

# The Socio-Cultural Mediation of Religious Authority: A Comparative Study of Halal Slaughter Fatwas in Indonesia and Australia

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## Abstract

This study highlights the gap between fatwas and the implementation of halal slaughter practices influenced by technological modernity in two distinct contexts: Indonesia as the world's largest Muslim-majority country and Australia with its Muslim minority community. This research is the socio-cultural resistance to the machine-slaughter fatwa in Indonesia, which contrasts with the more adaptive acceptance in Australia. To analyze this paradox, the study employs a qualitative method through literature review and comparative analysis, examining fatwa documents, regulations, and societal responses in both countries. The results indicate that the effectiveness of a technological fatwa is determined not only by its legal validity but critically by its alignment with the socio-cultural character of the community. In Indonesia, resistance stems from a value clash between the efficiency logic of machines and the religious-communal character of society, whereas in Australia, an autonomous and community-driven certification system maintains Sharia integrity in manual slaughter. The conclusion emphasizes the necessity for participatory social engineering, involving intensive dialogue among scholars, industry practitioners, and the public, to design halal technologies that are not only legally valid but also spiritually and culturally meaningful, thereby ensuring harmony between religious authority, technological innovation, and societal realities.

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## Introduction

Automated halal animal slaughtering technology often does not align with efforts to uphold the religious, social, and cultural values of Muslim communities (Badu et al., 2023a). The religious life of Muslims, which emphasizes intention (niyyah), manual control, and spirituality in ritual practice, frequently stands in contrast to the impersonal and mechanistic nature of machines (Bouzraa et al., 2025). This technology is also often perceived as an imported innovation, not one that emerges from the socio-cultural context of majority-Muslim societies (Badu

et al., 2023b; Sinclair & Phillips, 2019). A common belief among Muslim communities is that such technology carries values of efficiency and secularism that may conflict with religious convictions requiring mindfulness and heartfelt presence in acts of worship (Bonne & Verbeke, 2007; Fuseini et al., 2017a). The introduction of this technology into Indonesia's halal industry has also not been accompanied by sufficient literacy and education for the public and business actors regarding how to integrate sharia principles into machine-based operations (Marnita, 2024). At the same time, society exhibits an unpreparedness to accept this technology, reflected in concerns that the spiritual meaning of slaughter may be diminished (Driessen & Korthals, 2012; Lindebaum et al., 2020). From this picture, the presence of automated slaughter technology clearly creates an incompatibility with the religious and social character of Muslim communities, who should be the very subjects of its adoption.

However, previous studies on technologically assisted halal slaughter have not adequately addressed this crucial aspect of incompatibility, as they tend to view the relationship between fatwas, technology, and society in a linear manner (Ahmed, 2019; Lindebaum et al., 2020; Rosyidi et al., 2025). Existing studies often fail to capture the fundamental issues within the triangular relationship between fatwa authority, technological characteristics, and the sociocultural realities of its recipients. The research landscape shows three tendencies: first, studies that focus solely on technical implications and efficiency (Paranhos Da Costa et al., 2012); second, studies that analyze only the formal legal aspects of fatwas without engaging grassroots responses (Nasution, 2024; Rawanita & Mariati, 2024a); and third, studies that map technical literacy issues without delving into the cultural and religious roots (Fuseini et al., 2017b; Miele, 2016; Sinclair et al., 2023). From these tendencies, it becomes evident that the social and cultural character of communities, an essential factor in determining the acceptance of a technological fatwa, has been largely overlooked, resulting in a significant gap in the literature.

Therefore, this paper aims to fill the gaps in previous studies by carefully analyzing how sociocultural characteristics influence the acceptance of technological fatwas. A community's ability, whether Muslim-majority or minority, to adopt technology endorsed by a fatwa is strongly shaped by its cultural, religious, and social structures (Mujahidin, 2022). Public perceptions of the compatibility of a technology with core religious values must be thoroughly examined (Ho et al., 2024; Sinclair et al., 2023). Based on this, three key questions are raised: How does the gap between the textual content of the MUI fatwa and the socio-cultural reality of Indonesian Muslims affect its effectiveness? How does minority status enable Australian Muslims to maintain a manual method

that is, in fact, more shar'i? How do differences in regulatory and cultural contexts shape halal slaughtering practices in both countries? Answers to these questions will provide a solid foundation for formulating more contextual fatwa policies and effective social engineering.

This study departs from the main argument that the incompatibility between the machine-slaughter fatwa and Indonesian Muslim society stems from a fundamental difference between the communal-religious character of society and the efficient yet impersonal character of technology. Indonesian Muslims possess a strong orientation toward communal and religious values in worship, which may clash with the logic of efficiency and standardization inherent in technological systems. Efficiency-oriented technology risks eroding the spirituality and communal essence of the slaughter ritual. Its successful adoption requires the readiness of social infrastructure, such as education and sustained dialogue between religious scholars and communities, which remains weak in Indonesia. Meanwhile, the religious values upheld by society must serve as the foundation, not be treated as obstacles, in the process of adoption. Thus, the successful adoption of halal slaughter technology requires social engineering that is not only technical but, more importantly, capable of bridging modern technological values with the living religious character and values of society.

