

A CONCEPTUAL FRAMEWORK FOR MITIGATING HALAL NON- CONFORMANCES IN MICRO INDUSTRIES: THE P.A.R.F.I.E MODEL

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Abstract: *The halal industry in Malaysia is rapidly expanding, contributing significantly to the national economy and strengthening the country's aspiration to be a global halal hub. However, micro industries face persistent challenges in meeting halal certification standards due to financial limitations, insufficient infrastructure, and limited awareness. Existing frameworks such as the Halal Assurance System (HAS) and Internal Halal Control System (IHCS) provide guidance, but they are either too complex or insufficient for small enterprises, leading to recurring non-conformances. This paper adopts a qualitative research approach through document analysis of literature, industry reports and halal certification standards from 2015–2025, to develop a practical conceptual framework for mitigating halal non-conformances. The objective of this study is to propose the P.A.R.F.I.E framework as a structured model to guide micro industries in addressing halal non-compliance effectively. The findings highlight six core components, which are identification and assessment, supply chain integrity, sustainable practices, digital transformation, stakeholder engagement, and systematic monitoring that form the basis of the proposed P.A.R.F.I.E framework. The model emphasizes integrating regulatory standards with risk management principles while considering the operational realities of micro industries. By adopting this framework, micro enterprises can strengthen halal compliance, enhance consumer trust, and contribute to Malaysia's halal ecosystem sustainability. Ultimately, the P.A.R.F.I.E framework works as a scalable solution for micro industries to proactively address non-conformance issues, bridging the gap between regulatory expectations and practical business operations.*

Keywords: *Conceptual, Framework, Mitigating Halal, Non-Conformances, Micro Industry*

Introduction

The halal industry in Malaysia is expanding rapidly, contributing significantly to the national economy and positioning the country as a global halal hub (Muhammad et al.,2019). According to the Halal Industry Development Council, the sector contributed RM149 billion to GDP and RM61.8 billion in exports between 2023 and 2025, attracting global attention, particularly from Muslim-majority nations (The Star,2025). While halal products were traditionally focused on food, demand has surged in various sectors, including pharmaceuticals, medical devices, personal care and logistics. This expansion reflects the broader application of the *halalan toyyiban* concept, which emphasizes that products must not only be lawful (halal) but also pure, safe, and beneficial (tayyib) (Yahaya&Ruzulan,2020). The government plays a crucial role in maintaining strict halal standards to safeguard industry credibility and consumer trust. Halal certification has become a significant factor influencing purchasing decisions, especially among Muslim consumers who seek assurance that products comply with Islamic principles. The Department of Islamic Development Malaysia (JAKIM) is the primary authority that oversees halal certification and has established guidelines for businesses, such as the Malaysian Halal Management System (MHMS 2020), Manual Procedure for Malaysian Halal Certification (MPPHM) and halal standards such as MS1500 (Halal Food:General Requirements), and MS2634 (Halal Cosmetic:General Requirements) (JAKIM,2020).

However, micro and small enterprises often face significant challenges in achieving and sustaining halal certification. These challenges stem from limited awareness, financial constraints, inadequate infrastructure, and complex regulatory procedures (Muhammad et al., 2019). Currently, there is no comprehensive data on halal non-conformance, which has led to recurring compliance issues, particularly among smaller businesses. While medium and large companies have structured Halal Assurance Systems (HAS), smaller enterprises operate under less stringent requirements that require them to adopt an Internal Halal Control System (IHCS), which may not be sufficient and lack the robustness to address compliance concerns. Strengthening control mechanisms and providing better support to micro and small businesses could improve adherence to halal standards, benefiting the industry as a whole.

The concept of *halalan toyyiban* emphasizes the need for food and consumer products to adhere to Islamic principles, ensuring they are halal (lawful) and tayyib (pure and beneficial). According to the Quran, Muslims must consume only permissible items while avoiding anything impure or harmful. Halal regulations apply across the entire supply chain, including production, packaging, distribution, and research and development, ensuring compliance with Shariah guidelines. Halal principles extend beyond food to include various consumer goods such as pharmaceuticals, personal care products, and hygiene items. Islamic teachings require Muslims to consume and utilize only halal products. This claim is based on the Quranic foundation for this principle when Allah says:

﴿ وَكُلُوا مِمَّا رَزَقَكُمُ اللَّهُ حَلَالًا طَيِّبًا ۗ وَأَتَّقُوا اللَّهَ الَّذِي أَنْتُمْ بِهِ مُؤْمِنُونَ ﴾

Which means, “*Eat of the good, lawful things provided to you by Allah. And be mindful of Allah in whom you believe.*”

(Al-Quran, Al-Maidah: 88).

