drinks, and food, to fashion products (<https://cdn.salaamgateway.com>, 2020). Halal food and fashion products become excellent products in halal industries in Indonesia. The acceleration of halal industries can also take into account the reinforcement of regulations concerning this matter. Law Number 33 of 2014 concerning Halal Product Guarantee provides a strong fundamental supporting halal certification and consumer protection among Muslims.

²⁰ Nur Kasanah dan Muhammad Husain As Sajjad, “Potensi, Regulasi, Dan Problematika Sertifikasi Halal Gratis,” *Journal of Economics, Law, and Humanities* 1, no. 2 (9 Oktober 2022): 28–41, <https://doi.org/10.21154/jelhum.v1i2.1196>.

²¹ Abdul Rachman Abdul dan Ashar Johnsan Khokhar, “Role of Indonesian Council of Ulama in Halal Certification and Product Guarantee,” *Journal of Islamic Thought and Civilization* 13, no. 1 (26 Mei 2023), <https://journals.umt.edu.pk/index.php/JITC/article/view/2444>.

²² Abdul Rachman, “Halal Branding: A Religious Doctrine in the Development of Islamic Da’wah,” *Journal of Digital Marketing and Halal Industry* 2, no. 2 (30 Oktober 2020): 133, <https://doi.org/10.21580/jdmhi.2020.2.2.6149>.

²³ Yunes Ramadan Al-Teinaz dan Hani Mansour M. Al-Mazeedi, “Halal Certification and International Halal Standards,” dalam *The Halal Food Handbook* (John Wiley & Sons, Ltd, 2020), 227–51, <https://doi.org/10.1002/9781118823026.ch15>.

However, the government is also expected to strengthen the regulations and policies that support the development of digital halal industries.²⁴

The betterment of halal infrastructure initiated by the Indonesian Government has been one of the indicators, implying that the halal industrial growth in the country is accelerating through the development of halal research and innovation centres. The Government is endeavouring to simplify the halal registration process for businesses. The betterment of the Digital Halal Assurance System enhances transparency and trust among consumers in halal products. This development also indicates the huge potential that keeps running. The government and stakeholders work together to reinforce regulations, better halal product quality, and strengthen market share in the country or at a global level.

The Regulations Concerning Digitalisation of Halal Certification

The progress of halal industries in Indonesia takes place along with the support from policies and regulations such as laws and other regulatory provisions. These regulations are taken as concrete measures of the government to expedite and simplify the halal product registration process in Indonesia through a costless halal certification program for MSEs, commonly dubbed SEHATI, as an attempt to shift further to halal certification digitalisation.²⁵ Halal certification in Indonesia, in terms of its administration, has experienced digital transformation, where applicants can access the siHalal application on <https://ptsp.halal.go.id/> to register their products. This program complies with Government Regulation Number 39 of 2021 concerning the Administration of Halal Product Guarantee to expedite the issuance of the certificates and raise the number of MSEs certified halal, while the application for halal certification can be regularly

²⁴ Dedah Jubaedah dkk., "Halal Certification in Indonesia: Study of Law Number 6 of 2023 on Job Creation," *Jurisdictie: Jurnal Hukum Dan Syariah* 14, no. 1 (22 Juli 2023): 154–84, <https://doi.org/10.18860/j.v14i1.19948>.

²⁵ Melissa Aulia Hosanna dan Susanti Adi Nugroho, "Pelaksanaan Undang-Undang Nomor 33 Tahun 2014 Tentang Jaminan Produk Halal Terhadap Pendaftaran Sertifikat Halal Pada Produk Makanan," *Jurnal Hukum Adigama* 1, no. 1 (19 Juli 2018): 511, <https://doi.org/10.24912/adigama.v1i1.2155>.

accessed. This digitalisation should give a significant increase in the number of halal-certified MSMEs.