### **Research Methodology**

This study employs a qualitative approach using a literature study method to analyze the gap between fatwa texts and socio-cultural realities in halal slaughtering practices in Indonesia and Australia (Creswell, John W., Creswell J. David, n.d.). An exploratory-comparative design was selected to examine the complex dynamics between religious doctrine, technology, and social practices in both countries. Primary data sources include official fatwa documents issued by the Indonesian Council of Ulama (MUI) and Australia's governmental halal regulations, while secondary sources consist of scholarly articles, books, and relevant publications purposively selected based on credibility and relevance (Snyder, 2019). The data analysis process was conducted through thematic content analysis and comparative analysis. Thematic content analysis was used to identify key themes within the fatwas and social responses, whereas comparative analysis was applied to examine patterns in the implementation of halal standards and the adoption of technology (Virginia Braun et al., 2012).

The stages of analysis involved coding to identify key concepts, categorizing data based on thematic similarities, and interpreting findings to understand relationships between categories and the construction of meaning. Data validity was ensured through source triangulation by comparing findings

from various documents and literature, as well as expert review of the analytical results (Norman K. Denzin; Yvonna S. Lincoln, 2005). The theoretical framework integrates perspectives from the sociology of technology, fatwa studies, and social engineering. Through this approach, the study provides an in-depth analysis of normative and empirical gaps, while offering a foundation for the development of fatwa policies that are more responsive to the socio-cultural contexts of society.

### **The Dichotomy of Modernity and Tradition in the Global Landscape of Halal Slaughtering**

The dynamics within the global halal industry illustrate a complex interplay between modernization efforts, driven by the need for efficiency, global competitiveness, and technical adaptation, and the preservation of traditional Sharia principles that remain the moral anchor of halal production and consumption. This tension becomes particularly evident when contrasting two distinct markets: Indonesia, the world's largest Muslim-majority country that aspires to become a global halal hub, and Australia, a multicultural nation in which halal production exists within a predominantly non-Muslim regulatory and consumer environment. These two contexts reflect divergent trajectories in how modernization is negotiated vis-à-vis the ethical, ritual, and spiritual commitments embedded within halal standards.

In Indonesia, the drive for modernization is shaped significantly by the country's demographic composition and the longstanding cultural embeddedness of halal practices. As the demand for halal products grows, both domestically and internationally, the Indonesian government has responded by strengthening regulatory frameworks to ensure that industrial expansion remains aligned with core Sharia requirements. Research indicates that reinforcing regulations and policies plays a vital role in the halal industry's continued development, particularly through the establishment of comprehensive halal product assurance laws that can enhance the nation's international competitiveness (Pratama & Harahap, 2024). This legalistic approach reflects Indonesia's commitment to harmonizing industrial modernization with religious obligations, thereby preventing technological progress from eroding the spiritual legitimacy of halal certification.

The divergent trajectories of halal modernization in Indonesia and Australia can be traced to fundamental differences in regulatory frameworks, socio-cultural contexts, and community engagement. The following table provides a comparative overview of these contextual factors, setting the stage for a deeper analysis of how modernization is negotiated in each setting.

**Table 1**  
Comparison of Halal Industry Contexts in Indonesia and Australia

Aspect	Indonesia (Muslim-Majority)	Australia (Muslim-Minority)
Halal Regulation	Integrated into national law (JPH Act)	Community-based certification, no state regulation
Response to Technology	Strong resistance; spiritual-cultural concerns	Adaptive; technology integrated with Shariah adjustments
Certification System	Centralized (MUI), fragmented implementation	Autonomous, strict, community-trusted
Main Challenges	Low Shariah-technology literacy; public resistance	Standardization; non-Muslim public perception
Community Role	Passive recipients of fatwas	Active as standard guardians and monitors
Adaptation to Modernization	Slow, with significant resistance	Rapid, through scholar-industry-regulator dialogue

Source: Developed by the author based on literature synthesis, 2025.

As illustrated in Table 1, Indonesia's top-down regulatory approach contrasts sharply with Australia's community-driven model. These differences not only shape technological adoption but also influence how religious authority is exercised and contested in the halal arena. Indonesia's ambition to position itself as a global halal hub is further evident in its efforts to integrate modern practices into various industrial sectors, including halal logistics, supply chain management, and certification technologies. (Hasan, 2021) notes that Indonesia's strategy is not merely to expand production but to enhance supply chain integrity by embedding halal safety procedures at every node. Likewise, (Susanty et al., 2020) emphasize Indonesia's endeavor to institutionalize halal logistics, a move that ensures that products are not only produced but also stored, transported, and distributed in ways that prevent contamination and uphold Sharia-compliant practices. These developments demonstrate that modernization in Indonesia is not conceptualized as an antagonistic force to tradition; rather, it is framed as a necessary tool to safeguard, extend, and fortify halal integrity across increasingly complex supply chains.

