Evaluation of the Effectiveness of SEHATI Innovation in Improving the Efficiency of Halal Certification for Micro and Small Enterprises in Indonesia

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ABSTRAK

Penelitian ini bertujuan mengevaluasi efektivitas inovasi pelayanan SEHATI (Sertifikasi Halal Gratis dan Cepat untuk UMK) dalam meningkatkan efisiensi proses sertifikasi halal di Indonesia. Masalah utama yang diangkat adalah rendahnya efisiensi waktu, biaya, dan akses layanan sertifikasi halal, terutama bagi pelaku Usaha Mikro dan Kecil (UMK). Dengan pendekatan mixed method dan desain convergent parallel, data kuantitatif dikumpulkan melalui survei terhadap 71 pelaku UMK, sedangkan data kualitatif diperoleh melalui wawancara dengan BPJPH, LPH, dan pendamping PPH. Hasil analisis menunjukkan bahwa efisiensi waktu, efisiensi biaya serta aksesibilitas dan kemudahan proses tidak berpengaruh signifikan terhadap kepuasan pelayanan. Sementara itu, temuan kualitatif memperlihatkan berbagai kendala seperti keterbatasan literasi digital, biaya tersembunyi, serta ketidakefisienan proses verifikasi lapangan. Meskipun SEHATI telah membawa perubahan melalui digitalisasi dan selfdeclare, penerapannya belum sepenuhnya efektif. SEHATI merupakan inovasi strategis yang berpotensi meningkatkan efisiensi sertifikasi halal, namun implementasinya masih memerlukan perbaikan dalam aspek pendampingan, kesederhanaan sistem, dan infrastruktur digital agar manfaatnya dirasakan secara merata dan berkelanjutan oleh pelaku UMK.

ABSTRACT

This study aimed to evaluate the effectiveness of the SEHATI (Free and Fast Halal Certification for Micro and Small Businesses) service innovation in improving the efficiency of the halal certification process in Indonesia. The main issue raised is the low efficiency of time, cost, and access to halal certification services, especially for Micro and Small Businesses (UMK). By using a mixed method approach and convergent parallel design, quantitative data was collected through a survey of 71 UMK actors, while qualitative data was obtained through interviews with BPJPH, LPH, and PPH assistants. The results of the analysis showed that time efficiency, cost efficiency, process accessibility, and flexibility do not have a significant effect on service satisfaction. At the same time, qualitative findings reveal various obstacles such as limited digital literacy, hidden costs, and inefficiencies in the field verification process. Although SEHATI has brought about change through digitalization and self-declaration, its implementation has not been fully effective. SEHATI is a strategic innovation with the potential to improve the efficiency of halal certification, yet its implementation still requires improvements in the aspects of assistance, system simplicity, and digital infrastructure so that its benefits are felt evenly and sustainably by MSME actors.

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INTRODUCTION

Micro and Small Enterprises (MSEs) play an important role in economic growth in developing countries such as Indonesia, and have a large contribution to employment. In fact, MSEs are also productively a good forum for job creation, because MSEs are labor-intensive and do not require certain specifications in education or expertise.

The Asean Investment Report 2022 reports that the number of Micro and Small Enterprises (MSMEs) in Indonesia in 2021 has reached 65.46 million business units, which includes 4.2 million MSEs. However, the Ministry of Finance noted that the accumulated number of MSMEs that have been halal certified until 2022 has only reached 1% or around 650,000 business units (data www.puskajiakn.dpr.go.id). This indicates that efforts to accelerate halal certification through the SEHATI Program have not run optimally due to several challenges faced by the Government. Although Indonesia is known as a country where the majority of the population is Muslim, a report from the Royal Islamic Strategic Studies Center (RISSC) shows that Indonesia has the largest Muslim population in the world (Syahrir, Raem and Prayoga, 2019). By 2022, this population is estimated to reach 237.56 million people, or 86.88% of Indonesia's total population. This shows that, compared to other Muslim-majority countries, the consumption of halal products is increasing. In the State of the Global Islamic Economy Report 2022, the Global Islamic Economy (GIEI) indicator shows that Indonesia ranks fourth globally in terms of halal product consumption in several industries, such as finance, food, tourism, fashion, pharmaceuticals, cosmetics, media, and recreation (DinarStandard, 2022) (https://www.dinarstandard.com/).

