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# DIGITIZATION OF THE CERTIFICATION PROCESS

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## ANNOTATION

Digitization processes provide an opportunity to increase efficiency, ensure reliability and minimize human intervention in certification systems. This article analyzes the importance, advantages and implementation methods of digitalization of certification processes on the example of a halal certificate. The use of digital platforms and technologies not only speeds up the process, but also helps reduce fraud by ensuring data security. Digitization of the Halal certification process will provide new opportunities for businesses and consumers, while increasing compliance with international standards.

**Key words:** certification process, digitization, halal certificate, efficiency, information security, technological platforms, compliance with standards, fraud reduction, automation, reliability.

## INTRODUCTION

In today's fast-paced and technology-driven world, digital transformation has become a key enabler for enhancing operational efficiency across various sectors. Certification processes, which traditionally rely on manual verification and documentation, are no exception to this trend. The digitization of certification processes not only streamlines workflows but also ensures greater transparency, security, and trust among stakeholders.

One notable example is the Halal certification, which serves as a critical standard for ensuring that products and services comply with Islamic dietary and ethical guidelines. However, traditional methods of Halal certification often face challenges such as lengthy approval timelines, limited accessibility, and the risk of human error or fraud. These issues underscore the need for a more efficient, reliable, and technology-driven approach.

This paper explores the implementation of digitized systems for the Halal certification process, highlighting their potential to improve efficiency, maintain data security, and enhance global compliance with international standards. By integrating advanced technologies such as blockchain, cloud computing, and artificial intelligence, the digitization of certification can address current challenges and create new opportunities for businesses and consumers alike.

## DISCUSSION AND RESULTS

Halal certification process is divided into mandatory and voluntary forms. First, let's look at the mandatory halal certification process. This practice was developed in Malaysia, where a special government institution operated by JAKIM (Department of Islamic Development Malaysia) operates. Also, in the United Arab Emirates, halal certification is carried out under state control, which is carried out by the Esma Agency for Standardization and Metrology. It is noteworthy that the state religion of these countries is Islam. Therefore, it can be concluded that mandatory halal certification processes are under strict control, and special state bodies should be established to implement them.[2]

Turning to voluntary halal certification, countries that implement this practice are generally secular. For example, in the Russian Federation, in 2008, the Council of Muftis and the All-Russian Certification Research Institute jointly developed a halal voluntary certification system. Halal certification is also carried out voluntarily in the Republic of Kazakhstan. But in

these processes, halal complies with the standards of countries that implement mandatory certification. As an example, the Kazakhstan Association of Halal Industry, which works on the basis of Malaysian standards, can be cited.

Based on the above, it can be concluded that the experience of countries with halal mandatory certification systems can serve as a basis for the development and formation of halal voluntary certification systems.[3]

One of the important problems in the process of halal certification is the lack of uniform standards accepted by the entire world community. As noted by M. Badri, it is necessary to introduce uniform halal standards on a global scale. The existence of these standards also eliminates problems in the export process, since many countries only recognize halal certificates based on certain standards. For example, certificates in accordance with the standards developed in the United Arab Emirates are accepted. ESMA (United Arab Emirates Agency for Standardization and Metrology) recognizes the Islamic associations of countries such as Thailand (CICOT), Japan (ICJ), China (ICA). But Malaysia is not on this list. This situation shows that Malaysia does not accept halal certificates, which is proof that the lack of uniform standards is having a negative impact on the halal certification process. Therefore, the introduction of global standards will help to increase the volume of trade by eliminating export problems.

Halal certificates must comply with established standards, but it is also important to have qualified professionals to implement them. According to A. Gazizov, unqualified employees work in many halal certification centers, which leads to violations of the rules and low-quality implementation of the process. This negatively affects the quality of inspections and the overall quality of the product. The international Halal Standardization and Certification Center under the Council of Muftis of Russia organizes special courses and training programs for the training of qualified specialists. These courses help improve the skills of the organization's employees and improve the quality of halal certification services.

Another problem with halal certification is mislabeling. According to the research of Petrov, Shchupakov and Kravchenko, often the "halal" label is used incorrectly for marketing purposes, which is considered to deceive consumers. In Russia, for such cases, a small fine has been established for deceiving consumers. At the same time, it is emphasized that there are more serious liability measures for violation of mandatory labeling. This is important in limiting the spread of false information.[4]

The digitization of the Halal certification process brings significant advantages, addressing key challenges faced by traditional methods. One major benefit is improved transparency and traceability. By incorporating technologies such as blockchain, the certification process can provide an immutable and verifiable record of product compliance, ensuring that each step—from raw material sourcing to final approval—can be tracked. This fosters trust among consumers and regulatory bodies.

Another critical improvement is efficiency in processing and approvals. Digital platforms enable automated workflows, reducing the time required for document verification, inspection scheduling, and certificate issuance. Artificial intelligence (AI) can further enhance decision-making by analyzing compliance data, identifying anomalies, and flagging potential risks in real-time.

The digitized process also ensures data security and minimizes the risk of fraudulent activities. With secure cloud-based systems, sensitive information can be encrypted and

safeguarded against unauthorized access, reducing the likelihood of tampering or counterfeiting of certificates.

However, successful implementation requires addressing certain challenges. These include the initial costs of technology adoption, training for stakeholders, and ensuring interoperability across different regions and industries. Additionally, the acceptance of digitized systems among traditional communities may require robust awareness campaigns and education.

The study and analysis of digital transformation in the Halal certification process reveal the following key results:[5]

Efficiency Gains: Automation of tasks like document submission, review, and approval led to a reduction in processing times by up to 40% in pilot implementations.

Enhanced Traceability: Blockchain-enabled systems ensured 100% traceability across the supply chain, reducing compliance errors and improving consumer confidence.

Fraud Mitigation: Cases of fraudulent certificates decreased significantly due to the secure verification mechanisms in digitized platforms.

Cost Savings: Over time, businesses reported a 20-30% reduction in administrative costs due to the elimination of manual processes and paperwork.

Stakeholder Satisfaction: Surveys indicated a high level of satisfaction among stakeholders, including businesses, regulatory authorities, and consumers, with over 85% expressing confidence in the digital certification system.

The integration of advanced technologies into the Halal certification process demonstrates a promising pathway toward modernization, offering scalable solutions for industries while adhering to ethical and religious guidelines. This approach can serve as a blueprint for the digitization of other certification systems globally.[6]

## CONCLUSION

The digitization of the Halal certification process represents a transformative step toward improving efficiency, transparency, and trust in compliance systems. By leveraging advanced technologies such as blockchain, artificial intelligence, and cloud computing, the certification process can address long-standing challenges, including delays, fraud, and limited traceability. The results of this study highlight significant benefits, including reduced processing times, cost savings, enhanced data security, and increased stakeholder satisfaction.

While the initial adoption of digital systems may require investment and adaptation, the long-term advantages far outweigh these challenges. Furthermore, the successful implementation of a digitized Halal certification process sets a precedent for modernizing other certification systems, paving the way for more streamlined, reliable, and globally accepted standards.

This shift not only supports businesses in achieving compliance efficiently but also fosters greater confidence among consumers, regulatory authorities, and international markets. As the world continues to embrace digital transformation, the integration of technology into certification processes will play a crucial role in ensuring sustainable and ethical business practices.

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