The policies concerning halal certification in Indonesia refer to Law Number 33 of 2014 concerning Halal Product Guarantee. Moreover, this law is also linked to several policies and regulations governing the implementation of halal certification in Indonesia intended to protect the rights of Muslim Consumers to gain access to halal products. The following are the regulations regarding halal certification in Indonesia:

Table 1. Government Regulations and Policies in Halal Industries in Indonesia

No	Regulation	Detail
1	Law Number 33 of 2014 concerning the Halal Product Guarantee	The first regulation regulating halal product guarantee
2	Law Number 11 of 2020 concerning Job Creation	Amending law Number 33 of 2014
3	The Government Regulation in Lieu of Law (Perppu) Number 2 of 2022 concerning Job Creation	Superseding Job Creation Law
4	The Government Regulation Number 39 of 2021 concerning the Administration of Halal Product Guarantee	The government Regulation regarding Halal Product Guarantee and Halal Certification Registration using an electronic system
5	The Regulation of the Minister of Religion Number 2 of 2022 concerning International Collaboration in Halal Product Guarantee	The Regulation of the Minister of Religion concerning collaboration between institutions related to halal product guarantee
6	The Regulation of the Minister of Religion Number 20 of 2021 concerning Halal Certificate for MSEs	The Regulation of the Minister of Religion concerning Costless Halal Certification for MSEs, commonly dubbed SEHATI, and the process of

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| | | facilitating halal product registration (LP3H and P3H) |
| 7 | The Regulation of the Minister of Religion Number 26 of 2019 concerning the Administration of Halal Product Guarantee | The Regulation of the Minister of Religion Regarding Halal Product Guarantee in Indonesia |
| 8 | The Instruction of the Minister of Religion Number 1 of 2023 concerning Halal Product Certification and Canteens in Working Environment in the Ministry of Religion dated 8 February 2023. | The instruction from the Minister of Religion to certify canteens |
| 9 | The Decree of the Minister of Religion Number B.II/3/33453 of 2019 concerning the Assignment of Coordinators for Regional Certification Services | The Decree of the Minister of Religion concerning the Regional Halal Task Force |
| 10 | The Decree of the General Secretary of the Ministry of Religion Number 80 of 2019 concerning the Tasks of Coordinators and Regional Halal Certification Service Task Force | The Decree of the General Secretary of the Ministry of Religion concerning the Regional Halal Task Force |
| 11 | The Decree of the Chief of Halal Product Assurance Body Number 12 of 2020 concerning BPJPH | The Decree of the Chief of BPJPH concerning Regional Halal Task Force |
| 12 | The Decree of the Chief of Halal Product Assurance Body | The Decree of the Chief of BPJPH concerning the Halal product |
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Number 65 of 2022 Registration Process Facilitating concerning the Assignment of Agencies in (LP3H) and the Halal Facilitators of Halal Product Product Registration Process Registration Process (PPH) Facilitators (P3H)

Source: Obtained from BPJPH, Law No. 33 of 2014, Law No. 11 of 2020, Law No. 39 of 2021, the Instruction of the Minister of Religion No. 1 of 2023

These regulations govern halal certification administration performed digitally, provide protection of the matter, and integrate halal product guarantee service systems. These regulations also govern more easily accessible procedures of the certification that are less costly and more time-efficient for both MSMEs and MSEs. As a result, halal certification regulations in Indonesia are developed and renewed to ensure the legal protection of Muslim consumers and improve the quality of halal products. In addition to Law Number 33 of 2014, some other successor regulations and technical guidelines issued by BPJPH of the Ministry of Religion serve as guidance for producers and business actors to ensure that they meet halal requirements in Indonesia. Halal certification policies never stop developing and adjusting for the purpose of raising awareness and understanding of the significance of halal certification, as well as supporting business actors in satisfying halal requirements.

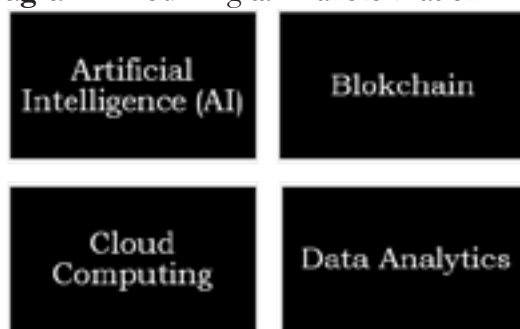
Policies Regarding the Utilisation of Technology in Halal Industries

Digital transformation in halal industries is inevitable, considering that technological development is getting more massive than ever before, coupled with the requirement to reach 10 million halal products to be certified under the administration of BPJPH. To meet this target, digitalisation is deemed necessary for halal product certification. Moreover, digital technology utilised in this process can guarantee efficiency in halal product verification, validation, and auditing processes that know no boundaries. Dedy Permadi asserts that the Indonesian Digital Roadmap 2021-2021 contains four pillars to allow for digital transformation: digital

infrastructure, digital economy, digital government, and digital society.²⁶ Digital transformation is performed by the government, beginning with digital infrastructure development.