Halal certification protects, guarantees, and provides information about the halalness of products and becomes a business ethics tool for producers and consumers and increases consumer confidence (Warto and Samsuri, 2020). In Law Number 33 of 2014, articles 135-140, concerning the Halal Certified Obligation Staging for Product Types, the government stipulates that the staging of halal certified obligations for food and beverage products, RPH, and RPU starts October 17, 2019 to October 17, 2024 (Jakiyudin and Fedro, 2022).

Indonesia as a country with the largest Muslim population in the world has the responsibility to ensure that all products circulating in the domestic market, especially food products, beverages, medicines, and cosmetics, meet the halal standards set by shar'i and regulative. Halal certification is a form of consumer protection that is not only religious in nature, but also closely related to aspects of health, safety, and legal certainty (Halik and Lutfi, 2025)(Hamid, 2022). However, in practice, the halal certification process in Indonesia still faces various challenges. Some of the main obstacles that are often faced by business actors, especially MSE actors, are the length of the administrative process (Putri, 2024) high costs (Khairawati et al., 2025), low digital literacy, especially in rural areas (Maskuri, Febriyanto and Baroroh, 2024) and system incoherence between related institutions (BPJPH, 2022). This delay has an impact on the low level of participation of MSE actors in halal certification, even though this sector has great potential in driving the growth of the national halal industry. A study by (Widigdo and Bayinah, 2023) found that despite the introduction of a simplification scheme, only around 18% of MSE actors were able to complete the certification process without third-party assistance, indicating a great need for technical assistance and a more user-friendly digital system.

In response to this challenge, the government through the Halal Product Guarantee Agency (BPJPH) launched the SEHATI (Free and Fast Halal Certification for MSEs) program which aims to accelerate the certification process through a self-declare approach and system digitization through the SIHALAL platform. This program is part of the implementation of Law No. 33 of 2014 concerning Halal Product Guarantee, which stipulates that all food and beverage products must be halal certified no later than 17 October 2024.

Although conceptually the SEHATI program looks promising, its effectiveness and real impact have not been studied scientifically. There is a gap between policy objectives and implementation in the field, especially in terms of efficiency, user satisfaction, and system readiness. Therefore, this study aims to evaluate the implementation of the SEHATI program in improving the efficiency of halal certification, as well as identifying supporting and inhibiting factors in the field.

With a focus on MSE actors as the main beneficiaries, this research not only contributes to the development of literature on public service innovation, but also provides practical policy recommendations to strengthen Indonesia's halal ecosystem and improve the competitiveness of MSEs in the domestic and global markets. (Kemenag RI, 2023) (Umami, Nada and Lulu, 2023).

Based on the background above, the problem formulation in this study is: to what extent does SEHATI innovation have an impact on time, cost, and service access efficiency and what factors support and hinder the implementation of SEHATI in the field?

This research is expected to provide theoretical, practical and socio-economic benefits. Theoretically, this research will contribute to the development of literature on public service innovation and service efficiency, especially in the context of religious values-based services, practically it is expected to provide evidence-based recommendations for the government and BPJPH in developing halal certification service policies that are more efficient and inclusive, and socio-economically it is expected to encourage the participation of MSE actors in halal certification, so as to increase the competitiveness of the national halal industry and have a broad economic impact on society.

Literature Review

Public Service Innovation

Osborne & Brown, 2011 (Bertot, Estevez and Janowski, 2016) explained that innovation in public services is a systematic effort made by government agencies to create new solutions to facing the challenges of service to the community. In the context of the public sector, innovation is not only technology-oriented, but also changes in procedures, increased efficiency, and a more responsive approach to community requirements (Jiao et al., 2025) (Farhan, 2023).