The certification process guarantees that products are free from prohibited substances, ethically sourced, and safe for consumers. The Malaysian halal certification system provides strict guidelines for compliance, ensuring that products meet Islamic legal and ethical standards. The broader *halalan toyyiban* approach integrates health, safety, and ethical considerations into the consumption of goods, fostering a responsible and accountable business environment. This framework reflects gratitude for divine provisions and promotes a holistic lifestyle that benefits individuals and society at large. Recent enforcement actions have raised concerns about halal compliance and consumer safety in Malaysia, with authorities uncovering violations such as counterfeit halal certifications, banned substances such as ethanol (Noor et al.,2025), and smuggled goods such as cartel meat (Mohd Riza et al.,2022). Investigations have revealed cases of businesses misusing halal labels, using harmful ingredients, and evading regulatory oversight, posing risks to public health and trust in halal certification (Ahmed Osman,O.2023).

Micro and small enterprises (MSEs) represent the backbone of Malaysia's halal industry, yet they continue to face recurring challenges in sustaining halal compliance. Studies have shown that limited financial capacity, lack of awareness, inadequate infrastructure, and complex certification procedures are among the primary barriers to achieving halal certification (Muhammad et al.,2019; Yahaya & Ruzulan,2020). Recent enforcement cases in Malaysia, including counterfeit halal logos and misuse of prohibited ingredients, highlight the urgency of strengthening halal governance and supporting vulnerable micro industries (Noor et al.,2025; Ahmed Osman,2023). While larger firms adopt comprehensive Halal Assurance Systems (HAS), smaller businesses are confined to the Internal Halal Control System (IHCS), which is often insufficient to address risks of cross-contamination, non-halal additives, and weak monitoring practices (Kurniawati et al.,2024; Mulyaningsih et al.,2023; Glevitzky et al.,2025). In the cosmetic sector, Abd Aziz and Borhan (2025) identified recurring non-conformance issues among halal-certified micro enterprises in Kelantan, including the use of doubtful raw materials, inadequate documentation, and weak supply chain monitoring. Such vulnerabilities heighten halal-related risks, including contamination, fraudulent practices, and reputational damage, which could undermine consumer trust and the credibility of Malaysia's halal certification. Despite the rapid growth of Malaysia's halal sector, limited research has specifically examined strategies for mitigating non-conformance among micro industries. Most existing frameworks focus on medium and large enterprises, leaving a critical gap in ensuring sustainable halal compliance for micro-scale businesses. This gap underscores the need for a tailored conceptual framework that integrates risk management principles with the operational realities of micro industries to strengthen halal assurance and safeguard consumer trust.

Literature Review

The Malaysian Halal Management System (MHMS) is a comprehensive framework designed to ensure the authenticity and quality of halal products. It encompasses several components, notably the Halal Assurance System (HAS) and the Internal Halal Control System (IHCS). Implementation and performance of the Halal Assurance System in food manufacturing micro industries. It emphasised the significance of thorough documentation, underlining that detailed records of all ingredients, processes, and suppliers are essential for preserving transparency and traceability (*Malaysian Halal Management Systems*,2020). Table 1 displays the content differences between HAS and IHCS. However, micro industries must create just an IHCS, which comprises halal policies, raw material management, and traceability.

**Table 1: Content Differences Between HAS And IHCS
 MALAYSIAN HALAL MANAGEMENT SYSTEM
 (MHMS) 2020**

Halal Assurance Systems (HAS)	Internal Halal Control Systems (IHCS)
Halal Policy Internal Halal Committee Halal Risk Control Raw Material Control Internal Halal Audit Halal Training Traceability HAS Review Laboratory Analysis Sertu Programme	Halal Policy Raw Material Control/ Halal Risk Control Traceability

Source: MHMS 2020, Department of Islamic Development Malaysia (Jakim)

There is a dynamic relationship between HAS implementation and company success, implying that organisations with strong HAS practices outperform in the market due to enhanced consumer trust and halal compliance (Indrasari et al.,2020). Other research underlined the importance of conducting regular internal audits to maintain halal compliance. These audits are crucial in identifying non-compliance concerns and providing a platform for continual improvement (Sulaiman et al.,2021). Companies can maintain optimal process management by frequently checking halal control points. The study also found that internal audits contribute to the halal management system's integrity by identifying areas for improvement and ensuring that remedial actions are taken as soon as possible. Another study looked at the effect of employee training programs on the effectiveness of HAS. Regular and personalised training sessions are vital for ensuring all personnel understand and properly apply halal principles (Dubai Municipality Standard, 2022). To achieve complete awareness, the study underlined the importance of continuing training that is tailored to different levels of the company. Companies may guarantee that all employees adhere to halal rules and best practices, which improves the overall effectiveness of the HAS.

