Restoring Trust: A New Ethical Framework for Halal Supply Chains

Nik Mohamad Ridhwan[1], Abdul Hadi Samsi[2], Mohd Daud Awang[3], Amirul Imran[4]

Abstract

The global halal meat supply chain confronts a critical integrity crisis characterized by the Halal Paradox, whereby market expansion coincides with declining consumer trust. This concept paper identifies epistemological rupture as the fundamental driver of systemic fraud, conceptualizing it as the institutional decoupling of certification form from spiritual substance. Employing theory-building methodology through narrative synthesis and forensic pattern-matching analysis of Malaysia's 2020 meat cartel scandal, the study demonstrates that secular governance frameworks rooted in Agency Theory fail to address the internal moral compass of supply chain agents. By synthesizing Al-Faruqi's Tawhidic paradigm with Al-Attas's philosophy of Adab, we develop a five-layer Tawhidic Integrity Framework that translates Islamic ethical constructs into operational governance mechanisms. The research contributes three theoretical innovations: first, the concept of Spiritual Agency Costs as an extension of classical agency theory; second, Digital Shahada as a socio-technical construct wherein blockchain effectiveness is moderated by human Taqwa; third, testable propositions correlating epistemological rupture severity with fraud incidence. This framework advances halal governance from compliance-based surveillance to consciousness-based stewardship, bridging Islamic civilization scholarship with contemporary supply chain management theory while offering actionable intervention strategies for practitioners and regulators.

Keywords: Tawhidic Integrity Framework, Epistemological Rupture, Halal Supply Chain, Governance, Spiritual Agency Costs, Digital Shahada

---

[1] Research Scholar, Halal Products Research Institute, Universiti Putra Malaysia, Email: nikridhwan95@gmail.com
[2] Research Scholar, Center of Human Sciences, Universiti Malaysia Pahang Al-Sultan Abdullah
[3] Research Scholar, Faculty of Human Ecology, Universiti Putra Malaysia
[4] Research Scholar, Federal Territory Islamic Religious Department, Malaysia

https://doi.org/10.58932/MULJ0019

Introduction

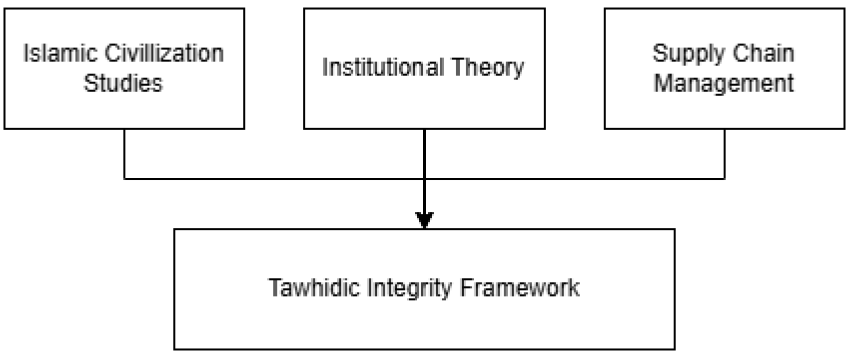
The global halal economy has transcended its niche origins to become a colossal force in international commerce, representing a profound shift in consumer consciousness that intertwines faith with consumption. As of 2024, the global halal food market is valued at approximately USD 2.5 trillion and is projected to reach nearly USD 9.45 trillion by 2034, driven by a compound annual growth rate (CAGR) of over 12% (Mordor Intelligence, 2025; Nafisah, 2023). Within this vast ecosystem, the halal meat sector stands as the most critical pillar, valued at USD 934.8 billion in 2024 and expected to exceed USD 1.7 trillion by 2033 (Straits Research, 2025). This exponential growth is fueled not only by the demographic expansion of the Muslim population, projected to reach 2.2 billion by 2030, but also by a rising global consciousness regarding ethical consumption, hygiene, and animal welfare, which aligns with the Islamic concept of Halalan Toyyiban (permissible and wholesome) (Al Islami Foods, 2024; Fuseini et al., 2017; GM Insights, 2025; Rejeb et al., 2021). As Muslim minorities in Western nations grow and Muslim-majority nations develop stronger middle classes, the demand for meat products that adhere to strict religious dietary laws has become a primary driver of global agricultural logistics (Azmi et al., 2019; Tieman, 2011).

However, these robust economic metrics conceal a profound and growing crisis of integrity that threatens the very foundation of the industry. The industrialization of halal production has paradoxically led to the secularization of its supply chain processes, creating what scholars identify as a Halal Paradox - as the market expands in volume and complexity, consumer trust in the halal status of products diminishes (Nasir & Pereira, 2020). This erosion of confidence is not theoretical but is rooted in systemic failures, most starkly illustrated by the 2020 meat cartel scandal in Malaysia (Adam, 2021; Ariffin et al., 2021). In this incident, a syndicate was found to have smuggled non-halal meat, from uncertified plants in China and South America, repackaging it as premium halal beef for over four decades.

Such incidents involve complex fraud mechanisms that leverage the opacity of global logistics, including falsified documentation, and the mixing of haram (forbidden) ingredients with halal meat (Rejeb et al., 2025). These breaches represent more than mere regulatory failures or criminal activities, they indicate a fundamental collapse of *amānah* (trust) and *mas'ūliyyah* (accountability) within the governance structures of agents within the supply chain. Operational realities in the modern food system often prioritize cost minimization and speed over the meticulousness required by Shariah, leading to a dangerous gap between the normative ethical requirements of Islam and the actual conduct of supply chain actors (Ahmad et al., 2022). The decoupling of the sign (the halal logo) from the signified (the actual treatment and slaughter of the animal) suggests a deeper ontological crisis within the management of halal logistics.