Public service innovation can be categorized into several forms, including product innovation, process innovation, organizational structure innovation, and strategy innovation(Chen, Walker and Sawhney, 2019). SEHATI innovation drops into the category of process and strategy innovation because it changes the service flow and bureaucratic approach in halal certification (de Vries, Bekkers, and LLG 2017).

Efficiency in Public Services

Efficiency is one of the key indicators in evaluating the quality of public services (De Witte et al., 2025). According to Frederickson et al. (2016), service efficiency can be seen from three main aspects: service completion time, resources used, and service user satisfaction (Fließ and Kleinaltenkamp, 2004) (Alkaf, Yusliza and Saputra, 2021). In the context of certification services, efficiency means accelerating the certification process while maintaining the accuracy, legal certainty, and credibility of the results (Masitho et al., 2024) (Hayat, 2024).

Digitalization and integration of information systems are common strategies for improving service efficiency. Online-based services also provide benefits in reducing face-to-face meetings, accelerating communication between institutions, and cutting administrative bureaucracy (Alkaf, Yusliza and Saputra, 2021).

Halal Certification in Indonesia

Halal certification in Indonesia is regulated in regulation No. 33 of 2014 concerning Halal Product Guarantee. The certification process is carried out through coordination between the Halal Product Guarantee Agency (BPJPH), the Halal Inspection Agency (LPH), and the Indonesian Ulema Council (MUI) (Sugiantoro, 2017) (Sugiantoro 2017). This certification is important not only for the fulfillment of sharia aspects, but also a strategic tool in strengthening the national halal industry.

Although important, the halal certification process is often considered slow and bureaucratic, especially by MSE actors. Therefore, a new approach is needed that can cut time and costs without reducing the quality and legitimacy of the certification results(Tohe et al., 2021).

SEHATI Service Innovation

The Free Halal Certification Program (SEHATI) is a public service innovation that aims to accelerate and simplify the halal certification process for micro, small, and medium enterprises (MSEs) in Indonesia(Engkus et al., 2023). This program uses a self-declare mechanism, where business actors can self-declare the halalness of their products without going through complex laboratory tests. This process is supported by digitalization through the SIHALAL platform, making it more efficient and transparent(Ilham, 2022)

This program simplifies the process through a self-declare mechanism, where businesses only need to upload documents such as Business Identification Number (NIB), product photos, and ingredient lists through the online system(Ilham, 2022) . This reduces the bureaucracy that was previously considered complicated. The SEHATI program also encourages digitalization in its services. The use of information technology allows halal certification applications to be made quickly and easily, from registration to certificate issuance.

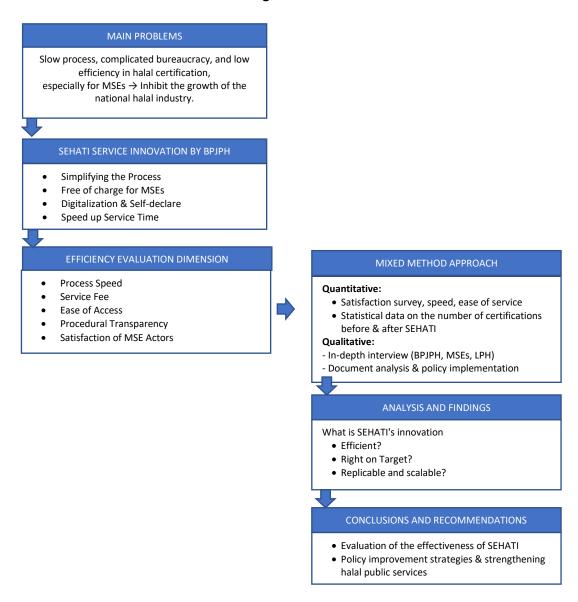
In implementing the SEHATI Program, the government provides an increased quota of up to 1 million free halal certificates per year, so that more MSEs can obtain halal certification at no cost. The expected economic impact is to increase consumer confidence in MSE products, expand the market, and encourage increased income for business actors. This program involves various institutions such as BPJPH, halal assisting institutions, and universities to ensure effective implementation (Masitah, Puspita and Wiriani, 2024)