The utilisation of digital technology that reaches all aspects, including halal certification in Indonesia, is an innovative and creative breakthrough. Advanced technology such as Artificial Intelligence (AI) and Blockchain are examples of the utilisation of recent technology. In 2020, LinkedIn conducted a study on the need for digital competencies for the future, mentioning four domains of advanced technology, constituting Artificial Intelligence, Blockchain, Cloud Computing, and Data Analytics, commonly abbreviated as ABCD (<https://www.linkedin.com/>, 2023). This utilisation is instrumental since it allows for efficient and effective services. The regulations governing digital transformation in public services are set forth in Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE). In other words, the use of digital technology must be backed up by lucid regulations and obvious and far-reaching realisation to enable people to effortlessly access recent technology, recalling that Indonesia has a huge potential for digital economic development that keeps growing. The digital economy in Indonesia is predicted to be the biggest in Southeast Asia by 2025, hitting Rp. 1,738 trillion.

Diagram 1. Four Digital Transformation Pillars



Source: <https://www.linkedin.com/>

²⁶ Titah Arum M. R. Toewoeh, “Akselerasi Transformasi Digital Pacu Pertumbuhan Ekonomi Digital,” *Ditjen Aptika* (blog), 19 November 2022, <https://aptika.kominfo.go.id/2022/11/akselerasi-transformasi-digital-pacu-pertumbuhan-ekonomi-digital/>.

The government has initiated a digital transformation in halal certification in Indonesia. Halal certification digitalisation represents assertive measures to exercise what is mandated by the law concerned. The government has also drafted some policies concerning halal product guarantees such as digital halal certification on a website. This progress serves as a stimulus to the development of halal industries in Indonesia. Nevertheless, digital transformation should transcend halal certification-related matters, further reaching halal food supply chain management, and this management will serve as a crucial point to guarantee halal products, considering that halal food industries constitute a lengthy food supply chain. Digitalisation in halal food supply chain management involves the exploration of halal ingredients, slaughterhouses, imported goods, logistics, distribution, warehouses, storages, and many more, and involves the participation of multi-stakeholders. The utilisation of technology in the halal food supply chain can lead to distribution management solutions comprehensively by maintaining the halal quality and cleanliness of the products efficiently.

The Dynamics of Regulations and Policies in Halal Certification Digitalisation in East Java

The digitalisation of halal certification in Indonesia is a creative and innovative idea initiated by the BPJPH as a governmental agency authorised to administer halal certification. Halal certification registration services can take place online on SiHalal application by accessing <https://ptsp.halal.go.id/>. Digital halal certification enables applicants to easily register their products to be halal certified through either self-declare or regular procedures.²⁷ Sihalal can be accessed online on a computer or a smartphone connected to the Internet. Halal product registration on this application can be done anytime anywhere. With a stable Internet

²⁷ Elif Pardiansyah, Muhammad Abduh, dan Najmudin, "Sosialisasi Dan Pendampingan Sertifikasi Halal Gratis (Sehati) Dengan Skema Self-Declare Bagi Pelaku Usaha Mikro Di Desa Domas," *Jurnal Pengabdian Dan Pengembangan Masyarakat Indonesia* 1, no. 2 (9 November 2022): 101–10, <https://doi.org/10.56303/jppmi.v1i2.39>.

connection, all people can effortlessly get their products halal certified (<https://kemenag.go.id>, 2023).

The implementation of halal certification digitalisation in Indonesia has experienced massive development and involved parties, ranging from the Indonesian Council of Ulama, Halal Assessment Body (LPH), LP3H, and P3H, to the Regional Halal Task Force.²⁸ This advancement is not without issues. Poor knowledge has caused some to face difficulty accessing the siHalal application; business actors fail to register their products simply because they do not hold Business Registration Number; other failures may also be caused by unstable internet connection, making the application inaccessible; not all products can be verified for halal certification, meaning that not all SMEs will be granted halal certificates. Halal certification is declared mandatory by Law Number 33 of 2014 concerning Halal Product Guarantee, requiring all businesses to certify their products halal for reliable legal certainty, to guarantee and safeguard Muslim consumers to safely consume halal food. Halal certification also ensures that the products are safe for consumption, and healthy, with their added value to be marketed worldwide.