However, modernization introduces its own set of challenges. The logistical landscape in Indonesia, which encompasses both urban industrial centers and geographically dispersed rural regions, often struggles with issues such as cross-contamination during transportation and limited technological standardization across supply chain actors (Pujiastuti et al., 2024; Susanty et al., 2020). These issues underscore the need for infrastructural upgrades and stronger regulatory enforcement. Moreover, as Indonesia adopts newer technologies, such

as automated tracking systems, blockchain-based traceability, and digital verification mechanisms, the central challenge lies in ensuring that these innovations remain compatible with Sharia requirements. For instance, digital tools intended to streamline certification must still preserve the human ethical judgment intrinsic to Islamic law, particularly in areas such as slaughtering processes, supply chain monitoring, and contamination prevention. In contrast to Indonesia's religion-centered regulatory development, the halal industry in Australia operates within an entirely different socio-cultural and institutional environment. Australia's halal sector emerged primarily in response to export-oriented demands, particularly from Muslim-majority countries in the Middle East and Southeast Asia. As a result, halal certification in Australia has evolved within a multicultural and secular landscape, which often leads to unique challenges related to standardization, recognition, and public perception. Unlike Indonesia, where halal consumption is a cultural norm, Australia's domestic halal market is shaped by the coexistence of Muslim minority needs and the broader expectations of non-Muslim consumers.

One of the main challenges faced by the Australian halal industry is the lack of a unified halal supply chain management (SCM) framework. Studies by (Tieman, 2011; Tieman et al., 2012) highlight that inconsistencies in halal standards, exacerbated by the presence of multiple certification bodies with differing interpretations, serve as significant barriers to trust, both within domestic markets and in international trade relations. These inconsistencies complicate Australia's efforts to maintain credibility in global halal markets, where importing countries often demand strict and uniform adherence to halal requirements. At the same time, the Australian government's regulatory structures emphasize transparency and accountability in food certification more broadly, which aligns with consumer demands for quality assurance (Akmal, 2021). Yet, transparency alone does not resolve the deeper challenge: that halal certification operates at the intersection between traditional Islamic jurisprudence and the secular principles of a multicultural society.

Another persistent issue in Australia concerns public misconceptions surrounding halal practices. As notes (Tieman et al., 2012), segments of the non-Muslim public often misunderstand halal certification, associating it with political or ideological motives rather than viewing it as a religious dietary standard. These misconceptions can generate social tensions and create barriers to industry growth, particularly when halal-certified products face resistance from consumers who do not perceive halal as a quality-enhancing practice. Such dynamics contrast sharply with Indonesia, where halal certification is widely accepted as both a religious necessity and an indicator of product safety, hygiene,

and ethical standards. Thus, the Australian halal industry must continually navigate the delicate balance between meeting Muslim consumer needs and addressing the concerns or misconceptions of non-Muslim stakeholders, including retailers, producers, and regulators.

Halal logistics in Australia also reflects these broader tensions. While the country has developed advanced agricultural and food supply chains, the halal logistics segment often requires additional assurances to maintain the integrity of halal status throughout the production and distribution process. (Tieman et al., 2012) argues that the absence of standardized halal logistics practices, coupled with competitive pressures and varying expectations across Islamic and non-Islamic markets, poses challenges to ensuring consistent halal integrity. Australian producers exporting to Muslim-majority countries must therefore navigate multiple layers of regulation, both domestic and international, to guarantee that their halal-certified products remain compliant from farm to fork.

Technological advancements have added another layer of complexity to both countries' halal industries. The integration of Industry 4.0 concepts, automation, digitalization, cyber-physical systems, big data analytics, and blockchain, has revolutionized operational efficiency within the halal supply chain (Febriati et al., 2024; Pratama & Harahap, 2024). These technologies offer unparalleled transparency, traceability, and monitoring capabilities that can enhance consumer trust and reduce risks of contamination or fraud. However, their adoption raises critical questions regarding the compatibility of mechanical processes with traditional religious prescriptions. For example, while automated slaughtering technologies can improve efficiency, Sharia law mandates that slaughter must be carried out by a sane, qualified Muslim who recites the basmalah and ensures humane treatment of animals. (Pratikto et al., 2023) highlight that technological advancement in slaughtering must therefore be carefully assessed to ensure that automation does not undermine these essential religious elements. Thus, while modernization can improve quality and scalability, it must be pursued within boundaries that respect the theological foundations of halal practices.