SEHATI is a program initiated by BPJPH as a form of digitization-based public service reform and process simplification(Kasanah and As Sajjad, 2022). This innovation offers convenience in online registration, free service fees for MSE actors, and integration between certification bodies (Siregar, Rafiki and Hidayat, 2024). In addition, this program also uses a self-declare approach for certain products that are considered low-risk (Ministry of Religious Affairs, 2023).

The SEHATI program is a concrete example of the implementation of digital transformation and good governance in public services. However, its effectiveness still requires empirical evaluation, especially regarding implementation in the field, perceptions of business actors, and the impact on the overall efficiency of the halal certification process (Widigdo and Bayinah 2023).

Based on the description above, the framework in this study is structured to explain the relationship between SEHATI service innovation and improving the efficiency of halal certification services. This research uses an evaluative approach to innovation performance, focusing on the dimensions of efficiency, accessibility, and accountability. The analysis model uses relevant public service efficiency indicators, such as service time, number of processes, costs, and user satisfaction.

Figure 1.
Thinking Framework



Source: Author Processed

RESEARCH METHODS

Research Approach and Type

1. This research uses a *Mixed Method* approach, which is a combination of quantitative and qualitative methods to gain a comprehensive understanding of the implementation

and impact of SEHATI service innovation in improving the efficiency of halal certification. This approach was chosen to capture objective dimensions (statistical data, user satisfaction, process speed) and subjective (perceptions, experiences, and challenges in implementing SEHATI) in a balanced manner according to Creswell & Plano Clark (O" stlund *et al.*, 2011).

- 2. The design used is convergence triangulation (convergent parallel design), namely quantitative and qualitative data collection is carried out in parallel, and then the results are compared and analyzed to obtain a comprehensive conclusion(Lakhsmi, 2019).
- 3. The research was conducted in several areas of SEHATI program implementation, with a focus on the implementing agency, namely the Central and regional BPJPH, supporting institutions consisting of LPH and MUI and service users, namely MSEs that have participated in the SEHATI program.
- 4. Quantitative data is obtained from secondary data from BPJPH and surveys to MSE actors, with a closed questionnaire instrument that measures: Process speed (in days), Service costs (compared before-after SEHATI), Satisfaction level (Likert scale) and flexibility of service access (Likert scale) with a sample of 50 MSE actors taken based on purposive sampling technique.
- 5. Qualitative data, sourced from information from in-depth interviews with BPJPH officers, halal auditors from LPH, and MSEs that have participated in the SEHATI process, were collected using semi-structured interviews and documentation studies.
- 6. Quantitative data analysis was processed using statistical software (spss), and descriptive analysis was carried out: frequency, average, and percentage with qualitative data analysis using thematic analysis, namely: data reduction, coding, and grouping, drawing main themes from interview data and documents, and data integration.

The results of quantitative and qualitative analysis are compared and integrated at the discussion stage to find common ground or differences in terms of the effectiveness and efficiency of SEHATI.

7. To ensure validity and reliability, quantitative data was tested through instrument validation, and qualitative data was tested using source and method triangulation and member checking to ensure the accuracy of the researcher's interpretation.

RESULTS AND DISCUSSIONS

Results of Quantitative Survey of MSE Actors

This study involved 71 Micro and Small Enterprise (MSE) actors as respondents with practical, methodological, and contextual considerations, the first being due to limited resources and access. Another reason is because this study has an evaluative and exploratory nature, not a population survey, so the quality of data is prioritized over the quantity of respondents. Respondents were selected using purposive sampling technique to ensure that they are MSEs that have actually followed the halal certification process through the SEHATI program. This aims to maintain the contextual validity of the data, even though the number is limited. The limited number of respondents is balanced by a mixed method approach through in-depth interviews with key actors (BPJPH, LPH, PPH assistants), as well as the study of policy documents. This strengthens data triangulation and broadens perspectives in drawing conclusions. This research can be considered the initial stage of a broader SEHATI evaluative study. The findings obtained from 71 respondents are expected to be the foundation for further research with a larger and more nationally representative sample coverage.