Current academic literature has largely attempted to address these issues through the lens of secular governance theories, particularly Classical Agency Theory, advocating for stricter external monitoring, frequent audits, and digitized traceability (Ali et al., 2021; Zulfakar et al., 2014). While valuable, these approaches treat the symptoms rather than the root cause. They assume that fraud is a rational economic calculation that can be curbed by increasing the cost of detection. However, the persistence of fraud despite robust regulatory frameworks indicates that external governance mechanisms are insufficient when the internal moral compass of the agent is compromised (Shuhari et al., 2019). There exists a significant theoretical and empirical gap in understanding how the Tawhidic Paradigm, the unifying worldview of Islam as articulated by scholars like Ismail Raji al-Faruqi and Syed Muhammad Naquib al-Attas, can be applied to contemporary supply chain governance (Al-Faruqi, 1982; Al-Attas, 1993). The existing body of knowledge lacks a framework that integrates the metaphysical dimensions of Islamic ethics with the physical realities of logistics. This paper seeks to bridge that gap by revisiting the foundational concepts of Islamic civilization studies and mapping them onto modern operations management, aiming to develop a Tawhidic Integrity Framework that goes beyond compliance to cultivate a culture of spiritual stewardship.

Figure 1: *Convergence of Three Theoretical Domains into the Tawhidic Integrity Framework*



Methodology

This concept paper employs a qualitative research design rooted in theory building through narrative synthesis and critical case analysis. Unlike empirical studies that rely on primary data collection from surveys or interviews, this research constructs a new theoretical model by integrating divergent streams of literature that rarely intersect: Islamic Civilization Studies, Institutional Theory and Supply Chain Management.

The study follows a rigorous, non-linear methodological process designed to ensure theoretical robustness. The research commenced with a Conceptual Deconstruction, where foundational texts by seminal Islamic scholars, specifically

Al-Faruqi and Al-Attas, were analyzed to extract core ontological principles such as *Tawḥīd*, *Adab*, and *Khilāfah* (Al-Faruqi, 1982; Al-Attas, 1993). These concepts were treated not as theological axioms but as organizational design principles capable of influencing economic behavior. Following this, the research engaged in operational mapping, juxtaposing these metaphysical principles against modern supply chain governance theories, namely Agency Theory and Institutional Theory, and regulatory standards like MS 1500:2019 (Department of Standards Malaysia, 2019). This comparative analysis was critical to identify theoretical disconnects between secular efficiency models and Islamic ethical mandates.

Finally, the study employed pattern matching, adhering to the case study protocol suggested by Yin (2018) for explanatory case studies. For this study, the 2020 Malaysia Meat Cartel scandal served as the critical case (Adam, 2021). The analysis utilized a structured four-step protocol comprising: (1) Proposition Formulation, (2) Data Extraction, (3) Pattern Comparison, and (4) Theoretical Replication.

To ground these theoretical predictions and support the forensic synthesis, the study drew upon a comprehensive narrative review of scholars from three primary domains: Islamic Epistemology, focusing on the Islamization of knowledge and business ethics (AbuSulayman, 1997; Al-Attas, 1993; Al-Faruqi, 1982); Halal Supply Chain Management, covering contemporary literature on traceability, blockchain adoption, and Institutional Theory (Ali et al., 2021; Rejeb et al., 2021; Rejeb et al., 2025).

Literature Review

i. Governance Vacuums in Credence Goods Markets

In standard economic theory, markets function efficiently when information is symmetric. However, Halal meat is defined as a credence good (Darby & Karni, 1973), where the attribute of quality (halal status) cannot be verified by the consumer even after consumption (Hayat & Butter, 2013). A consumer cannot distinguish between a steak from a ritually slaughtered animal and one from a stunned animal through sensory experience. This inherent opacity creates a market for lemons scenario (Akerlof, 1970), where bad actors drive out good actors because integrity cannot be signaled without costly verification mechanisms (Akerlof, 1970).

To mitigate this asymmetry, Supply Chain Management (SCM) literature predominantly relies on Classical Agency Theory (Jensen & Meckling, 1976). This theory posits a fundamental conflict of interest between the principal (the consumer/regulator) and the agent (the supplier), assuming the agent is a rational, self-interested utility maximizer who will shirk duties or cheat if the economic benefits outweigh the costs of detection. The secular solution is invariably panoptic, increasing surveillance through audits, certifications, and digitized traceability to raise the cost of non-compliance (Ali et al., 2021; Zulfakar et al., 2014). Similarly, Transaction Cost Economics (TCE) views governance as a mechanism to minimize the friction of monitoring these contracts, focusing heavily on asset specificity and uncertainty (Williamson, 1979).

However, the recurrence of systemic fraud, such as the 2020 Meat Cartel, exposes the fragility of these models (Adam, 2021). Agency Theory assumes that external constraints can contain internal opportunism. It fails to account for regulatory capture, where the auditors themselves are bribed, a phenomenon rampant in the cartel case (Mahidin & Othman, 2022). Furthermore, TCE focuses on monitoring costs but neglects selection costs, the cost of finding an agent whose internal values align with the principal's. This literature review identifies a critical gap: secular theories lack a mechanism for spontaneous compliance in the absence of surveillance. They manage the probability of fraud but do not address the propensity for it (Bidin & Marzuki, 2023; Khan & Haleem, 2021). In the context of the halal industry, where the value is spiritual, a materialist governance theory is theoretically mismatched.

ii. Conceptual Deconstruction of the Tawhidic Paradigm: *Tawḥīd* and *Khilāfah*

To address the propensity for fraud, one must examine the worldview of the agent. This research engages in a conceptual deconstruction of Ismail Raji al-Faruqi's articulation of the Tawhidic Paradigm to identify its ontological implications for supply chain governance (Al-Faruqi, 1982). Al-Faruqi posits that *Tawḥīd* (The Unity of God) is not merely a theological assertion but the integrating principle of all reality. He argues that the bifurcation of reality into sacred and profane spheres is an artificial construct of Western modernity. In Islam, *Tawḥīd* implies the Unity of Knowledge and the Unity of Life, meaning there is no secular zone where economic efficiency overrides ethical imperatives (Al-Faruqi, 1982; Sulaeman & Rahmat, 2024).