In conclusion, the evolution of the global halal industry, exemplified by the contrasting cases of Indonesia and Australia, is characterized by an intricate and ongoing negotiation between modernization and tradition. In Indonesia, modernization is channeled primarily through regulatory alignment and infrastructural enhancement aimed at reinforcing Sharia compliance while stimulating global competitiveness. Meanwhile, the multicultural framework of Australia necessitates a broader focus on standardization, transparency, and public perception, requiring stakeholders to reconcile diverse consumer

expectations with foundational halal principles. Despite their differences, both countries share a common challenge: ensuring that technological transformation and market expansion do not compromise the spiritual, ethical, and procedural integrity of halal. As the global marketplace increasingly demands halal-certified products, maintaining this balance becomes essential for sustaining the industry's credibility and securing its future growth.

### **Indonesia's Sociocultural Response to the Machine-Slaughter Fatwa**

The sociocultural response to the fatwa on machine slaughter in Indonesia reveals layers of resistance rooted in spiritual, educational, cultural, and identity-oriented anxieties that shape public attitudes toward technological modernization. The controversy is not merely about the permissibility of machine slaughter as a technical process; rather, it encompasses deeper concerns over ritual authenticity, the preservation of religious meaning, and the safeguarding of Islamic identity in the face of rapidly evolving technological landscapes. These factors combine to create a complex terrain in which modern slaughtering technologies, despite being declared permissible (halal) by the Indonesian Ulama Council (MUI), encounter persistent skepticism and emotional rejection from various segments of Indonesian society.

At the heart of this resistance lies a perceived clash between the spiritual values embedded in traditional slaughter practices and the mechanized logic underlying machine slaughter. Traditional slaughter in Islam is not simply a procedural or industrial activity; it is a ritual act imbued with meaning, centered on the intention (*niyyah*) of the slaughterer and the recitation of the *basmalah* as an explicit acknowledgment of divine authority. For many Indonesians, therefore, slaughtering is a site of spiritual engagement where religious identity is performed and reaffirmed. The introduction of machine slaughter disrupts this relational dynamic by inserting technological mediation between the human actor and the ritual obligation. This shift, as noted by (Husna, 2021; Rawanita & Mariati, 2024b) evokes a deep-seated fear that technological advancement could hollow out the religious essence of the act, reducing it to a mechanical process devoid of spiritual intentionality.

This anxiety is part of a broader fear that the mechanization of ritual practices may dilute Islamic identity itself. Machine slaughter becomes, symbolically, a point of tension where the integrity of religious authenticity is perceived to be under threat. For many communities, especially in rural and traditionally observant regions, the idea that a machine could perform an act that has historically required human agency feels dissonant and potentially sacrilegious. It raises questions about the boundaries of religious adaptation:

How far can Islamic law engage with modern technology before it risks compromising its foundational principles? Such questions fuel resistance, even when religious authorities assert that the required conditions, such as operator intention, verbal recitation of the basmalah, and humane treatment, can be met in mechanized systems.

Resistance to machine slaughter in Indonesia is multifaceted, driven by intersecting spiritual, cultural, educational, and media-related factors. The following table outlines these determinants and their impact on the acceptance of the MUI fatwa.

**Table 2**  
Determinants of Resistance to Machine-Slaughter Fatwa in Indonesia

Determinant	Description	Impact on Fatwa Acceptance
Spiritual	Concerns over loss of <i>niyyah</i> and <i>basmalah</i>	Emotional and religious rejection
Cultural	Slaughter as communal ritual (Eid al-Adha, aqiqah)	Perceived erosion of tradition and identity
Educational	Low understanding of fiqh and technology integration	Misconceptions about halal legitimacy
Media & Public Narrative	Media framing linking machines to secularization	Strengthened collective resistance
Regulation & Implementation	Fragmented fatwa adoption at regional levels	Inconsistent standards and oversight

Source: Developed by the author based on literature synthesis, 2025.

Table 2 reveals that resistance is not merely a rejection of technology but a defense of deeply held religious and cultural values. Addressing these concerns requires more than doctrinal validation, it demands participatory dialogue and culturally sensitive communication

Compounding these spiritual concerns is the widespread low level of sharia-technological literacy among the public. Although MUI and various scholars have long clarified that Islamic jurisprudence allows for modern slaughtering methods, provided key criteria are met, this message often fails to reach the broader population in a clear and accessible manner. As (Abdullah et al., 2019; Kurniawan et al., 2025) observe, many Indonesian consumers remain unaware of jurisprudential nuances such as the permissibility of reversible stunning, a practice accepted in many Muslim-majority countries as long as the animal is not irreversibly harmed before slaughter. The lack of understanding regarding the legal logic behind such rulings contributes significantly to the rejection of machine slaughter. The resistance, therefore, stems not from an inherent incompatibility between Sharia and technology, but from the absence of

informed public discourse that explains how Islamic law responds to new technological realities.