Measurements were made using a Likert scale-based questionnaire (1-5) on four main variables, namely: time efficiency, cost efficiency, accessibility and ease of process, and service satisfaction.

Simple Regression Analysis Results

Simple regression analysis was conducted to determine the effect of each variable on Service Satisfaction. The following are the calculation results for the three independent variables: Time Efficiency, Cost Efficiency, and Accessibility and Ease of Process.

Table 1.

Results of Regression Analysis between Time Efficiency and Service Satisfaction

Variables	Coet.	Std.Err.	t	P> t	[0.025	0.975]	
const	3.879	0.554	7.006	0.000	2.774	4.983	
Time Efficiency	0.096	0.130	0.741	0.461	-0.163	0.355	

Source: Author Processed

Interpretation: Time efficiency has no statistically significant effect on service satisfaction (p = 0.461 > 0.05).

The scatter plot graph with the regression line shows a positive but weak relationship between time efficiency and service satisfaction. The data points are spread quite widely from the trend line, indicating high variability. This is in line with the results of the regression analysis, which shows that the effect of time efficiency on service satisfaction is not statistically significant (p = 0.461).

Table 2.
Regression Analysis Results Between Cost Efficiency and Service Satisfaction

Variables	Coef.	Std. Err.	t	P> t	[0.025	0.975]
const	4.476	3.184	1.406	0.164	-1.876	10.828
Cost Efficiency	-0.039	0.647	-0.060	0.953	-1.330	1.253

Source: Author Processed

Interpretation: Cost efficiency also showed no significant effect on service satisfaction (p = 0.953).

In this graph, the distribution of data looks fairly even and does not show a clear pattern. The regression line is almost flat, indicating that there is no meaningful linear relationship between cost efficiency and service satisfaction. This is reinforced by the very small and insignificant coefficient value (p = 0.953), indicating that cost efficiency is not a dominant factor in influencing the level of MSE satisfaction with SEHATI services.

Table 3.

Results of Regression Analysis Between Accessibility and Service Satisfaction

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Variables	Coef.	Std. Err.	t	P> t	[0.025	0.975]

const	5.101	0.480	10.616	0.000	4.142	6.059
Access and Ease	-0.198	0.116	-1.713	0.091	-0.428	0.033

Source: Author Processed

Interpretation: Access and convenience are almost significant (p = 0.091), but still above the 0.05 threshold. This suggests a trend that as accessibility increases, satisfaction may decrease, but it is not strong enough to be statistically significant.

The regression line in this graph shows a slight negative trend, meaning that there is a tendency that as access and processes become easier, satisfaction decreases slightly. However, this relationship is not statistically significant (p = 0.091), although it is close to the significance threshold. This could be an indication that this variable may be influential under certain conditions or contexts that have not been fully captured in the current data.

The results of this study indicate that SEHATI service innovation has a varied impact on the perceptions of MSE actors in terms of the efficiency of the halal certification process. Through measuring the three main aspects, namely time efficiency, cost efficiency, and accessibility and ease of process, it can be concluded that the contribution of the SEHATI program in improving the efficiency of the halal certification process is not fully optimal in all dimensions.

Simple regression analysis shows that time efficiency, although assumed to be one of the main advantages of digitizing SEHATI services, does not have a significant effect on service satisfaction (p = 0.461). This could be due to the higher expectations of MSE actors compared to the realization of the speed of the process, or the existence of administrative barriers that are still felt even though the service has been digitized.

Cost efficiency also did not show a significant effect (p = 0.953), indicating that while the SEHATI program may have reduced costs in the halal certification process, it is not strong enough to provide a more satisfying experience overall.