The digitalisation of halal certification facilitates services offered to business actors through either a costless halal certification program (SEHATI) or a regular program. BPJPH has set a plan to grow MSEs halal certified, reaching at least 10 million certified businesses. On May 2023, the number of halal-certified MSMEs in the Province of Central Java hit 30,669, followed by East Java (24,757), and West Java (21,156). The increasing number of halal-verified MSMEs shows that the digitalisation of halal certification expedites the tendency to effortlessly access halal certification processes among MSMEs. The dynamic of halal certification in the Province of East Java is quite challenging. To accelerate the increasing number of halal-certified MSMEs in the *Safe n Locké* area, a group of halal industries must appropriately be managed. Cooperation with Islamic boarding schools in the domain of East Java is also required to guarantee high-quality halal

²⁸ Abdul Rachman dkk., "Pendampingan Proses Produk Halal Dalam Program Sertifikasi Halal Gratis (SEHATI) Bagi Pelaku UMKM Kedu Emas Tangerang," *JAPI (Jurnal Akses Pengabdian Indonesia)* 8, no. 1 (1 April 2023): 1–8, <https://doi.org/10.33366/japi.v8i1.4558>.

products with “one Pesantren One Product strategy (OPOP) so that the products are qualified for export.”²⁹ Christiayu Natalia and FX Gugus Febri Putranto report that there was only one per cent of MSMEs marketing their products overseas in East Java Province in 2021. This small number is an issue impeding the acceleration of product quality.³⁰

According to Iswanto, the policies regarding halal certification have been duly enforced in East Java, but there are issues in terms of business actors, particularly in the aspect of the digitalisation of small businesses. Business Registration Number issuance process and accessing the ‘sihalal’ page, for example, are deemed problematic because the process tends to be demanding and some are not technology-literate.³¹ Similarly, Nurhidin also holds that the Law concerning Halal Product Guarantee has set halal certification mandatory. Measures taken to administer halal certification are getting massive, encouraging people to register their products more effortlessly.³²

This idea is supported by Rooza Meilia, believing that halal certification and digitalisation are a positive development. Rooza adds: “Law concerning Halal Product Guarantee is growing well, especially in East Java simply because this certification is no longer voluntary but mandatory. New LP3H and LPH founded by government institutions and mass organizations are growing in number, improving the digitalisation of halal certification. SIHALAL and BPJPH have also allowed for easy processes for businesses, facilitators, LP3H, and LPH planning to apply for halal certification via self-declare or regular procedures. The policies of BPJPH were awarded top digital implementation 2023 in digital awards held by *itworks*.”³³ The

²⁹ Liputan6.com, “Tantangan Sektor Industri Halal di Jatim,” liputan6.com, 13 Juni 2021, <https://www.liputan6.com/surabaya/read/4580599/tantangan-sektor-industri-halal-di-jatim>.

³⁰ Christiayu Natalia dan FX Gugus Febri Putranto, “Socio-Economic Determinants of Credit Access in Micro Enterprises Household of East Java During New Normal Era,” *East Java Economic Journal* 6, no. 2 (29 September 2022): 160–81, <https://doi.org/10.53572/ejavec.v6i2.86>.

³¹ Juni Iswanto, Halal Center IAI Diponegoro Nganjuk, *interview*, 29 November 2023.

³² Nurhidin, Halal Center IAI Tri Bakti Kediri, *interview*, 30 November 2023.

³³ Rooza Meilia, Halal Center IAIN Ponorogo, *interview*, 2 Desember 2023.

information given indicates that this certification still faces issues notwithstanding its proper implementation.

Halal certification digitalisation refers to the utilisation of digital technology to facilitate the process of halal certification online.³⁴ As technology advances, several countries have involved digital platforms to expedite halal certification. This digitalisation involves the utilisation of digital technology to help transform or supersede processes, activities, or products formerly performed manually. It also involves information technology, software, hardware, and systems allowing for processing, storage, and electronic data exchange. Digitalisation also involves comprehensive digital transformation reaching all aspects of life, including businesses, industries, governance, education, accessibility, and innovation through digital technology.³⁵ In general, digitalisation transforms traditional processes into digital technology-based processes, utilising computation, connectivity, and data analysis to help improve performance and reach better results.³⁶ Digitalisation stimulates innovation that uses new technology and more adaptive business models, giving access to the acceleration of halal certification for MSMEs in Indonesia, particularly in the Province of East Java via digitalisation of halal certification initiated by BPJPH of the Ministry of Religion.