Deconstructing this further, this Unity is operationalized through the concept of *Khilāfah* (Vicegerency) and Dayn (Indebtedness). In the Tawhidic worldview, the supply chain manager is not an owner of capital in the absolute sense, but a *Khalīfah*, a trustee appointed by the Creator to manage resources (AbuSulayman, 1997). This trusteeship is metaphysically deepened by Al-Attas's etymological insight that the term Din (religion) shares the same root as Dayn (debt). Unlike a secular agent who enters a contract for economic gain, the human agent is in existential debt to God for their creation, a debt that must be "repaid" through total submission and service (Al-Attas, 2021). This fundamentally alters the principal-agent relationship found in secular theory. In Classical Agency Theory, the principal is the shareholder; in the *Tawhidic* model, the ultimate Principal is God. Therefore, the agent's accountability *(Mas'uliyyah*) is vertical to the Creator before it is horizontal to the firm. Al-Faruqi's philosophy challenges the utilitarian ethics of Homo Economicus (Economic Man), who divorces business conduct from spiritual salvation. Instead, it posits *Homo Islamicus,* for whom the means of production consisting of the process of slaughter, the fairness of trade, possess intrinsic spiritual value equal to the ends. The current crisis in halal integrity can thus be framed as a rejection of this Unity, where agents operate as secular entities in a sacred domain.

iii. The Epistemological Crisis: *Adab* as the Loss of Hierarchy

While Al-Faruqi provides the ontological structure (Being), Syed Muhammad Naquib al-Attas provides the epistemological diagnosis (Knowing). A deconstruction of Al-Attas's philosophy reveals that the root of modern integrity failure is *Fasād al-ʿIlm* (corruption of knowledge), where facts are severed from their spiritual significance (Al-Attas, 1993; Al-Attas, 2021). This concept is critical to understanding the industrialization of livestock.

In modern industrial logistics, the animal is reduced to a biomass unit to be processed for maximum yield. This reductionism is a product of secularisation that begin with disenchantment of nature that means to free of nature from its religious overtones, separating it from God so that man can use it purely for his needs and plans, stripping the creature of its sanctity as a sign of God. Al-Attas counters this with the concept of *Adab*. Often mistranslated simply as manners, Al-Attas rigorously defines *Adab* as the recognition and acknowledgement of the reality that knowledge and being are ordered hierarchically (Al-Attas, 1993). This definition is central to halal integrity. It implies that every object in the supply chain, from the animal to the consumer, has a specific spiritual place or right (Alzeer et al., 2017).

The Epistemological Rupture is likely caused by the loss of *Adab* in the supply chain governance in Halal industry. Al-Attas implies that for desecularisation to be executed, the rot must be eliminated from the top to bottom. If the regulators and certifiers themselves view Halal as a technical commodity rather than a spiritual covenant, they are the false leaders Al-Attas warns against. When a slaughterman or logistics provider treats non-halal meat as interchangeable with halal meat, or treats a living animal as a mere machine, they are suffering from a loss of *Adab* (Yusof & Jusoh, 2021). They have failed to recognize the proper place of the object in the spiritual hierarchy. This leads to *Ẓulm* (oppression/injustice), which is the opposite of *Adab*. Therefore, integrity breaches are not merely legal violations or non-compliance; they are epistemological errors. The agent knows the regulations (the form) but does not know the reality (the substance), leading to what this paper terms an Epistemological Rupture between certification and sanctity. This rupture allows for the rationalization of fraud, as the perpetrator views the violation as merely administrative rather than a spiritual transgression against the order (Ahmad et al., 2022; Nafisah, 2023).

iv. Operational Mapping: From Regulatory Compliance to Spiritual Stewardship

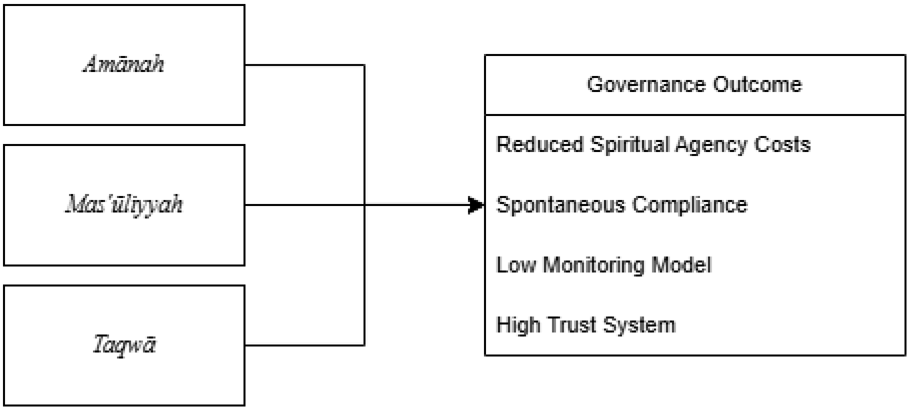
The Epistemological Rupture manifests concretely when mapping the metaphysical principles of *Tawḥīd* against current regulatory standards like MS

1500:2019 and secular governance theories. The MS1500:2019 standard serves as the operational benchmark for halal compliance, focusing heavily on Halal Control Points (HCPs) - physical locations where contamination might occur (Department of Standards Malaysia, 2019; JAKIM, 2020). From the perspective of Institutional Theory, however, strict adherence to these physical standards can often devolve into ritualism or decoupling. Organizations may adopt the structures of MS1500:2019 (appointing a Halal Executive, forming a committee) to gain legitimacy (certification), while distancing these structures from actual operations to maintain efficiency (Meyer & Rowan, 1977; Zucker, 1987). The standard monitors the process, but it cannot monitor the conscience.

This exposes the glaring limitations of Agency Theory, which relies on extrinsic monitoring costs (audits) to align interests (Jensen & Meckling, 1976). As the 2020 Meat Cartel scandal demonstrated, agents can influence regulators, rendering physical audits ineffective without infinite regress (Adam, 2021; Ariffin et al., 2021). To bridge this gap, the Tawhidic paradigm put together secular monitoring with *Murāqabah* (Spiritual Vigilance) (Zurina, 2020). While MS1500:2019 creates a physical perimeter, *Murāqabah* creates a psychological perimeter. This shift operationalizes the compliance of MS 1500 into commitment, transforming the Halal Executive from a mere employee into a *Khalīfah* managing *Amānah*.

Operationalizing this stewardship requires transforming the agent's utility function from profit maximization to spiritual accountability through three specific mechanisms (Beekun, 2012). First, *Amānah* (Trustworthiness) acts as a bonding mechanism superior to the calculated trust of Transaction Cost Economics; a violation becomes a betrayal of the Creator, not just a breach of contract (Othman et al., 2016). Second, *Mas'ūliyyah* (Accountability) establishes vertical liability to God that resists the diffusion of responsibility often found in secular subcontracting layers (Shuhari & Hamat, 2020). Finally, *Taqwā* (God-Consciousness) functions as a strategic intangible resource within the Resource-Based View (RBV) of the firm (Barney, 1991; Sarif & Ismail, 2025). A workforce imbued with *Taqwā* acts as a universal internal auditing system, theoretically reducing Spiritual Agency Costs and offering a low-monitoring, high-trust governance model that secular theory cannot replicate (Davis et al., 1997; Zailani et al., 2017).