Accessibility and ease of process have a negative relationship with service satisfaction, although not significant (p = 0.091). This leaves room for interpretation that technical ease of access does not always translate into a positive user experience, especially when accompanied by technical constraints, lack of digital assistance, or uneven digital literacy.

Qualitative Survey Results of BPJPH, LPH, PPH Facilitators, and MSE Actors

To complement the quantitative findings, in-depth information gathering was carried out with representatives of BPJPH, Halal Inspection Institutions (LPH), PPH assistants, and MSEs. In addition, a study of official documents, SEHATI reports, and the latest policies related to accelerating halal certification.

a) BPJPH and LPH Perspectives

BPJPH stated that SEHATI is a national strategy in achieving the halal certification target of 10 million MSE products by 2024. Digital innovation and self-declare schemes are seen as very effective in accelerating and expanding access to halal services. LPH supports the simplification of the process but highlights the importance of a monitoring mechanism so that quality is maintained.

BPJPH's Principal Secretary, emphasized the importance of more adaptive regulations to support the strengthening of the ecosystem and the growth of the national halal industry. Halal certification is not just a religious aspect but also relates to economic aspects, industrial competitiveness, export-import, and sustainability. Flexible regulations are needed so that the halal sector can develop more optimally. In addition, the status of BPJPH as a Public Service Agency is also a concern and it is considered necessary to separate the roles of operators and regulators in the governance of halal certification to provide flexibility so that halal certification governance is more effective. It is stated that optimizing regulations can increase efficiency and legal certainty for business actors so that the national halal industry is growing.

b) Perspective of MSE Actors

The results of this study indicate that SEHATI service innovation has a varied impact on the perceptions of MSE actors in terms of the efficiency of the halal certification process. Through measuring the three main aspects, namely time efficiency, cost efficiency, and accessibility and ease of process, it can be concluded that the contribution of the SEHATI program in improving the efficiency of the halal certification process is not fully optimal in all dimensions.

Although time efficiency is assumed to be one of the main advantages of digitizing SEHATI services, it does not have a significant effect on service satisfaction (p = 0.461). This could be due to the higher expectations of MSE actors compared to the realization of the speed of the process, or the existence of administrative barriers that are still felt even though the service has been digitized.

SEHATI service aims to speed up the halal certification process, but there are still MSE actors who complain about the length of the verification process and scheduling auditors in the field, for example, a home food MSE actor in the West Java area mentioned that even though he had uploaded documents digitally through the SEHATI application, the validation process still took almost 3 weeks due to the queue for scheduling field auditors. This fact shows that digitalization has not fully accelerated the overall flow, many states still rely on manual or semi-manual processes, especially in the verification and visitation aspects.

Efficiency

SEHATI cuts a lot of costs for printing documents and physical travel for certification, but MSEs still have to pay other costs such as independent assistance, consultation, or third-party services to understand the process of filling out documents digitally. Some business actors admit that they still use third-party services or assistance agencies because they find it difficult to understand halal terminology independently in the digital system. This cost adds to their expenses.

In other words, even though formal costs have fallen, *hidden costs* are still quite large, so the perception of cost efficiency is biased.

Accessibility and Ease of Process

System-wise, SEHATI can be accessed through various digital devices, but the comfort and ease of use is strongly influenced by the level of digital literacy and the readiness of local infrastructure. MSEs from West Bandung Regency said that the internet network is often unstable, and the SEHATI application interface is confusing for first-time users who are not familiar with technical terms.

Some respondents reported technical issues, such as the document upload process failing due to file format or size restrictions.

Although SEHATI program has brought innovative approaches to digital-based public services, its effect on the efficiency of the halal certification process has not been fully equitable.