The Council of National Information Technology and Communication confirms that digital transformation in Indonesia should ease businesses (Ease on Doing Business (EoDB)), and e-commerce transactions in 2024 have recorded a huge number, reaching Rp. 600 trillion. This digital transformation is also instrumental to digital economic growth

³⁴ Suryo Adi Rakhmawan, "Digital Transformation of Informal Workers in the New Normal Era: 'Can It Be the Solution We Are Searching For?'" *East Java Economic Journal* 6, no. 2 (29 September 2022): 182–207, <https://doi.org/10.53572/ejavec.v6i2.87>.

³⁵ Irfan Nurfalih dan Aam Slamet Rusydiana, "Digitalisasi Keuangan Syariah Menuju Keuangan Inklusif: Kerangka Maqashid Syariah," *Ekspansi: Jurnal Ekonomi, Keuangan, Perbankan, Dan Akuntansi* 11, no. 1 (31 Mei 2019): 55–76, <https://doi.org/10.35313/ekspansi.v11i1.1205>.

³⁶ Mohd. Iskandar Ilyas Tan dan Zuhra Junaida Ir Mohamad Husny, "Digital innovation, Halal industry and the Fourth Industrial Revolution," *Halal Logistics and Supply Chain Management in Southeast Asia*, no. Query date: 2023-03-05 22:45:25 (2020): 228–42, <https://doi.org/10.4324/9780429329227-17>.

and halal product quality improvement.³⁷ Digitalisation can optimise manual processes, reduce human errors, increase business productivity, reduce cost, and optimise resources.³⁸ This digitalisation is expected to contribute to the improvement of halal product quality since efficiency processes, verification, and information transparency are also boosted, enabling consumers to make decisions faster. The BPJPH of the Ministry of Religion has created digitalisation for halal certification by launching an application called Sihalal as a halal information system. This application can be accessed on a website from desktop or mobile devices, giving easy access to people anywhere and anytime. Sihalal is expected to help accelerate the halal ecosystem in Indonesia.

Halal Certification Digitalisation for the Betterment of Halal Product Quality in East Java

The policies regarding halal certification, as mandated under Government Regulation Number 39 of 2021 Articles 59 and 148, imply that businesses can apply for halal certification via an electronic system and Halal Product Assurance Body as electronic-based integrated services. This application is intended to support efficiency and effectiveness in the process of halal certification in Indonesia. The Chief of BPJPH, Aqil Irham, agrees that SiHalal has given ease, including extensive access for business actors in Indonesia from the Internet. This application is also integrated with the Online Single Submission (OSS)-Investment Coordinating Board, Electronic Certificate Board, and National Cyber and Crypto Agency (BSSN). The halal certification processes via the siHalal application can be performed faster than manual processes. These accelerated processes can, therefore, help stakeholders in halal certification to apply the data and service integration,

³⁷ Sascha Kraus dkk., "Digital Transformation: An Overview of the Current State of the Art of Research," *SAGE Open* 11, no. 3 (1 Juli 2021): 21582440211047576, <https://doi.org/10.1177/21582440211047576>.

³⁸ Alif Ihsan A. Fahta, Anggita Fiorella Moreni, dan Adzrani Anggita, "The Impact of Digitalization to Accelerate Economic Performance During COVID-19 Pandemic," *East Java Economic Journal* 6, no. 2 (29 September 2022): 253–70, <https://doi.org/10.53572/ejavec.v6i2.92>.

involving LPH and the Fatwa Commission of the Indonesian Council of Ulama.