Several studies, including those by (Badu et al., 2021; Ritonga & Aminah, 2023), highlight that misconceptions about the technical processes involved in machine slaughter play a critical role in shaping public opinion. For example, many consumers mistakenly believe that machine-operated slaughter eliminates the need for a Muslim operator or the recitation of the basmalah, despite the fact that most certified machine slaughter systems still require trained Muslim personnel to initiate and supervise the process. These misconceptions create a narrative of threat, where technology is framed as inherently un-Islamic or incompatible with halal principles, even when religious authorities explicitly assert otherwise. This interpretive gap underscores the urgent need for systematic education and transparent communication regarding halal technological standards. The public perception of technology as a “trademark” of modernity that threatens religious identity is further intensified by cultural narratives and media representations. Indonesian media, including social media platforms, often play a significant role in shaping public sentiment, especially in controversial or emotionally charged issues related to religion and modernity. (Mochammad Taufik Nur Sapto Wardono et al., 2023) note that discourses surrounding purity, tradition, and authenticity are frequently mobilized in online debates about machine slaughter, emphasizing the perceived moral risks of mechanized processes. In such narratives, technology becomes equated with foreign influence, industrial exploitation, or secular intrusion into sacred practices.

These perceptions are not unique to Indonesia; similar anxieties have been observed in other Muslim communities grappling with technological change. However, the Indonesian sociocultural context, with its strong emphasis on communal religious life, local customary practices, and the historical intertwining of Islam and national identity, amplifies the symbolic weight of debates on halal practices. As a result, the push toward modern slaughter technologies is often interpreted not merely as an industrial development but as a cultural shift with potential to reshape collective religious identity. Community narratives also contribute significantly to resistance. In many Indonesian regions, slaughtering practices are integrated into cultural life, particularly during religious festivals such as Eid al-Adha. These rituals reinforce communal bonds and affirm religious identity through shared practices. The notion that a machine could replace human involvement in such rituals is not only spiritually troubling for some individuals but is also perceived as undermining community-based traditions. (Tieman et al., 2012) suggest that when technological change threatens

established social practices, resistance tends to intensify, especially in societies where religious and cultural norms are deeply interconnected.

This situation reflects broader sociological themes regarding the relationship between modernity and tradition in Indonesia. Modernity, particularly technological modernity, is often met with caution, if not outright suspicion, in communities where religious and cultural practices form the bedrock of social cohesion. The introduction of machine slaughter, therefore, becomes a microcosm of the larger tension between preserving cultural-religious identity and adapting to global technological shifts. The fear is not simply that technology will change slaughtering practices, but that it will introduce a broader paradigm that prioritizes efficiency and mechanization over spiritual meaning and cultural continuity.

In this context, the resistance to machine slaughter cannot be viewed merely as a rejection of technology; rather, it is an expression of collective anxiety about the erosion of religious agency and the potential loss of identity in an era characterized by rapid modernization. This anxiety is intensified by the perception that religious authorities and policymakers are too quick to accommodate technological innovations without sufficiently addressing the public's spiritual concerns or providing accessible explanations of the jurisprudential reasoning behind permissive rulings. In summary, Indonesia's sociocultural resistance to the fatwa on machine slaughter can be traced to multiple intersecting factors: deep-rooted spiritual values associated with ritual slaughter, limited public literacy regarding Sharia perspectives on technological adaptation, and broader apprehension about the perceived erosion of religious identity in the face of modernization. These concerns are further shaped by cultural narratives, media influence, and the historical role of ritual slaughter in reinforcing communal belonging.

### **The Firmness of Sharia Principles in Manual Slaughtering Practices in Australia**

The practice of halal slaughter in Australia reflects a complex and evolving interplay between religious observance, cultural identity, and contemporary ethical expectations surrounding animal welfare. At its core, halal slaughter is governed by principles deeply rooted in Islamic jurisprudence, emphasizing compassion toward animals, humane handling, and strict adherence to prescribed rituals. These principles shape every aspect of the slaughtering process, from the invocation of God's name to the requirement that the animal be healthy, conscious, and treated without unnecessary suffering. Yet, when situated within Australia's predominantly non-Muslim and highly regulated

meat industry, these religious principles intersect with modern standards of ethical slaughter, producing a dynamic space in which theology, culture, economics, and ethics converge. This discussion explores the paradox and tension that arise when Muslim communities attempt to maintain strict adherence to Sharia principles in a setting that simultaneously demands compliance with modern animal welfare standards.