Figure 2: *Three Mechanisms for Transforming Agent Utility Function*



v. Technological Solutionism vs. Social Reality

Recent literature has increasingly advocated for Blockchain and IoT as the panacea for halal integrity, framing the immutable ledger as a "trust machine" capable of replacing fallible human intermediaries (Ab Talib et al., 2024; Harsanto & Permana, 2024; Razak & Asyraf, 2022). However, this technocentric view risks falling into a modernist trap by assuming that a machine can perform *Shahādah* (witnessing). From the perspective of Al-Attas, this reliance on empirical technology is perilous. He warns that the scientific and technological advantages of the west can overwhelm the Muslim mind, obscuring the fact that reality in Islam is grounded in revealed knowledge and the spiritual vision of the heart, not merely on empirical data. A machine, lacking a soul, cannot possess the moral agency required for true witnessing.

Consequently, this paper argues for a duality of *Shahādah*. While blockchain provides the Digital *Shahādah* for the physical aspect, it must be paired with the spiritual witnessing of a human being. True integrity is not an algorithmic output but a metaphysical state where the rational soul (al-nafs al-natiqah) governs the animal soul (al-nafs al-hayawaniyyah). Fraud, such as that seen in the meat cartel case, occurs precisely because the animal soul, driven by profit, lust, and desire has usurped the rational soul which is bound by the covenant with God. Blockchain cannot resolve this internal rebellion of the soul. Therefore, technology functions merely as a tool, structurally dependent on the Adab of the human agent to ensure that the data entered reflects spiritual truth, not just logistical fact. Any framework that prioritizes digital traceability over spiritual training is destined to succumb to Spiritual Entropy, where the system degrades into corruption despite its technical sophistication (Harsanto & Permana, 2024).

Findings and Discussion

This section synthesizes the empirical diagnosis from the meat cartel case with theoretical proposition development and practical framework construction, employing the Yin (2018) forensic pattern matching protocol introduced in the methodology. The analysis proceeds sequentially through proposition formulation, data extraction, pattern comparison, and theoretical replication to ensure a logical flow from the identification of the problem to the theoretical explanation and solution.

i. The Rationalist Prediction: Agency Theory and Compliance Expectations

The first step of the protocol establishes the predicted pattern, the idealized expectation of how the supply chain should function under secular governance models like Classical Agency Theory and standards such as MS1500:2019. In this construct, the relationship between the regulator (principal) and supplier (agent) is governed by a rational calculus of risk and reward (Eisenhardt, 1989; Jensen & Meckling, 1976). The theory posits that the agent is a self-interested utility maximizer who will naturally shirk obligations unless constrained. Therefore, the model predicts that the implementation of Robust Control Mechanisms, specifically frequent physical audits, strict border controls, and rigorous documentation checks will raise the cost of crime sufficiently to deter non-compliances (Ali et al., 2021; Zulfakar et al., 2014). By increasing the monitoring intensity, the system aims to make the price of non-compliance prohibitively high.

Consequently, the pattern predicts a behavior of Rational Compliance, where agents suppress their opportunistic tendencies because the probability of detection and the subsequent financial penalties outweigh the potential economic gains from fraud (Eisenhardt, 1989). Under this paradigm, the Halal Logo is theoretically stabilized as a reliable, uncorrupted signal of credence quality, serving as a perfect proxy for the unseen spiritual attributes of the meat (Darby & Karni, 1973; Nasir & Pereira, 2020). This entire pattern rests on the critical assumption that external surveillance can effectively substitute for internal moral commitment, essentially betting that a watched hand will not steal, regardless of the heart's intent.

ii. The Empirical Reality: Regulatory Capture and Decoupling in the Meat Cartel

The second step reconstructs the "Observed Pattern" of actual behavior by extracting data from forensic reports and investigative journalism surrounding the 2020 Meat Cartel scandal (Adam, 2021; Ariffin et al., 2021; Mahidin & Othman, 2022). This empirical reality reveals a behavioral pattern that is diametrically opposed to the theoretical predictions of Agency Theory. Instead of being deterred by the presence of monitors, the cartel engaged in a systematic form of Regulatory Capture (Mahidin & Othman, 2022; Mariam, 2021). By bribing customs officers and port authorities, the cartel effectively internalized the monitoring cost as a predictable business expense rather than a penalty. This suggests that the external auditors, intended to be the guardians of the system, were commodified and integrated into the fraud itself, neutralizing the primary control mechanism of the secular model.

Furthermore, the cartel successfully executed a sophisticated strategy of institutional decoupling (Ahmad et al., 2022; Meyer & Rowan, 1977), severing the external form of compliance from the internal substance of operations. The investigation revealed that the syndicate imported non-halal meat, from uncertified sources in China and South America (Adam, 2021; Ariffin et al., 2021). Yet, to pass inspection, they utilized authentic, cloned Halal logos and falsified permits, creating a perfect duplicate of compliance. The persistence of this fraud, continuing undetected for over 40 years provides evidence that the existing secular control mechanisms were not merely temporarily breached by a rogue actor, but were structurally ineffective against agents determined to manipulate the system from within (Adam, 2021; Rejeb et al., 2025).

iii. Comparative Analysis: Diagnosing the Epistemological Rupture

The third step compares the predicted and observed patterns to diagnose the root cause of the governance failure. The sharp mismatch between the Agency Theory prediction of rational compliance and the empirical reality of systemic fraud confirms this study's core diagnosis: an Epistemological Rupture (Al-Attas, 1993; Al-Faruqi, 1982). The failure was not due to a deficiency in legal statutes (form) but a profound deficit of *Amānah* (substance) (Othman et al., 2016; Shuhari et al., 2019). In a strictly secularized bureaucracy, the concept of Halal is frequently reduced to a certifiable administrative status rather than a spiritual state of being. If the documentation is in order, the meat is deemed halal by the system, regardless of its physical origin. This study identifies this phenomenon as the severing of the external signifier (the logo/certificate) from the internal reality (the specific method of slaughter and the intention), creating a vacuum where bureaucratic validity supersedes spiritual veracity.