Digital transformation also plays a role in expediting people's connectivity in economic, cultural, political, and social sectors; it also allows for easy access to information in real-time and communication. Halal certification digitalisation is also an easy way for business actors.³⁹ This digitalisation gains support from MSMEs in the Province of East Java with their access to the Internet rising by 44% of the total number of SMEs in the province (9,782,262) (<https://diskopukm.jatimprov.go.id>, 2023). Through BPJPH, the government has created a breakthrough in halal certification digitalisation that can be done regularly or in self-declare. All the processes of halal certification are performed digitally by accessing <https://ptsp.halal.go.id/login>. There is also an increase in the number of halal-certified SMEs, following easy access to certification processes,⁴⁰ coupled with an increasing quota of SEHATI. This is seen positive development by MSMEs in improving the quality of halal products because the halal certification can give protection, guarantee, and information on halal products and serve as an instrument in business ethics for consumers and producers alike, as well as build trust among consumers.

Citing the data issued by BPJPH of the Ministry of Religion, East Java is ranked two in terms of the number of businesses certified halal, accounting for 24,757 certificates per May 2023. However, this number is below that of Central Java notwithstanding the major Muslim population in East Java. The Data published by the Office of Cooperatives and SMEs of East Java Province reports that the participation of the MSMEs in East Java in accelerating halal certificate with a global standard is also considered low, accounting for only one per cent:

³⁹ Rakhmawan, "Digital Transformation of Informal Workers in the New Normal Era."

⁴⁰ Pardiansyah, Abduh, dan Najmudin, "Sosialisasi Dan Pendampingan Sertifikasi Halal Gratis (Sehati) Dengan Skema Self-Declare Bagi Pelaku Usaha Mikro Di Desa Domas."

Table 2. The Number of Halal Certification in Provincial Regions

Province	Number of Applicants	Halal Certificates Issued
Central Java	45,605	30,669
East Java	38,329	24,757
West Java	34,232	21,156
Lampung	15,932	8,498
Yogyakarta	5,733	3,508
DKI Jakarta	5,531	3,038
Banten	3,792	2,127
Riau	2,774	1,491
West Sumatera	2,730	1,704
North Sumatera	2,479	1,375

Source: <http://olap.halal.go.id/>, 20 May 2023

According to Nur Anim, halal certification with a digital system eases business actors and certification agencies. He further argues: “Digitalisation using the *sihalal* application accessible on ptsl.halal.go.id makes facilitating easier in the process. This also holds true for businesses, particularly those referring to self-declare to register their products to the fatwa commission. Halal certification supervision may be held by business actors who continuously know all the processes of halal products produced by business actors. With such ease, PPH will immediately process halal certification applications because every business actor with an issued certificate is entitled to Rp. 150,000 before deducted Rp. 3,000 for the administrative service fee.”⁴¹ Furthermore, Agus Wiyono says that halal certification acceleration should serve as a stimulus to facilitators in halal product processes and increase the number of business actors facilitated although we know that some businesses are not prepared for such halal certification digitalisation.

Rooza Meilia believes that halal certification has been duly implemented, but digitalisation triggers new problems as said further: “...some violations of halal certification processes are found. The

⁴¹ Nur Anim, LSH PW ISNU Banyuwangi, *Interview*, 1 December 2023.

regulations, however, are appropriate, but not the implementation, especially the supervision of the implementation. Violations are obvious and no further action is given by the government. Responses to the violations have only been given in warning from LP3H. There is no intensive supervision over the products certified halal, allowing some unfair conduct to take place, where some change ingredients not according to the provision agreed upon during registration. This conduct may be imposed with sanctions that may either revoke the certificate or impose fines. So far, I have never heard any stricter sanctions.”⁴²

Rooza further said: ”...one of the problems in digital halal certification is that no supervision carried out systematically on SiHalal application. Restrictions need to be set forth for facilitators who implement irrational verification and validation affecting businesses. Facilitators can do verification ten times or more in a day, while in reality, facilitators can perform validation and verification only for a few businesses. It means facilitators may not directly get involved in validation and verification processes. The bottom line is that, in terms of supervision, sihalal does not adequately accommodate those violations committed by either business actors or facilitators.”⁴³

In terms of the hampering issues in halal certification, Nur Amin said:

”....another issue is that the ingredients used by businesses are often unregistered on the sihalal website, and it requires them to input the materials already listed in the system. Another issue is that the processes running in the fatwa committee are uncertain, they can take 1 to 3 months or even more. Halal product processes may be varied, sparking uncertainty between processes in gaining benefits from every business as transferred to the designated account for payment submitted to LP3H, in this case LSH PWISNU. Some fatwa committees are quick some others are slow with the number of the members of the fatwa limited in the entire Indonesia.”⁴⁴

⁴² Rooza Meilia A, Halal Center IAIN Ponorogo, *Interview*, 2 December 2023.