Meanwhile, according to Malaysian Halal Management Systems (2020), small and micro industries must implement IHCS, which includes Halal policy, raw material or Halal risk control, and traceability, which are specific control measures to prevent cross-contamination between halal and non-halal products. It highlights the significance of separating production lines, designating storage spaces, and using unambiguous labelling methods. These safeguards are critical for ensuring the quality of halal products, particularly in facilities that handle both halal and non-halal commodities. Muslim worker requirements must be adhered to, and the MHMS must be effectively implemented by fulfilling the elements within the micro cosmetic category, specifically clause 18(2) (e) (iii): a). A minimum of one full-time Muslim worker who is a Malaysian citizen must be appointed and on duty in the processing area throughout the shift or period; b) The IHCS must be developed and implemented based on the MHMS 2020 Manual. Concerning that, the IHCS is the latest directive issued by JAKIM under the new Malaysia Halal Certification Scheme's procedures. JAKIM introduces IHCS, conceivably due to the lack of credible Halal internal control mechanisms that small and micro-sized enterprises could adopt. Only multinational and medium-sized enterprises were required to implement HAS.

Regrettably, small-scale and micro-scale businesses and specific cosmetic product establishments in the Halal certification scheme are required to set an internal Halal control mechanism. However, the requirements are insufficient in mitigating non-conformance. This, in turn, left a considerable gap and inconsistency, especially on the issues of maintaining Halal integrity at the operational level for these types of establishments. Therefore, the primary objective of introducing IHCS is to ensure Halal integrity is upheld, as long as the Halal certification is still valid and enforced. This is achievable by introducing a halal risk management plan that plans, monitors and controls the flow of raw materials and halal-related processes. Without a halal risk management plan, the company's probability of deviating from the requirements is exceedingly significant. This IHCS also acts as a set of references to the management.

Halal Non-Conformance In Micro Industries

Halal non-conformance in micro industries refers to the failure of small-scale enterprises to comply fully with halal standards and requirements as prescribed by regulatory authorities. These non-conformances typically arise in several domains, including raw material sourcing, documentation management, production processes, hygiene control, and record keeping. Unlike larger enterprises with structured Halal Assurance Systems (HAS), micro industries often lack systematic procedures, making them more vulnerable to oversight and errors.

\One of the key challenges stems from limited resources and dependence on external suppliers. Micro businesses often struggle to ensure that all raw materials are sourced from certified halal providers, creating exposure to *syubhah* (doubtful) or even non-halal inputs (Othman, Awang, & Shah, 2023). This is compounded by the absence of specialized halal executives, with compliance responsibilities typically shouldered by the owners themselves, who may have minimal training in halal standards and certification procedures (Halim et al., 2024).

Financial constraints also contribute to weak documentation and insufficient preparation for audits. Many micro entrepreneurs are unaware of the importance of maintaining detailed records aligned with Malaysian halal standards such as MS1500:2019. As Rosli et al. (2023) note, while there is general awareness of halal obligations among entrepreneurs, it is often not translated into structured systems and daily operations. Furthermore, the lack of continuous training and capacity building worsens these issues. Without regular exposure to updated guidelines or engagement with competent authorities such as JAKIM or JAIN, micro industries are prone to recurring non-conformances. These challenges underline the gap between regulatory expectations and the operational realities of micro enterprises, emphasizing the urgent need for frameworks tailored to their scale and capacity. In addition to the food sector, halal non-conformance issues have also been documented in the cosmetic industry. Abd Aziz and Borhan (2025), in a case study of halal-certified cosmetic micro enterprises in Kelantan, found recurring weaknesses such as the use of doubtful raw materials, inadequate documentation, and weak supply chain monitoring. These non-conformances not only jeopardize halal integrity but also expose businesses to regulatory penalties and consumer distrust. The findings indicate that even certified micro enterprises remain vulnerable due to limited capacity and lack of structured halal risk management, reinforcing the need for a more tailored and practical framework for cosmetic micro industries.

Halal Non-Conformance Related Framework

Addressing halal non-conformance in micro industries requires a structured framework that can bridge the gap between regulatory expectations and the operational limitations faced by small enterprises. Existing models such as the Halal Assurance System (HAS) and the Halal Built-in approach were primarily developed for medium and large enterprises, and therefore may not be directly adaptable to micro-level operations (Othman, Awang & Shah,2022). Micro industries operate under resource constraints, informal management structures, and limited technical expertise, which necessitate a more flexible and scalable framework. Several frameworks and models have been proposed in past literature to mitigate halal risk. For example, the Halal Assurance Management System (HAS 23000) in Indonesia emphasizes structured documentation, monitoring, and training (Syafrida & Suharyono,2021). Similarly, Malaysia's MS1500:2019 standard highlights control points in sourcing, processing, storage, and distribution to ensure continuous compliance. While these frameworks provide a strong basis, their direct implementation in micro industries often results in non-conformance due to the lack of financial and human capital.