Crucially, this rupture finds a powerful theoretical parallel in Institutional Theory (Scott, 2014), specifically the concept of Decoupling as articulated by Meyer and Rowan (1977). Organizations often adopt formal policies and myths to satisfy external legitimacy requirements (Suchman, 1995) such as displaying halal logos while maintaining disparate internal practices to maximize technical efficiency. In the case of the meat cartel, the actors engaged in what DiMaggio and Powell (1983) term Mimetic Isomorphism. They meticulously copied the outward appearance and administrative behaviors of legitimate halal providers, using cloned permits and authentic branding to deceive the entire ecosystem. This effectively allowed them to gain the legitimacy required to operate in the market without bearing the costs associated with actual Shariah compliance.

However, a critical distinction must be drawn between secular and religious decoupling. Unlike secular decoupling, which is often viewed as a strategic organizational response to conflicting institutional demands, the Epistemological Rupture in the halal context represents a deeper ontological failure. It signifies a collapse of the Unity of Knowledge proposed by Al-Faruqi (Al-Faruqi, 1982), where the actors involved possessed full knowledge of the regulations (the form) but fundamentally rejected the spiritual reality (the substance) underpinning them. This separation allows for a dangerous cognitive dissonance where fraud is rationalized as a logistical maneuver rather than a metaphysical transgression. Consequently, the systemic failure is not merely administrative but spiritual, indicating that without the binding force of *Taqwā*, the sign of Halal will inevitably drift away from the truth it is meant to represent (Sarif & Ismail, 2025).

iv. Theoretical Replication: Re-coupling through the Tawhidic Paradigm

The final step, Theoretical Replication, resolves the mismatch by applying the Tawhidic Paradigm. By replicating the analysis through this rival theoretical lens, we develop three propositions that predict how supply chain integrity can be restored when spiritual agency is reintroduced.

Proposition 1: *The degree of Epistemological Rupture, defined as the institutional decoupling of certification markers (form) from ethical witnessing (substance), is positively correlated with the frequency and severity of integrity breaches in the halal meat supply chain.*

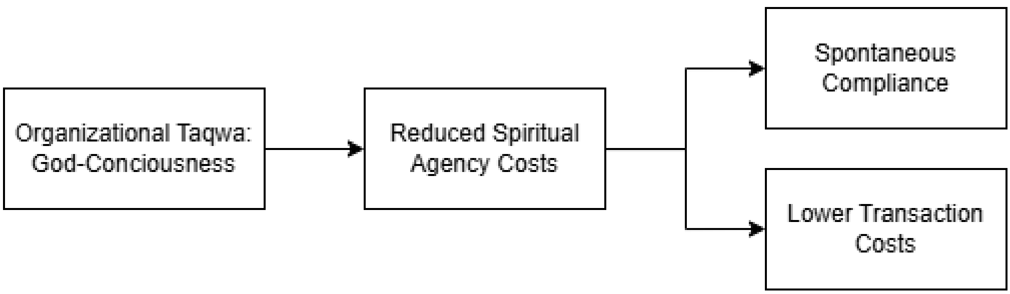
Figure 3: *Correlation of Epistemological Rupture and Integrity Breachers*

This proposition synthesizes Al-Attas's philosophy with Institutional Theory to argue that the Epistemological Rupture is not merely an administrative lapse but a fundamental ontological disconnection wherein the sign (certification) becomes an autonomous reality, detached from the signified (the actual treatment of the animal) (Al-Attas, 1993; Meyer & Rowan, 1977). As the supply chain grows in complexity, the bureaucratization of Halal necessitates reliance on these proxy indicators rather than direct witnessing (*Shahādah*). This distance creates structural blind spots or governance vacuums, where the form of compliance can be perfectly maintained through paperwork while the substance (the spiritual act of slaughter) is completely neglected (Al-Faruqi, 1982).

For example, the industrialization of slaughter, as high-speed abbatoirs often view the requirement of *Tasmiyah* as a bottleneck to efficiency (Nakyinsige et al., 2013; Rahman & Abdullah, 2025). The more the industry relies on the proxy of the logo without corresponding mechanisms to verify the actual practice, the higher the propensity for fraud. This aligns with the concept of mimetic isomorphism, where unethical actors mimic the outward symbols of compliance to gain legitimacy, knowing that the system prioritizes the audit of documents over the audit of the soul (DiMaggio & Powell, 1983; Zulfakar et al., 2014). Consequently, as the physical and administrative distance between the consumer and the slaughterman increases, the integrity of the product conversely diminishes.

Proposition 2: *Supply chain actors exhibiting high levels of Organizational Taqwā will demonstrate lower Spiritual Agency Costs and transactional costs with higher spontaneous compliance with halal standards, independent of external audit frequency.*

Figure 4: *Effects of Organizational Taqwa on Supply Chain Governance Costs*

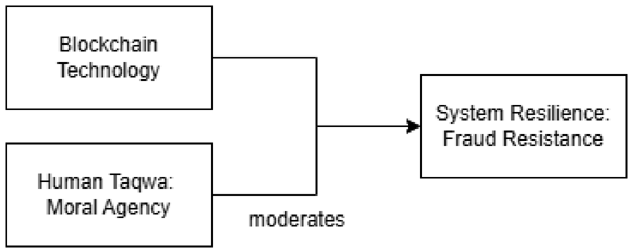


This proposition fundamentally challenges the pessimistic assumptions of Classical Agency Theory, which posits that agents are opportunistic utility maximizers who must be constrained by costly external monitoring (Jensen & Meckling, 1976). Instead, it introduces the construct of Spiritual Agency Costs, the residual loss incurred when an agent's spiritual alignment diverges from the principal's expectations. We argue that supply chain actors exhibiting high levels of Organizational *Taqwā* possess an internal self-regulatory mechanism that operates independently of external surveillance (Sarif & Ismail, 2025). For such agents, the cost of non-compliance (bribery or fraud) is not merely a financial penalty but a metaphysical one, the loss of *Barakah* and the incurrence of divine wrath, a cost that is effectively infinite (Othman et al., 2016).