⁴³ Rooza Meilia A, Halal Center IAIN Ponorogo, *Interview*, 2 December 2023.

⁴⁴ Nur Anim, LSH PW ISNU Banyuwangi, *Interview*, 1 December 2023

The above information indicates that digitalisation still encounters issues, particularly in the area of East Java in terms of the supervision over business actors or certainty in the certification process utilising unreliable digital systems. This also shows that digital certification in East Java is not optimal although it is intended to ensure that products and services certified 'halal' fulfil the standard set by BPJPH of the Ministry of Religion. The digitalisation of halal certification is also performed to give easier and transparent access to consumers. The digitalised certification process will help reduce paper waste and give better accuracy in data collection, as well as increase communication between businesses and customers. Moreover, digitalisation will allow for more efficient quality assurance and improve industrial productivity; digitalisation will help improve the quality of halal products and MSMEs may enjoy more efficient access to online registration for data verification and validation without having to visit the BPJPH office in the Ministry of Religion in Jakarta.

The regulations governing halal certification in East Java need to be reinforced to support accessibility to halal industrial acceleration and revolutionise food industries by providing more efficient and transparent ways of verifying varied Muslim-friendly products with global standards. The digitalisation of halal certification may give added value to the product concerned, allowing for massive marketing globally. The digitalised certification process helps reduce the cost of physical inspections and real-time information on the halal status of the products. Moreover, this digitalisation can also improve access to authentic halal products among Muslims residing in remote areas and simplify the market of certified products across borders.⁴⁵ In a nutshell, the digitalisation of halal certification offers countless benefits for both producers and consumers in the province of East Java.

Recognised or not, the digitalisation of halal certificates for MSMEs in East Java Province offers huge benefits because it serves as one of the factors to improve the quality of halal products so that they can be exported

⁴⁵ Abdul Rachman dan Bilaly Sangare, "Synergy and Collaboration Between Government And Private Institutions In Building Halal Ecosystems In Indonesia," *Jurnal Ilmiah Islam Futura* 23, no. 2 (4 Agustus 2023): 303–26, <https://doi.org/10.22373/jiif.v23i2.17507>.

overseas. The Government of the Province of East Java, representing the economic sector, released data reporting that in 2020, halal products in East Java consisting of food and drinkable products reached USD 309 billion, equal to 46.35 trillion. This huge figure was obtained from halal products. The market share of halal products involves Muslim countries, including Saudi Arabia, Egypt, United Arab Emirates, Malaysia, Nigeria, Qatar, Libya, Iraq, Bangladesh, Turkey, Oman, and Maldives.⁴⁶ Therefore, the products of MSMEs must be certified halal to meet the market share overseas.

Therefore, optimising and enforcing regulations and policies regarding halal certification covering potential regions like East Java will need synergy and acceleration at two levels, the Government and grassroots. At the government level, the government need to take some measures of supervision and control of policies; furthermore, the government must also be committed to accelerating the program and enforcing the law. At the grassroots level, coordination, collaboration, and innovation need to be reinforced to bring about just and inclusive digitalisation of halal certification.

Conclusion

Regulations and policies regarding halal certificates in Indonesia guarantee legal certainty of the digital transformation in halal certification, particularly in East Java. Despite a low number of issued certificates granted for MSMEs in the Province of East Java compared to those of other provinces, this digitalisation is an effective solution to help improve the quality of halal products produced by MSMEs in East Java. The regulations and policies concerning halal certificates initiated by the BPJPH also offer easy access to the halal certification process for MSMEs utilising communication and information technology without boundaries. This accessibility encompasses far-reaching stages, ranging from registration, data input, verification, and validation to the progress of the halal certification processes in East Java. This digitalisation is also expected to improve the quality of halal products and compliance with halal requirements for products. Therefore, this research offers valuable perspectives to the

⁴⁶ Liputan6.com, "Tantangan Sektor Industri Halal di Jatim."

government, industry associations, and business actors in reinforcing the digitalisation of halal certification to improve halal product quality in Indonesia. The Provincial Government of East Java can also consider making regulations at the regional level supporting the program of digitalisation of halal certification as a stimulus to better the quality of halal products produced by MSMEs in the Province of East Java.

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