To overcome these gaps, scholars recommend integrating elements of risk management into halal practices (Halim et al.,2024). This includes risk identification, assessment, mitigation, and monitoring tailored specifically to the micro-industry context. A simplified and practical framework focusing on halal awareness, documentation support, training and capacity building, regulatory facilitation, internal controls, and external monitoring can serve as an effective tool for minimising non-conformances. Therefore, the conceptual framework proposed in this study is grounded on existing halal management literature while adapting it to the operational realities of microenterprises. By aligning the framework with regulatory requirements and embedding risk management principles, this model aims to ensure that halal non-conformance can be systematically identified, mitigated, and prevented, thus safeguarding consumer trust and strengthening the halal ecosystem at the grassroots level.

Several frameworks have been developed to address Halal Assurance and mitigate risks of non-conformance, particularly within SMEs. The Halal Assurance System(HAS) and Halal Built-In Approach are among the most referenced models, emphasizing systematic documentation, staff training, and continuous monitoring (Othman, Awang, Shah, 2023). These frameworks provide structured guidelines for compliance; however, their applications are often tailored for medium and large-scale enterprises, leaving micro industries at a disadvantage due to resource constraints and operational informality.

Other studies highlight the Halal Supply Chain Framework and Halal Risk Management Framework, which focus on safeguarding Halal integrity across the value chain and identifying potential risk points (Halim et al., 2024). While comprehensive, these frameworks are resource-intensive and require advanced management systems, which micro industries often lack. Consequently, there is a gap in adapting these frameworks to suit micro enterprises, particularly in Selangor, where limited manpower, documentation challenges, and weak internal controls frequently lead to non-conformances. This calls for a more practical and scalable conceptual framework that aligns with the realities of micro industry practices.

In the mitigation of Halal-related non-conformance, several frameworks have been proposed and established. For example, studies by Vanany et al. (2021) introduce the Halal Six Sigma (HSS) framework, which is structured around the DMAIC (Define-Measure-Analyse-Improve-

Control) approach, integrating the Halal assurance system (HAS) requirements to ensure compliance. Applied in a poultry processing company, the HSS framework utilised SIPOC tools, Pareto diagrams, root cause analysis, and improvement process flows to detect and reduce halal defects and improve compliance. However, this approach is unsuitable for micro industries to implement IHCS rather than HAS.

Another approach used in mitigating non-conformance is the Holistic Non-Conformities Reduction (HNCR) Approach Giorgetti et al.,(2017). A fresh approach to non-conformity management tries to address the limits of dealing with non-conformities using established methodologies such as Root Cause Analysis. The need to propose a new approach to Non-Conformity Management arises from situations where a wide range of non-conformities are recorded, including a significant number of low-impacting ones, and addressing them directly through methods such as Root Cause Analysis is frequently not economically viable. The first scenario involves managing non-conformities inside a big pharmaceutical distribution centre's extended supply chain, while the second addresses non-conformities in the context of a company's new program development. Specifically for supply chain industries, Ali et al. (2017) introduced the supply chain integrity framework, in which the key framework consists of raw material, production, service, and information integrity, emphasising the need for comprehensive management beyond certification. This seems more suitable for micro industries where raw material control is compulsory. Other than that, the approach used in the mitigation of halal non-conformance was tabulated in Table 2. Scholars have also emphasized the importance of incorporating halal risk perspectives into non-conformance mitigation. Halal-related risks typically involve contamination between halal and non-halal products, unintentional use of prohibited substances, fraudulent halal labels, and reputational damage to businesses (Ahmed Osman,2023; Noor et al., 2025; Kurniawati et al.,2024). These risks are particularly critical for micro industries that lack robust monitoring and quality assurance mechanisms. Without effective risk identification and control, micro enterprises remain exposed to both operational disruptions and the erosion of consumer trust, further highlighting the urgency of developing a structured yet practical halal risk management framework.

Table 2: Summary of Other Methods/Approaches Used in The Mitigation of Halal Non-Conformances

Component	Methods/ Approaches	Key Insights	References
Risk Identification and Assessment	House of Risk (HoR) and Interpretive Structural Modelling (ISM)	Enables identification of high-priority risk events and risk agents within micro supply chains (e.g, raw material handling, production hygiene). Provides clear prioritisation for limited resources.	Mustaniroh et al., 2025
Supply Chain Integrity	SCOR Method	Maps out critical risk points across the production process, particularly in micro setups where documentation and quality assurance are weak. Helps ensure halal integrity during sourcing, processing, and distribution.	Pujiastuti et al.,2025