Consequently, high levels of *Taqwā* generate spontaneous compliance, reducing the need for the panoptic surveillance methods advocated by secular theorists (Davis et al., 1997). This aligns with Stewardship Theory, suggesting that when agents are motivated by shared non-financial values (such as religious obligation), they act as stewards of the principal's resources rather than opportunistic free-riders (Williamson, 1979). By shifting the position of control from the external auditor to the internal conscience, organizations can significantly lower transaction costs associated with monitoring, creating a governance model that is both ethically robust and economically efficient (Hayat & Butter, 2013; Shuhari et al., 2019).

Proposition 3: *The effectiveness of blockchain technology in mitigating fraud is moderated by the level of Taqwā among human data-entry agents; specifically, Digital Shahādah (technology) creates resilience only when coupled with Moral Agency (ethics).*

Figure 5: *Moderation of Blockchain Technology (Digital Shahādah) and Taqwā in Mitigating Fraud*



While Industry 4.0 technologies are often touted as the panacea for supply chain opacity, this proposition asserts that their effectiveness is structurally dependent on the moral quality of the human inputs. Technology functions as a Digital *Shahādah* (witnessing mechanism), yet it remains susceptible to the Oracle Problem, the disconnect between the physical asset and its digital twin (Ab Talib et al., 2024; Harsanto & Permana, 2024). We introduce the concept of Spiritual Entropy to describe the tendency of these socio-technical systems to degrade into corruption without ethical maintenance. If the human agent entering data lacks *Ṣidq* (truthfulness), the blockchain does not eliminate the fraud; it merely secures the lie, rendering the falsified data immutable and giving it a veneer of unearned cryptographic legitimacy (Razak & Asyraf, 2022).

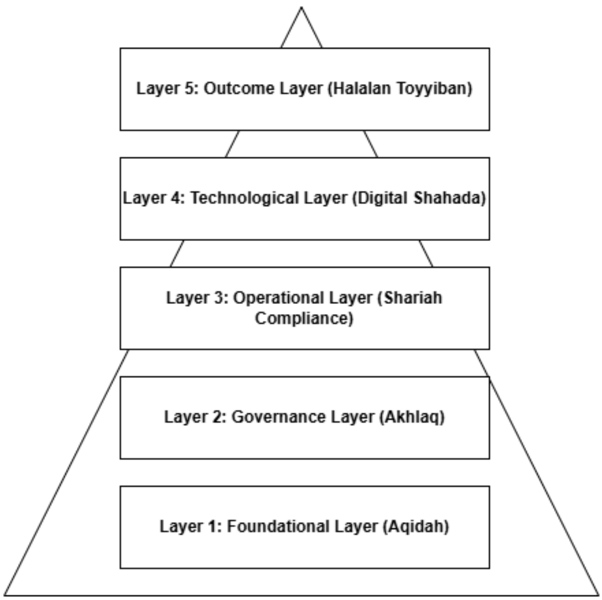
Therefore, Moral Agency serves as the critical moderator in the relationship between technology and integrity. The blockchain validates the data, but only *Taqwā* validates the truth (Rejeb et al., 2025). A high-tech traceability system operated by agents suffering from an Epistemological Rupture is futile, as the technology cannot judge the *Niyyah* (intention) or the *Adab* (spiritual conduct) of the slaughterman. Resilience against systemic fraud, therefore, cannot be coded into a smart contract alone; it requires a hybrid governance architecture where the Digital *Shahādah* of the machine is anchored by the *Amānah* of the human steward, preventing the system from becoming a tool for sophisticated deception (Tan & Gligor, 2022).

v. Practical Framework: The Tawhidic Integrity Framework

The diagnosis of an epistemological rupture and the subsequent theoretical replication necessitate a governance model that transcends the binary of secular compliance. The Tawhidic Integrity Framework is thus constructed not merely as an administrative add-on, but as a direct structural remedy to the Institutional

Decoupling observed in the meat cartel case. It operationalizes the abstract propositions of *Amānah*, *Mas'ūliyyah*, and *Taqwā* into a coherent management system, effectively re-coupling the severed link between the certificate and the spiritual reality. By moving the industry from compliance-based governance to consciousness-based governance, this five-layer model serves as the practical manifestation of Al-Faruqi's Unity of Knowledge applied to supply chain logistics.

Figure 3: *The Five-Layer Tawhidic Integrity Framework for Halal Supply Chain*



Layer 1: The Foundational Layer (*ʿAqīdah*) establishes the organization's worldview. Strategies must explicitly recognize the supply chain as a metabolic process of the *Ummah*. The manager acknowledges an existential indebtedness to the Creator, where business operations become a form of Khidmah (service) to repay this debt. This involves aligning corporate goals with *Maqāṣid al-Sharīʿah*, explicitly recognizing profit as a means to sustain the business rather than the ultimate end if it compromises the *Hifẓ al-Dīn* of the consumer (Kamali, 2012). The strategic orientation shifts from Shareholder Primacy to Stakeholder Vicegerency.

Layer 2: The Governance Layer (*Akhlāq*) addresses the human element to reduce Spiritual Agency Costs. Managerially, this reframes supply chain integrity from a quality control issue to a human resources issue. Recruitment processes for sensitive roles, such as slaughtermen, quality assurance officers, and procurement managers, must include screening for ethical orientation and spiritual competency. Staff must receive spiritual training that reinforces the *Niyyah* (intention) and the gravity of *Amānah* (Shuhari & Hamat, 2020). Additionally, whistleblowing is reframed as the Quranic duty of *Amr bi'l-Maʿrūf wa Nahy ʿan al-Munkar* (enjoining good and forbidding evil), creating a culture of mutual accountability (Shuhari et al., 2019).

Layer 3: The Operational Layer (Shariah Compliance) focuses on the physical movement of goods. It mandates strict control of feed to prevent *Al-Jallālah* status and strict animal welfare protocols (Septiani & Ridwan, 2023). The framework prioritizes a Human-in-the-Loop approach to slaughter (*Dhabḥ*) to preserve the element of *Niyyah* and requires absolute physical segregation between halal and non-halal channels to prevent cross-contamination (Zulfakar et al., 2014).