Digitalization does not automatically guarantee efficiency, because efficiency is not only determined by technology but also by the readiness of human resources (HR)(Laily et al., 2025), the simplicity of the digital process itself, and the speed of response from related agencies. From the perspective of MSE actors, service satisfaction is not solely determined by the existence of a digital platform, but how easily and quickly they can achieve certification results without additional obstacles.

c) Literature Perspective

The SEHATI program has not run optimally because it faces several major challenges. First, the limited budget from the APBN and APBD is a major obstacle, considering that halal certification for one MSE costs around IDR 300,000. If all MSEs access this program, a budget of around IDR 1.2 trillion is needed, while the BPJPH budget is only around IDR 114 billion. (https://kemenag.go.id/read/dpr-dan-kementeriandukung-sertifikasihalal-gratis-10-jutaproduk-halal-umk-kdmkz). In addition, the capacity of human resources assisting the Halal Product Process is still limited both in terms of quantity and quality. Currently, there are more than 20 thousand assistants, which is not sufficient for the target of halal certification for one million products. The quality of assistants is also questionable because the minimum requirement is only a high school graduate without the obligation to have certain technical competencies, risking invalid data(Veranita et al., 2025). Another challenge is the limited number of Halal Examining Institutions (LPH), which only number 30 and only 19 have accreditation (Ministry of Religion, 2022). Access to digital services through the SIHALAL application has also not been equally accessible to all MSE actors, due to limited digital literacy and required documents such as NIB, NPWP, PIRT, and BPOM permits. PPH assistants often have to help with this process, even though it is not their job(Khasanah, Azizah and Susilo, 2024) Finally, there are still many MSE actors who are not aware of the importance and obligation of halal certification and do not consider it an urgent need without encouragement or facilitation from local governments or related institutions (Ningrum, 2022)

Integration of Quantitative and Qualitative Findings

The mixed method approach in this study allows for data triangulation which strengthens the validity of the findings.

> Table 4. **Integration of Quantitative and Qualitative Findings**

Dimensions	Quantitative Findings	Qualitative Findings
Time Efficiency	(p = 0.461 > 0.05).	Service Realities that Fall Short of Expectations
Cost Efficiency	(p = 0.953).	economical but not immediate
Process Accessibility	p = 0.091),	technology is not always friendly

Source: Author Processed

The following table shows the comparison between MSME actors' expectations of SEHATI services and the reality found based on the research results.

Table 5. Comparison of Expectations and Reality of SEHATI Services

Service Aspect	MSME Expectations	Reality in the Field (Research Findings)
Process Speed (Time Efficiency)	Fast certification process (max. 1 week) with a digital system.	It still takes up to 2-3 weeks, especially at the verification stage and scheduling of field auditors.
Cost Efficiency	Certification is completely free of charge at no additional cost.	Formal fees are free, but there are hidden costs such as escort services, consultation, and system filling.
Ease of System Access	Easy access, just from your phone, with a simple and user-friendly user <i>interface</i> .	Many MSMEs struggle due to low digital literacy and the SEHATI system display is considered confusing.
Technical Support	Online assistance or help if you experience technical difficulties.	Mentoring is not always available; some MSMEs feel "abandoned" when experiencing system problems.
Transparency and Certainty	The certification flow information is clear and can be monitored at every stage.	Not all MSMEs know the current status of their certificates; the notification system has not been optimized.
Service Satisfaction	It's increasing because the online system makes things easier and faster.	There are still many who feel unsatisfied because expectations do not match reality, especially in service speed.

Source: Author Processed

Based on the results of the document review and the research data listed, the following are the answers to the three key questions regarding the SEHATI program innovation:

Conceptually, SEHATI is designed to improve efficiency through digitization, self-declare, and elimination of formal fees for MSEs. However, quantitative data shows that time (p = 0.461) and cost (p = 0.953) efficiencies have no significant effect on service satisfaction. Qualitative findings support this, with MSEs complaining that the verification process remains lengthy and that there are *hidden costs* such as assistance services or digital technical issues. Thus, the actual efficiency of the SEHATI program has not been fully achieved, especially in field implementation.

The program targets MSEs as the main beneficiary group, which is generally on target. However, the realization has revealed significant challenges, such as the low digital literacy of MSEs, limited internet access, and lack of technical assistance in the regions. Many MSEs find the system not user-friendly and feel "left out". So, although the target is right, the implementation approach has not fully addressed the real needs and capability conditions of MSEs equally.