Sustainable Practices	Integration with Sustainable Value Chains	Aligns halal assurance with sustainability goals, ensuring micro industries can enhance consumer trust while addressing resource efficiency and ethical standards.	Qadir et al., 2025, Salisu et al., 2025
Digital Transformation	Digitalisation of Halal Certification	Digital tools streamline certification processes, reducing costs and bureaucratic delays for micro enterprises. Improves transparency, traceability, and compliance.	Santoso & achman, 2023
Stakeholder Engagement and Education	Awareness and Training	Training builds knowledge on halal standards, reducing non-conformances. Particularly crucial for micro players where awareness and expertise are low.	Nurainun et al., 2023
Compliance and Monitoring	Halal Integrity Assurance (HIA)	Continuous monitoring, commitment, and trust-building across micro-level supply chains are essential to uphold Halal integrity	Mohamed et al., 2020

All the mitigation approaches listed and identified barriers include reduced demand for halal products, improper laws, a lack of a policy framework, and a lack of halal awareness among staff. The study on halal implementation in Indonesia proposes a research framework drawing on institutional theory and resource-based views, emphasising the importance of external pressure and organisational capability in implementing a halal traceability system (Prathama et al., 2024).

Table 2 summarises the various methods and approaches that have been proposed in prior studies to address halal non-conformance. While these frameworks provide valuable insights, their applicability remains limited for micro enterprises due to resource constraints and operational informality. Therefore, this study integrates key elements from existing models and adapts them into a more practical and scalable framework. The proposed P.A.R.F.I.E model (Point out, Analyse, Review, Fix, Invent, and Educate) is developed as a theoretical framework to systematically guide micro enterprises in mitigating halal non-conformances. Figure 1 illustrates the theoretical framework adopted in this study, positioning the mitigation plan for micro industries as the dependent outcome of the P.A.R.F.I.E process.

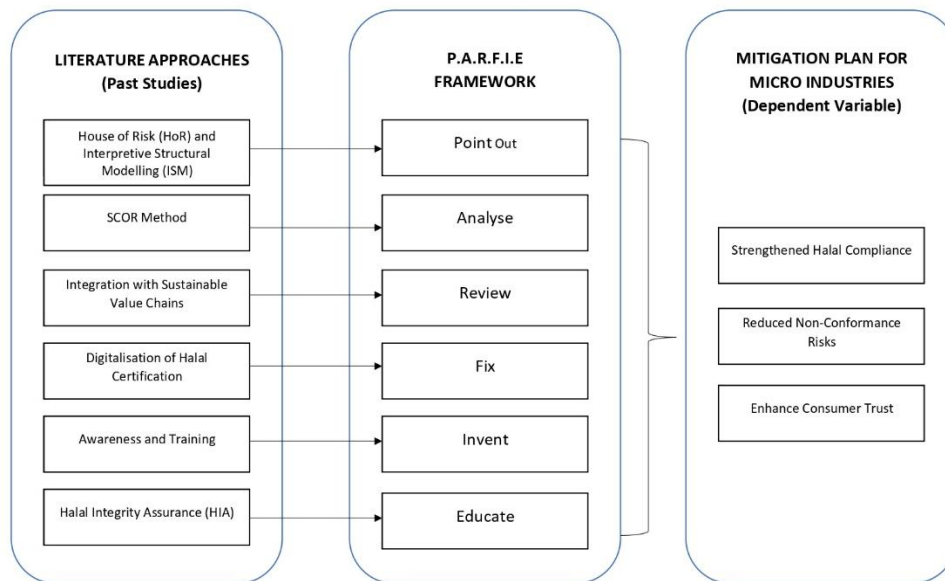


Figure 1: Theoretical Framework of the P.A.R.F.I.E Model for Mitigating Halal Non-Conformances in Micro Industries

Methodology

This concept paper employs a qualitative research design with document analysis as the primary method, as it enables an in-depth exploration of existing knowledge and practices related to halal non-conformances among micro industries (Bowen, 2009). The study focuses on scholarly articles, industry reports, policy documents, and halal certification standards published between 2015 and 2025, since this period reflects the most recent developments and trends in halal compliance. Key documents such as the Malaysian Standard MS2634 (Halal Cosmetics – General Requirement) and MS1500 (Halal Food-General Requirement) are carefully examined to capture regulatory expectations and practical challenges faced by micro enterprises. The selection of documents follows strict inclusion criteria, whereby only materials directly related to halal non-conformance and mitigation strategies in micro and small industries are reviewed, while unrelated or outdated sources are excluded to maintain accuracy and relevance. To analyse the data, a thematic content analysis approach is employed (Braun & Clarke, 2006), whereby the collected documents are systematically coded, categorised, and interpreted. This process allows for the identification of recurring themes, critical risk factors, and existing mitigation approaches while highlighting their applicability to the micro enterprise context. Patterns and relationships between risk factors and mitigation strategies are carefully examined to generate insights that are both analytical and practical. To strengthen the trustworthiness of the findings, triangulation is applied by cross-referencing insights from multiple sources, including academic research, industry guidelines, and case studies (Flick, 2018), thereby reducing bias and enhancing validity. The outcome of this rigorous document analysis serves as the foundation for constructing the P.A.R.F.I.E conceptual framework, which integrates regulatory requirements with risk management principles while taking into account the operational realities of micro industries. By adopting a systematic and credible methodological approach, this study ensures that the proposed framework is evidence-based, contextually relevant, and adaptable for guiding micro enterprises in mitigating halal non-conformances and sustaining compliance.