Layer 4: The Technological Layer (Digital *Shahādah*) provides tools for transparency. The Blockchain Ledger serves as the *Kitāb* (Record) to prevent double spending of certificates (Ab Talib et al., 2024; Harsanto & Permana, 2024). IoT Surveillance acts as a proxy for *Murāqabah* (Divine Watchfulness), providing continuous monitoring of temperature and location (Ibrahim et al., 2024). Crucially, regulatory bodies like JAKIM must evolve to Hybrid Auditing, combining physical site inspections with forensic digital audits enabled by this layer, making decoupling significantly harder to conceal (JAKIM, 2020).

Layer 5: The Outcome Layer (Halalan Toyyiban) results in a product that is both spiritually valid and physically wholesome. This leads to the restoration of Consumer Trust through radical transparency and theoretically culminates in *Barakah*, a form of divine sustainability and resilience that transcends standard economic metrics.

5. Conclusion

The global halal meat industry stands at a critical juncture, facing a choice between secular industrialization, which risks systemic fraud through Epistemological Rupture, and a return to stewardship through the Tawhidic Integrity Framework. This study has systematically argued that the restoration of trust requires more than just new laws or technological interventions; it necessitates a return to the Unity of Knowledge. By conceptualizing the supply chain not as a machine but as a human system, we recognize that the validity of the meat on the table is inextricably linked to the conscience of the hand that processed it. Without the internal regulator of *Taqwā*, the chain is broken before it even begins.

The theoretical contribution of this work lies in challenging the hegemony of secular Agency Theory in faith-based industries. By introducing the concept of Spiritual Agency Costs, this paper provides a vocabulary for understanding risk in credence goods markets. It posits that shared non-financial values can substitute for costly external monitoring, offering a model of governance that is both ethically robust and economically efficient. Furthermore, the concept of Digital *Shahādah* contributes to the philosophy of technology, proposing that digital tools are not value-neutral but must be anchored in moral agency to function effectively.

Practically, this research demands a paradigm shift for industry practitioners and regulators. It suggests that human resources and spiritual training are the first line of defense against fraud, urging a move from compliance checklists to the cultivation of conscience. However, this study is limited by its reliance on theoretical synthesis and secondary data. Future research must validate the proposed framework through empirical testing, specifically by developing measurement scales for Organizational *Taqwā* and using Structural Equation Modeling (SEM) to test its correlation with supply chain resilience. Additionally, scholars should investigate the jurisprudential implications of Artificial Intelligence as a legal witness and examine the universality of these stewardship principles in non-Muslim majority production contexts.

References

Ab Talib, M. S., Zulfakar, M. H., & Kurniawati, D. A. (2024). Sustainable halal supply chain management: A multi-theory perspective. *Journal of Islamic Marketing, 15*(3), 678–698. https://doi.org/10.1108/JIMA-10-2022-0284

AbuSulayman, A. (1997). *Islamization of knowledge*. International Institute of Islamic Thought (IIIT).

Adam, A. (2021, January 30). How Malaysia's 'meat cartel' scandal unfolded: A timeline. *Malay Mail*. https://www.malaymail.com/news/malaysia/2021/01/30/how-malaysias-meat-cartel-scandal-unfolded-a-timeline/1945347

Ahmad, A. N., Abdul Rahman, R., & Othman, M. (2022). Halal integrity supply chain: The impacts of the fake Halal meat cartel scandal. *Journal of Halal Industry & Services, 5*(1), a0000282. https://doi.org/10.56529/jhis.v5i1.79

Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics, 84*(3), 488–500. https://doi.org/10.2307/1879431

Al Islami Foods. (2024). *Sustainability and halal integrity report*. Al Islami Corporate. https://www.alislami.com/

Al-Attas, S. M. N. (1993). *Islam and secularism*. International Institute of Islamic Thought and Civilization (ISTAC).

Al-Attas, S. M. N. (2021). *The concept of education in Islam*. Ta'dib International.

Al-Faruqi, I. R. (1982). *Al-Tawhid: Its implications for thought and life*. International Institute of Islamic Thought (IIIT).

Ali, M. H., Suleiman, N., & Khalid, N. (2021). Halal food supply chain integrity: From a literature review to a conceptual framework. *Trends in Food*

Science & Technology, *111*, 676–687. https://doi.org/10.1016/j.tifs.2021.03.011

Alzeer, J., Rieder, U., & Hadeed, K. A. (2017). Rational justification of the concept of Halal and Tayyib in food production. *Journal of Integrative Medicine*, *15*(6), 427–432. https://doi.org/10.1016/S2095-4964(17)60365-9

Ariffin, S. K., Ishak, N. K., & Yusof, J. M. (2021). The impact of the meat cartel scandal on consumer confidence. *Journal of Halal Industry*, *4*(1), 12–24.

Azmi, F. R., Musa, H., & Sihombing, H. (2019). Halal logistics vs. Halal supply chain: A preliminary insight. *Journal of Islamic Marketing*, *10*(4), 1072–1087. https://doi.org/10.1108/JIMA-02-2018-0038

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120. https://doi.org/10.1174/014920639101700108

Beekun, R. I. (2012). Character centered leadership: Muhammad (p) as an ethical role model for CEOs. *Journal of Management Development*, *31*(10), 1003–1020. https://doi.org/10.1108/02621711211281825

Bidin, Y., & Marzuki, S. Z. (2023). *Risk management in halal supply chains*. Springer Nature. https://doi.org/10.1007/978-981-99-1234-5

Darby, M. R., & Karni, E. (1973). Free competition and the optimal amount of fraud. *Journal of Law and Economics*, *16*(1), 67–88. https://doi.org/10.1086/466756

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, *22*(1), 20–47. https://doi.org/10.5465/amr.1997.9707180258

Department of Standards Malaysia. (2019). *MS 1500:2019 Halal food - General requirements (Third revision)*. Ministry of Investment, Trade and Industry. https://www.jsm.gov.my

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160. https://doi.org/10.2307/2095101

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, *14*(1), 57–74. https://doi.org/10.5465/amr.1989.4279003

Fuseini, A., Wotton, S. B., & Knowles, T. G. (2017). Halal slaughter and animal welfare: A review. *Meat Science*, *131*, 35–42. https://doi.org/10.1016/j.meatsci.2017.04.018

GM Insights. (2025). *Halal food market size & growth forecast*. Global Market Insights. https://www.gminsights.com/industry-analysis/halal-food-market

Harsanto, B., & Permana, I. (2024). Blockchain in halal supply chains: A systematic literature review. *Journal of Islamic Marketing*, *15*(1), 215–238. https://doi.org/10.1108/JIMA-08-2022-0221

Hayat, R., & Butter, F. (2013). Halal certification for financial products: A transaction cost perspective. *Journal of Business Ethics*, *117*(3), 601–613. https://doi.org/10.1007/s10551-012-1534-x

Ibrahim, I., Shuib, A., & Yusoff, F. H. (2024). Planning of Halal compliance critical control points and IoT integration. *Journal of Halal Industry & Services*, *7*(1), a0000394. https://doi.org/10.56529/jhis.v7i1.182

JAKIM. (2020). *Manual procedure for Malaysia Halal certification (Domestic) 2020*. Department of Islamic Development Malaysia. https://www.halal.gov.my

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Kamali, M. H. (2012). *Maqasid al-Shariah made simple*. International Institute of Islamic Thought (IIIT).