SEHATI has the potential to be replicated and expanded, but with conditions for improvement in the aspects of mentoring, system simplification, and digital infrastructure support in the regions. This program can become a national and even international model if it is developed as an adaptive and inclusive platform, and supported by flexible regulations. The involvement of local governments, MSE communities, and educational institutions is also important for sustainable expansion.

Research Limitations:

This study highlights the efficiency of the halal certification process and has not focused on the implementation of the SEHATI Program on the social and economic impacts on MSEs in Indonesia. Social impacts include: awareness of MSEs of the importance of halal principles in running a business in terms of contributing to the community in the halal ecosystem, social solidarity, and new job opportunities in the field of digital assistance and education through digitization of public services. While the economic impact includes increasing the competitiveness of MSE products, strengthening the national halal industry ecosystem, efficiency of production and operational costs as well as export opportunities and access to global markets. It is hoped that further research can discuss and focus on the social and economic impacts of implementing the SEHATI Program.

CONCLUSIONS

This study examines the contribution of SEHATI service innovation to the efficiency of the halal certification process for MSEs in Indonesia. With a mixed method approach, a comprehensive picture is obtained that although the SEHATI program has carried out digitization and simplification of procedures through a self-declare mechanism, its impact on perceptions of efficiency and user satisfaction is still not entirely evenly distributed. In general, the SEHATI program is a progressive step in public service reform in the field of halal product assurance. However, implementation in the field shows that the success of innovation is not only determined by technology, but also depends heavily on the readiness of human resources, clarity of bureaucratic flow, easy access to information, and digital literacy of users. The impact of SEHATI on the efficiency of the halal certification process is varied and not yet optimal as a whole in three main aspects: time efficiency, cost efficiency, and accessibility and flexibility of process.

The results of the quantitative analysis showed that there was no significant relationship between time efficiency (p = 0.461), cost efficiency (p = 0.953), or accessibility and ease of process (p = 0.091) on service satisfaction. This indicates that even though digital innovation and self-declare mechanisms have been implemented, MSEs' perceptions of satisfaction with SEHATI services are still influenced by administrative constraints, technical constraints, and unmet expectations. Qualitative findings strengthen these results by revealing concrete phenomena in the field. MSEs still face a long verification process (Putri, 2024), dependence on companion services (Ilham 2022), and technical constraints in using the SEHATI system (Khairawati et al., 2025). Although this program has succeeded in cutting costs and simplifying procedures, there are still hidden costs, uneven digital literacy, and limited internet access, especially in non-urban areas (Yuanitasari et al., 2023).

From the integration of these findings, it can be concluded that SEHATI innovation is a strategic and progressive step, but its implementation still requires system improvement, strengthening assistance, as well as harmonizing regulations and coordination across institutions so that it is truly able to improve the efficiency of halal certification services in a comprehensive, equitable and inclusive manner.

Policy Implications

The results show that technological innovation through the SEHATI program has not fully touched the user satisfaction aspect. This indicates that digital transformation cannot only focus on transferring manual processes to online systems, but must be accompanied by bureaucratic process reforms, simplifying certification flows, and increasing the capacity of implementing human resources (Harahap et al., 2023).



The Importance of Local Government Intervention in MSE Assistance Local governments need to play an active role as a bridge between MSE actors and the SEHATI system through training, direct socialization, and technical assistance. Without local intervention, central innovation will not be inclusive for businesses in disadvantaged areas or with low digital literacy.

Strategic Recommendations

- It is necessary to build synergies between government agencies, technical implementers, and the business community to create an inclusive and efficient halal certification ecosystem.
- Not all MSEs have the same digital readiness. SEHATI can be developed into a platform
 with an adaptive user profile that offers a simple mode for beginners and an advanced
 mode for advanced users.
- It is recommended that the system be equipped with a feedback loop mechanism
 directly from users after completing each stage so that system development can be
 based on actual data from the field.

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