Result and Discussion

Addressing halal non-conformance in micro industries requires an integrated understanding of risks, supply chain integrity, sustainable practices, digital innovation, stakeholder engagement, and continuous monitoring. Findings from the reviewed literature reveal that these six components form the foundation of a practical conceptual framework for mitigating non-conformance among resource-limited micro industries. Based on previous literature and ethical considerations, this research presents the P.A.R.F.I.E framework, as illustrated in Figure 1 below, as a conceptual approach to mitigating halal non-conformances. This framework aims to enhance halal risk management by providing structured guidelines and processes to improve compliance, particularly within micro industries. For the purpose of clear discussion of the findings, the application of the Halal mitigation plan model was incorporated through a cosmetic scheme.

The challenges faced by micro cosmetic industries further reinforce the need for this structured framework. For instance, Abd Aziz and Borhan (2025) highlighted that cosmetic enterprises in Kelantan reported recurring non-conformances such as the use of uncertified raw materials, inadequate documentation, and weak internal halal controls. These cases demonstrate that while IHCS provides minimum compliance requirements, it does not sufficiently address risks at the operational level. Therefore, the P.A.R.F.I.E. model is positioned as a more pragmatic solution, integrating risk management practices and continuous improvement to ensure long-term compliance and consumer trust.

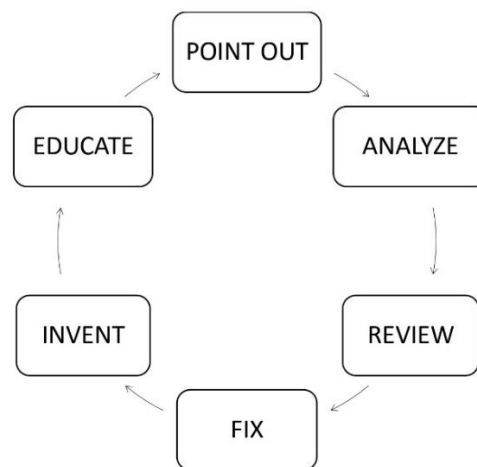


Figure 2: Model of Halal Non-Conformance Mitigation Plan – P.A.R.F.I.E

First of all, it is of the utmost importance to “point out” or detect problems of halal non-compliance and weaknesses in a variety of aspects, including management, paperwork, and processing operations. To give one example, there may be cases in the processing industry in which workers do not repeat the required prayers throughout the slaughtering process. As adopted from House of Risk (HoR) and Interpretive Structural Modelling (ISM), identification of risk is important as the first step of the mitigation plan (Mustaniroh et al.,2025). Proper documentation plays a critical role in managing halal integrity within micro industries, particularly when issues such as expired halal certifications and unclear segregation protocols arise. For instance, raw materials may possess halal certifications that have expired and not been renewed, and management may lack standardized procedures to separate tools or

equipment used for halal and non-halal processing. These gaps not only pose risks of unintentional non-conformances but also leave the business vulnerable to audit failures. A centralized tracking system, such as a dedicated spreadsheet using Microsoft Excel or Google Sheets, is essential to ensure that this information is readily accessible and consistently updated, thereby enhancing transparency and traceability in operations. Rigorous documentation and raw material control are essential components of halal compliance, particularly for micro and small enterprises. For the purpose of halal readiness requirements, including raw material control, record keeping, and documentation (Shah, Abu Bakar, & Mustapha, 2024). These findings underscore that maintaining updated documentation of ingredients and their certification status is a recognized practice for sustaining halal compliance. Implementing such controls can help micro industries proactively identify expiring certifications, enforce equipment segregation, and reinforce their internal halal assurance systems.

The next step is to analyze and review by conducting a thorough investigation into all of the problems that have been reported in order to identify the underlying causes and the factors that have contributed to them. For instance, the primary reason why workers are unable to recite prayers could be due to a lack of adequate training. Similarly, the absence of a reminder system for the dates of renewal may be the cause of halal certifications that have lost their validity. To ensure the identified flaws align with established halal standards, it is necessary to consult relevant standards and guidelines. Subsequently, it is necessary to examine the remedial actions taken in the past to ascertain whether or not they are capable of preventing the occurrence of NCR. Furthermore, it is necessary to devise suitable solutions for every non-compliance issue in a manner that is both clear and organized. For example, digital thermometers should be used to monitor essential aspects of the production process, such as temperature and time, in order to guarantee compliance with regulations.