Khan, S., & Haleem, A. (2021). Investigation of Halal supply chain management: A literature review and future research agenda. *Journal of Cleaner Production*, *312*, 127710. https://doi.org/10.1016/j.jclepro.2021.127710

Mahidin, N., & Othman, S. N. (2022). Food safety and Halal food certification: The case of the meat cartel. *Food Research*, *6*(1), 184–192. https://doi.org/10.26656/fr.2017.6(1).211

Mariam, A. (2021). Integrity in the public sector: The meat cartel case. *Journal of Public Administration*, *12*(4), 312–329.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*(2), 340–363. https://doi.org/10.1086/226550

Mhd Sarif, S., & Ismail, Y. (2025). Tawhidic epistemology and ummatic mind as strategic resources. *Online Journal of Islamic Management and Finance*, *5*(2), 1–26.

Mordor Intelligence. (2025). *Halal meat market size & share analysis*. Mordor Intelligence Industry Reports. https://www.mordorintelligence.com/industry-reports/halal-meat-market

Nafisah, F. (2023). Al-Attas's perspective on Islamic education and Adab. *Journal of Islamic Thought*, *12*(2), 45–60.

Nakyinsige, K., Che Man, Y. B., & Sazili, A. Q. (2013). Halal slaughter: Spiritual and scientific perspectives. *Meat Science*, *93*(2), 223–230. https://doi.org/10.1016/j.meatsci.2012.08.033

Nasir, A., & Pereira, A. (2020). Defensive marketing and the Halal paradox. *Journal of Business Research*, *118*, 45–56. https://doi.org/10.1016/j.jbusres.2020.06.031

Othman, B., Shaarani, S. M., & Bahron, A. (2016). Amanah and Halal integrity: The role of spiritual values in supply chain. *Journal of Islamic Marketing*, *7*(1), 45–61. https://doi.org/10.1108/JIMA-09-2014-0056

Precedence Research. (2025). *Halal food market size, share and trends 2025 to 2034*. Precedence Research Reports. https://www.precedenceresearch.com/halal-food-market

Rahman, F. K., & Abdullah, A. (2025). Halal poultry slaughter technology: A critical review of control points. *Animal Science and Food Technology, 16*(2), 114–128.

Razak, I., & Asyraf, M. (2022). Blockchain technology for Halal supply chain: A review. *IEEE Access*, *10*, 112–125. https://doi.org/10.1109/ACCESS.2022.3140123

Rejeb, A., Rejeb, K., Zailani, S., Treiblmaier, H., & Hand, K. J. (2021). Halal meat supply chain traceability based on HACCP, blockchain and Internet of Things. *Acta Technica Jaurinensis*, *14*(4), 218–247. https://doi.org/10.14513/actatechjaur.v14n4.611

Rejeb, A., Zailani, S., & Keogh, J. G. (2025). Integrity challenges in Halal meat supply chain: Potential Industry 4.0 technologies. *Foods, 14*(7), 1135. https://doi.org/10.3390/foods14071135

Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). Sage Publications.

Septiani, R., & Ridwan, M. (2023). Istihalah and Istibra in modern animal husbandry. *Journal of Islamic Jurisprudence, 8*(2), 89–104.

Shuhari, M. H., Hamat, M. F., & Basir, S. A. (2019). Concept of Al-Amanah and Al-Mas'uliyyah for human character. *Journal of Legal, Ethical and Regulatory Issues, 22*(1), 1–7.

Shuhari, M. H., & Hamat, M. F. (2020). Governance and integrity in Halal industry. *Journal of Halal Service Research, 1*(1), 15–28.

Straits Research. (2025). *Halal meat market size and growth forecast*. Straits Research. https://straitsresearch.com/report/halal-meat-market

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331

Sulaeman, S., & Rahmat, A. (2024). Islamic business ethics in the framework of Maqasid al-Shariah. *International Journal of Ethics and Systems*, *40*(2), 341–358. https://doi.org/10.1108/IJOES-04-2022-0078

Tan, A., & Gligor, D. (2022). Green and Halal supply chain management: A review. *Sustainability*, *14*(10), 5862. https://doi.org/10.3390/su14105862

Tieman, M. (2011). The application of Halal in supply chain management. *Journal of Islamic Marketing*, *2*(2), 186–196. https://doi.org/10.1108/17590831111139877

Williamson, O. E. (1979). Transaction-cost economics: The governance of contractual relations. *Journal of Law and Economics*, *22*(2), 233–261. https://doi.org/10.1086/466942

Yusof, M., & Jusoh, W. J. W. (2021). The role of Adab in Islamic management. *Asian Journal of Business and Accounting*, *14*(1), 245–272. https://doi.org/10.22452/ajba.vol14no1.10

Zailani, S., Iranmanesh, M., & Aziz, A. A. (2017). Drivers of Halal orientation strategy among halal food firms. *British Food Journal*, *119*(8), 1702–1714. https://doi.org/10.1108/BFJ-01-2017-0027

Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, *13*, 443–464. https://doi.org/10.1146/annurev.so.13.080187.002303

Zulfakar, M. H., Anuar, M. M., & Ab Talib, M. S. (2014). Halal supply chain integrity: Concept and model. *International Journal of Logistics Systems and Management*, *17*(3), 329–342. https://doi.org/10.1504/IJLSM.2014.059143

Zurina, S. (2020). Halal governance: Issues and challenges. *Journal of Shariah Law Research*, *5*(2), 113–130.