To begin with, the strong sense of religious identity among Australian Muslims plays a pivotal role in shaping the community's engagement with halal slaughter. For many Muslims living in Western and secularized environments, halal consumption transcends its status as a dietary rule; it functions as a core marker of faith, belonging, and cultural continuity. Halal meat thereby becomes a material expression of religious authenticity and a symbolic means of resisting cultural assimilation. Scholars have shown that for minority Muslim communities in non-Muslim countries, halal consumption forms part of a broader strategy to sustain communal boundaries and uphold religious distinctiveness (Chandia & Soon, 2018; Zainalabidin et al., 2019). This symbolic dimension is especially pronounced in contexts where halal options are less widespread, compelling community members to seek certified halal products as a reassurance that their food aligns with Islamic principles. Consequently, halal certification takes on immense importance, not merely as a technical verification but as a mechanism for maintaining the integrity of Muslim identity. This dynamic reinforces the need for certifying bodies to uphold rigorous standards, ensuring that halal integrity remains unthreatened by the pressures of cultural assimilation, industrial processing, or institutional oversight.

Central to the maintenance of halal integrity in Australia is the development of a strict and centralized halal certification system designed to safeguard credibility both within the Muslim community and in the global halal market. However, the reality is more complex: multiple certifying bodies operate in Australia, each employing slightly different protocols and interpretive frameworks. While diversity in certification may allow communities to choose bodies that align most closely with their theological views, it also complicates uniform enforcement and creates ambiguity for consumers and industry actors alike. Nonetheless, Australia has established a comprehensive halal certification framework that operates alongside national food safety regulations, ensuring compliance with both Islamic requirements and government standards (Abdullah et al., 2019; Manan et al., 2017). This dual compliance is crucial because the halal meat market is embedded within a globalized supply chain, where credibility, consistency, and transparency are essential to maintaining consumer trust.

Moreover, the halal meat industry in Australia must respond to ethical expectations aligned with contemporary animal welfare discourses, especially the widely recognized “Five Freedoms,” which emphasize freedom from pain, fear, hunger, discomfort, and distress (Fuseini et al., 2017c). These principles shape public perceptions of humane slaughter and influence regulatory frameworks governing animal welfare. As a result, the halal industry must navigate a delicate balance: on one hand, adhering to religious requirements that emphasize the sanctity and consciousness of the animal at the moment of slaughter; and on the other hand, meeting societal expectations that increasingly favor pre-slaughter stunning as a method to reduce perceived suffering. This tension has given rise to significant debate among scholars, practitioners, and jurists. Some scholars argue that reversible stunning, methods that render the animal unconscious without causing death, can be considered permissible because they do not interfere with the essential Shariah requirement that the animal must be alive at the moment of slaughter (Riaz et al., 2021). Others, however, insist that any form of stunning contradicts Islamic principles, particularly if it risks harming the animal prior to slaughter or alters traditional ritual procedures (Aghwan, 2022). These debates exemplify the broader challenge of interpreting religious texts within modern technological and ethical contexts.

Australian Muslim communities have developed proactive strategies to maintain Shariah integrity within a secular regulatory environment. The table below summarizes key mechanisms that enable the preservation of manual slaughter practices while engaging with modern ethical expectations.

**Table 3**  
Strategies for Maintaining Halal Integrity in Australia

Strategy	Description	Contribution to Halal Integrity
Community Certification	High autonomy, strict standards, full transparency	Builds trust within and beyond the community
Slaughterer Training	Fiqh and animal welfare programs for butchers	Enhances technical and ethical competence
Technological Adaptation	Adoption of reversible stunning aligned with Shariah	Bridges religious and animal welfare demands
Multi-Stakeholder Collaboration	Forums involving scholars, industry, regulators, NGOs	Produces contextual and accepted policies
Audit & Traceability	Farm-to-fork halal tracking systems	Increases accountability and consumer trust

Source: Developed by the author based on literature synthesis, 2025.

As shown in Table 3, the success of Australia’s halal system lies in its ability to harmonize traditional principles with contemporary demands through

structured community-led initiatives. In recent years, adaptation and innovation within halal slaughter practices have become increasingly visible. These adaptations reflect a nuanced, community-driven effort to preserve traditional methods while engaging responsibly with contemporary welfare norms. One of the most significant developments has been the establishment of structured training programs within halal-certified slaughterhouses. These programs target both theoretical and practical dimensions: they enhance butchers' knowledge of fiqh (Islamic jurisprudence) and simultaneously improve skills related to humane handling and ethical slaughter practices (Hardi et al., 2024; Ismail et al., 2025). The inclusion of ethics-based training demonstrates a widening recognition that maintaining halal integrity extends beyond ritual compliance; it also encompasses moral conduct, animal stewardship, and professionalism.