Next step is fix, where the company or manufacturer will make all necessary corrections and implement the improved procedures. As part of this, regular halal training sessions will be held for employees, and monitoring personnel will be assigned to guarantee that all procedures are carried out in the appropriate manner. For the purpose of ensuring compliance, continuous monitoring is required. In the context of cosmetics, “fix” is particularly critical because non-conformances often arise from lapses in raw material verification and product labelling. Unlike food industries, cosmetic formulations frequently involve complex chemical ingredients sourced globally, which increases the risk of syubhah or contamination. Implementing corrective measures such as verified supplier databases, halal ingredient mapping, and clear labelling protocols ensures that companies not only correct past errors but also prevent recurrence. This step strengthens consumer confidence, especially in a sector where halal assurance is closely tied to product safety and ethical concerns.

Immediately after that, the halal compliance procedure should be improved by developing and constructing new processes first. Take, for instance, the creation of a computerized reminder system for the expiration dates of halal certificates. Hold regular meetings to discuss potential modifications to the halal process, aiming to continuously improve all aspects of the operation. Last but not least, it is imperative that all parties involved in halal compliance get education in order to ensure that halal principles are understood and applied in a consistent manner. The provision of organized training for employees on proper halal practices, the focus on the importance of precise paperwork, and the guarantee that management is aware of risk mitigation strategies are all included in this. To enhance comprehension of halal legislation, certification

procedures, and critical control points in production, it is recommended to adopt regular awareness programs, workshops, and digital learning aids. In addition, establishing a centralized knowledge-sharing platform will provide employees with access to updated guidelines, case studies, and records of corrective actions, leading to increased compliance and enabling continuous improvement in halal resource management. Meanwhile, Figure 3 illustrates how P.A.R.F.I.E. can be applied in micro-cosmetic industries through a structured approach.