Furthermore, ongoing collaboration between scholars, certifiers, and industry leaders has created platforms for dialogue on harmonizing Islamic tradition with modern understandings of animal welfare (Pratama & Harahap, 2024; Ulfah, 2025). This dialogue has paved the way for the acceptance of practices such as reversible stunning in certain contexts, provided they do not violate core Sharia principles. The adoption of such adaptations signifies a broader shift toward a more dynamic interpretation of halal practice, one that upholds doctrinal values while remaining responsive to societal expectations, scientific advancements, and ethical concerns. As (Badu et al., 2021) note, flexible and context-sensitive interpretations of halal requirements allow practitioners to uphold religious obligations without compromising the well-being of animals or the credibility of the halal industry.

In conclusion, the firmness and continuity of Sharia principles in the context of manual halal slaughter in Australia can be attributed to three interrelated factors: a strong and resilient sense of religious identity, the presence of a structured and credible certification framework, and the adoption of adaptive strategies that balance tradition with contemporary ethical demands. These factors collectively illustrate how halal practices evolve in response to both internal religious commitments and external societal shifts. As the halal industry continues to grow within a diverse and multicultural Australian landscape, stakeholders must continue to negotiate this balance between integrity and adaptability. Maintaining religious authenticity while embracing ethical animal treatment is not merely a regulatory requirement, it is an ongoing, collaborative effort to safeguard the moral, cultural, and spiritual significance of halal in a rapidly changing world.

## A Comparative Analysis of Fatwa Contextualization in Indonesia and Australia

The comparative analysis of fatwa contextualization in Indonesia and Australia reveals not only contrasting approaches to religious authority and regulatory engagement but also deeper sociocultural dynamics that shape how Islamic legal principles are interpreted and implemented in each setting. Figure 1 presents a comprehensive comparative framework that maps the distinct pathways of fatwa contextualization in Indonesia and Australia. The model visualizes how identical religious pronouncements undergo fundamentally different translation processes based on national context, institutional structures, and socio-political dynamics. Beginning with the common starting point of fatwa issuance, the framework diverges to illustrate Indonesia’s top-down regulatory integration model, characterized by centralized authority, political mediation, and fragmented outcomes, versus Australia’s bottom-up community-market model, which emphasizes decentralized authority, market accountability, and consistent compliance.

**Figure 1**

Comparative Analysis Framework: Fatwa Contextualization in Indonesia vs Australia



Source: Author’s conceptual model based on study findings, 2025.

This comparative framework reveals that fatwa effectiveness is less determined by the textual correctness of religious rulings and more by the socio-political architectures through which they are implemented. The visual model underscores three critical findings: first, that state endorsement does not guarantee effective implementation; second, that community agency often surpasses regulatory control in ensuring compliance; and third, that market accountability mechanisms can drive greater consistency than formal

enforcement systems. These insights challenge conventional assumptions about religious authority and provide a foundation for rethinking fatwa implementation strategies in diverse Muslim contexts.

While Indonesia relies heavily on the normative authority of fatwas issued by the Majelis Ulama Indonesia (MUI), the practical realization of these fatwas is significantly influenced by the country's sociocultural diversity and decentralized governance. By contrast, the Australian Muslim community operates within a secular state structure that offers no formal legal integration of Islamic rulings. As a result, Muslim communities in Australia have crafted their own internal regulatory mechanisms, often more stringent and consistent, to ensure compliance with Islamic principles, particularly in the domain of halal practices. This contrast illustrates how fatwas and Islamic norms are not only religious pronouncements but also sociopolitical tools shaped by context, regulatory opportunity, and public expectations.

In Indonesia, fatwas issued by MUI occupy a unique position as authoritative moral and religious guidance for the Muslim community. Although they do not hold binding legal force, they are widely regarded as normative directives that shape social behavior and, in many cases, inform government policies at national and regional levels. However, the practical implementation of these fatwas frequently encounters obstacles rooted in sociocultural realities. Research indicates that despite the significant symbolic and moral authority of fatwas in Indonesia, their influence on actual behavior is often mediated by local customs, political interests, economic concerns, and governance limitations (Arif et al., 2023; Mardianto et al., 2023; Rashid et al., 2018). This dynamic becomes especially evident in cases where fatwas call for behavioral changes that disrupt long-standing cultural practices or require robust enforcement mechanisms, which local governments may be unwilling or unable to provide.

The integration of fatwas into regional regulations reflects both the potential and the limitation of Indonesia's fatwa system. On one hand, fatwas can mobilize public opinion, legitimize government initiatives, and align regulatory agendas with Islamic values. On the other hand, their impact is often undermined by fragmented local governance, uneven institutional capacities, and variations in regional political notes that sociocultural contexts, including traditional values, communal leadership structures, and local interpretations of Islamic teachings, play a decisive role in determining whether fatwas are acknowledged, adapted, or contested at the regional level. For this reason, Indonesia's fatwa-driven system exhibits a pattern of selective enforcement, where compliance often reflects local consensus rather than national religious authority.