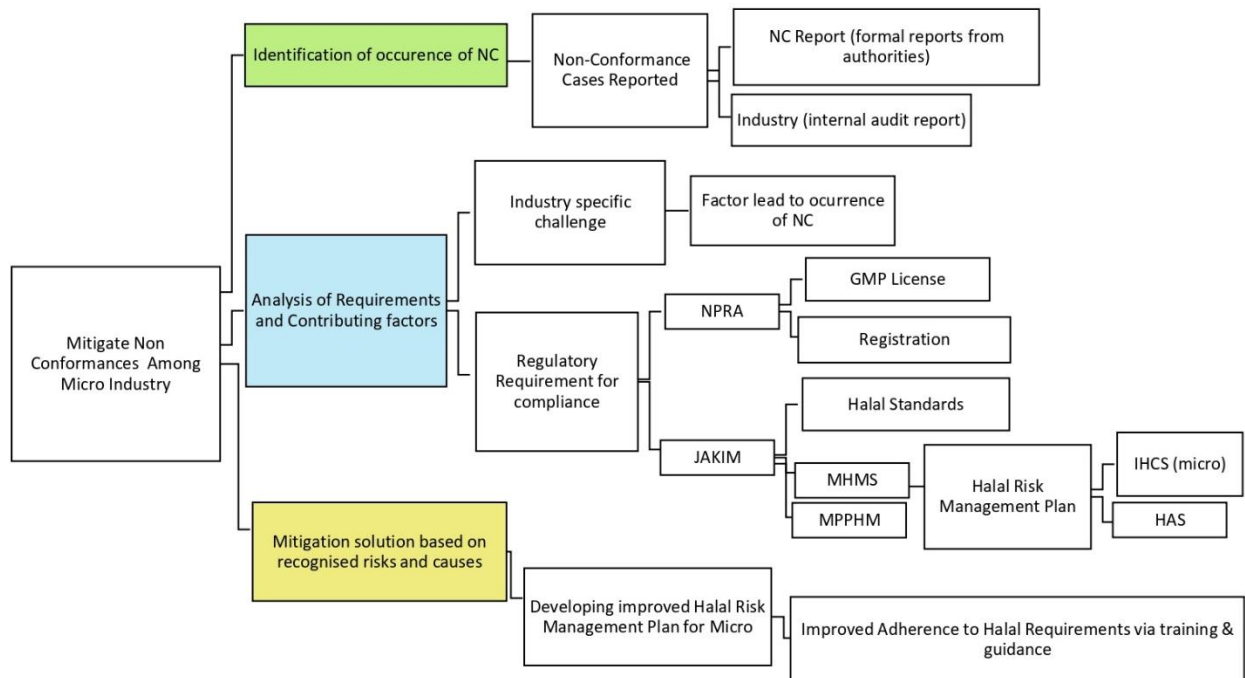


Figure 3: Conceptual Framework in Mitigating Non-Conformance in Micro Industry

The conceptual framework can be understood through three interlinked stages: identification of non-conformance occurrence, analysis of requirements and contributing factors and mitigation solutions based on recognized risks and causes. At the first stage, non-conformance is detected through NC reports (from authorities) or internal audit findings within micro industries. This ensures that both external oversight and internal accountability contribute to the detection process (Mustaniroh et al.,2025). From Figure 2, the first stage is to establish where and how non-conformances occur by gathering formal reports from regulatory bodies and internal audit reports from within the industry. This information aids in determining the frequency and nature of nonconformances. Once the data has been obtained, it is critical to analyse the requirements and contributing factors.

Non-conformance challenges specific to an industry must be identified to identify the causes that contribute to NCs, such as inadequate training, poor quality control processes, or supply chain issues. Compliance with regulatory regulations is also essential. For example, the National Pharmaceutical Regulatory Agency (NPRA) requires getting a Good Manufacturing Practice (GMP) licence and product registration. Additionally, adherence to JAKIM Halal standards, including the Malaysian Halal Management System (MHMS), is required. This includes creating a Halal Risk Management Plan, implementing the Integrated Halal Control

System (IHCS) for micro-enterprises, and adhering to the Halal Assurance System (HAS) and the Manual Procedure for Halal Certification Malaysia (MPPHM). The following phase, based on the study, will be to propose ways to mitigate non-conformances. This includes increasing conformity to Halal rules by upgrading existing Halal control systems. It is critical to implement a comprehensive system for managing, documenting, and evaluating nonconformances. Methods such as Poka-Yoke can prevent errors by ensuring that only permitted raw materials are used. Staying up to date on legislative changes and ensuring compliance with standards such as ISO 22716 (Gilchrist,2022), which gives recommendations for excellent manufacturing processes in the cosmetic business, is also vital.

The disparity in halal compliance between large corporations and micro enterprises underscores the need for a scalable, context-sensitive framework. While HAS offers comprehensive safeguards, its complexity renders it impractical for smaller businesses. Conversely, IHCS, though accessible, lacks the depth needed to prevent recurring non-conformance. The P.A.R.F.I.E. framework bridges this gap by offering a structured, adaptable model that integrates regulatory standards, digital tools, and continuous education. It aligns with the halalan toyyiban philosophy, ensuring that products are not only lawful but also ethically and hygienically sound. Moreover, it supports Malaysia's aspiration to become a global halal leader by enhancing grassroots compliance and consumer trust. The second stage involves analyzing industry-specific challenges and regulatory requirements for compliance, such as GMP licensing, NPRA registration, and JAKIM halal certification. These regulatory benchmarks form the backbone of halal governance but are often difficult for micro enterprises to fully comply with due to limited expertise and resources (Pujiastuti et al.,2024). By recognizing these constraints, the framework contextualizes compliance as a shared responsibility between industry and regulators, rather than an isolated burden on micro firms.

Finally, mitigation solutions are designed around recognized risks and their root causes. These include developing improved halal risk management plans tailored for micro enterprises, enhancing adherence to halal requirements and integrating IHCS and HAS elements in a simplified manner. The adoption of digital tools for halal certification (Santoso & Rachman, 2023), stakeholder training and awareness programs (Nurainun et al.,2023), and continuous halal integrity assurance mechanisms (Mohamed et al.,2020) further strengthen the system. This holistic approach ensures that non-conformance is not only addressed reactively but prevented proactively, thereby embedding resilience and sustainability into micro industry operations. Overall, the PARFIE framework offers an adaptive approach compared to the more rigid HAS or the limited IHCS. Its emphasis on systematic problem detection, continuous monitoring, and education creates a cycle of resilience that micro industries can realistically adopt despite their resource limitations. Importantly, by tailoring halal risk management strategies to the unique challenges of the cosmetic sector, the framework not only mitigates regulatory non-conformances but also aligns with Malaysia's ambition to strengthen its halal ecosystem globally. This highlights PARFIE's potential as both a practical industry guideline and a policy reference for regulators in supporting micro-enterprises.

Conclusion

Halal non-conformance remains a critical challenge in Malaysia's halal ecosystem, particularly among micro and small enterprises. Existing frameworks like HAS and IHCS provide foundational structures but fall short in addressing the nuanced realities of smaller businesses. The P.A.R.F.I.E. framework offers a practical, standards-aligned solution that promotes

structured problem-solving , digital monitoring, and continuous education. By adopting this model, micro enterprises can enhance their halal compliance, reduce non-conformance incidents, and strengthen consumer trust. Ultimately, this contributes to a more resilient and credible halal ecosystem, reinforcing Malaysia's position as a global halal hub.

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