The situation in Australia stands in stark contrast. As a secular and multicultural nation, Australia does not integrate religious rulings such as fatwas into its legal system. Instead, Muslim communities must navigate a regulatory environment that is shaped primarily by national laws and industry standards, particularly in the domain of animal welfare. Notably, the absence of legislated uniform animal welfare standards across industries has created regulatory gaps that directly affect halal practices. Yet, far from weakening compliance, these gaps have motivated Australian Muslim communities to develop strong internal mechanisms to ensure that halal practices remain consistent, credible, and aligned with Islamic principles (R. B. Morton et al., 2020; Parker et al., 2017). This has resulted in a system of community-driven regulation that is often more disciplined and standardized compared to Indonesia's fatwa-dependent model.

In Australia, market pressure and consumer expectations play a central role in shaping halal compliance. Because Muslim communities rely heavily on certification to guarantee adherence to Islamic norms, halal certifiers must maintain strict and transparent standards to preserve community trust. The need for credibility within a secular marketplace fosters a form of self-regulation that emphasizes rigorous monitoring, standardized operating procedures, and third-party auditing. (R. Morton & Whittaker, 2022) highlight that this context enables Muslim communities to assert their religious values within the boundaries of Australian law, resulting in strong community commitment to ethical and consistent halal certification practices. These practices are not externally imposed but arise from the community's recognition that religious legitimacy and public accountability are mutually reinforcing.

The divergent roles of fatwas in Indonesia and regulatory frameworks in Australia illuminate fundamental differences in how Islamic authority is negotiated within each society. In Indonesia, fatwas carry symbolic and normative power but rely heavily on cultural receptivity and governmental support to achieve practical impact. The decentralized nature of Indonesian governance means that local sociocultural dynamics often determine whether fatwas are adopted or ignored. This results in a complex interplay between national religious authority and localized cultural expressions of Islam. As a consequence, Indonesia's approach can appear reactive: fatwas are issued to address emerging moral or social issues, but their implementation depends on external actors whose motivations may vary.

Australia, conversely, demonstrates how regulatory gaps can prompt proactive community engagement. In the absence of formal legal structures that codify Islamic rulings, Muslim communities assume responsibility for constructing and maintaining the regulatory systems necessary for religious

compliance. This includes rigorous halal certification frameworks, internal auditing mechanisms, collaboration with industry partners, and continuous adaptation to changes in welfare standards. Rather than weakening religious authority, the lack of formal state involvement encourages Muslim communities to take ownership of religious practice, resulting in stronger internal cohesion and clearer institutional accountability.

In summary, the comparative analysis of fatwa contextualization in Indonesia and Australia unveils two distinct yet instructive models of Islamic compliance. Indonesia's system, grounded in the institutional authority of fatwas, displays a dynamic but sometimes inconsistent interaction between religious pronouncements, cultural practices, and local regulatory capacities. Meanwhile, Australia's community-driven model illustrates how engagement with regulatory gaps can stimulate proactive behavior, resulting in stricter adherence to ethical and religious norms. Together, these cases highlight the profound influence of cultural context, legal structures, and community agency in shaping how religious principles are enacted and sustained. The comparison ultimately demonstrates that religious compliance is not merely a matter of doctrine but is deeply embedded in the sociopolitical environments in which communities live, negotiate identity, and assert moral values.

## Conclusion

This study reveals an intriguing paradox within the landscape of the global halal industry. In Indonesia, the country with the world's largest Muslim population, the fatwa permitting mechanical slaughter faces deep sociocultural resistance. The roots of this rejection do not lie in the legal validity of the fatwa itself but in a fundamental clash of values between the efficient logic of machinery and the communal-religious character of society. For many Indonesian Muslims, the act of slaughter is not merely a procedural matter but a spiritual space in which intention (*niyyah*), inward presence, and human agency hold central importance. The presence of machines is perceived as eroding this sacred meaning, triggering anxiety over the potential loss of religious identity under an impersonal modernity. In contrast, in Australia, where Muslims are a minority, manual slaughter practices can be maintained with a high level of Sharia integrity. The key to this success lies in an autonomous, strict, and responsive system of community regulation. Without the support of state legal structures that adopt fatwas, Australian Muslim communities have instead developed highly disciplined internal halal-certification mechanisms, driven by market demands and the need to maintain credibility within a secular environment.

These findings affirm that the effectiveness of a technological fatwa is never determined solely by its textual correctness but by its alignment with the sociocultural rhythms of the community. Therefore, moving forward requires more than merely disseminating the fatwa. A participatory approach to social engineering is needed, one that involves intensive dialogue among scholars, engineers, industry practitioners, and the public to design halal technologies that are not only legally valid but also spiritually and culturally meaningful. The future of the halal industry depends on its ability to harmoniously bridge religious authority, technological innovation, and sociocultural realities.

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