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Systematic Literature Review of Halal Purchasing in SMEs

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ABSTRACT

Intensifying global competition in the halal market is compelling businesses to seek sustainable competitive advantages. In this context, halal purchasing practices have emerged as a critical strategy for enhancing organizational performance. While academic research on halal supply chain management has expanded over the past decade across various industries, a significant gap remains in the literature on halal purchasing and its role within the value chain, particularly since the start of the 21st century. To address this gap, this paper conducts a systematic literature review of scholarly work on halal purchasing practices. Using a structured methodology, we extracted relevant articles published in reputable journals between 2021 and 2025 from the Scopus database and the Web of Science (WoS) search engine, yielding a final corpus of 25 studies for analysis. The review identifies and synthesizes four primary research clusters: (1) halal traceability, (2) halal integrity assurance, (3) logistics activities, and (4) halal supply chain performance. The findings consolidate and advance understanding of halal principles in purchasing practices and the broader value chain. This research aims to provide valuable insights for academics and industry practitioners, offering a structured framework to help businesses in the halal sector refine their purchasing management strategies for improved market performance.

Keywords: *Halal Purchasing, Halal Supply Chain, SMEs, Systematic Literature Review*

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INTRODUCTION

The global halal industry has evolved from a niche religious segment into a dynamic, multi-trillion-dollar global market encompassing food, pharmaceuticals, cosmetics, finance, and logistics (Randeree, 2019). At the core of this industry is the concept of halal (permissible under Islamic law), which extends beyond product ingredients (halal) to encompass the ethical and procedural integrity of the production process (tayyib, meaning wholesome and pure) (Dashti et al., 2024). This comprehensive requirement makes value chain management (VCM), the systematic coordination of all activities from raw material sourcing to end-consumer delivery, critical for halal compliance. Purchasing, as the function responsible for sourcing raw materials, selecting suppliers, and managing inbound logistics, serves as the critical gateway in the halal value chain. A failure at the purchasing stage to verify the authenticity and integrity of inputs can invalidate the halal status of the entire final product, leading to severe ethical, religious, and commercial consequences (Handayani et al., 2021)

Despite its pivotal role, halal purchasing faces complex challenges that conventional VCM frameworks often fail to address. These include pervasive issues of fraud and adulteration within complex global supply networks, a severe lack of transparency and traceability beyond tier-one suppliers, and the high costs and logistical difficulties of halal assurance and certification across borders (Munawar & Mugiono, 2024). Furthermore, purchasing managers in multinational corporations frequently operate with a predominantly commercial mindset, potentially overlooking the rigorous and nonnegotiable religious-ethical imperatives of halal integrity. This disconnect can create systemic vulnerabilities, where halal compliance is treated as a final product certification rather than a holistic, process-driven requirement embedded from the start of the value chain. Consequently, businesses risk product recalls, brand damage, loss of consumer trust, and legal liabilities, undermining the stability and growth of the halal market (Kusnadi et al., 2024).

Existing academic literature on halal has predominantly focused on consumer behavior, marketing strategies, and overview studies of halal industry trends. Similarly, mainstream VCM research emphasizes efficiency, lean operations, and resilience, often sidelining unique ethical and religious specifications. A significant gap exists at the intersection of these two fields.

Systematic synthesis is lacking on how purchasing principles and practices are adapted, implemented, and challenged within halal value chains. Key unanswered questions remain: (1) What are the specific critical success factors for halal purchasing? (2) What theoretical frameworks best explain the dynamics of halal purchasing? Without a consolidated review, knowledge in this crucial area remains fragmented, impeding the development of robust theoretical models and practical guidelines for industry practitioners.

This systematic literature review (SLR) aims to bridge this gap by comprehensively mapping, synthesizing, and critically evaluating the existing scholarly work on halal purchasing within the context of value chain management. The specific objectives are: (1) To systematically identify and analyze published academic literature on purchasing activities within halal value chains, and (2) To synthesize the findings to delineate the key themes and critical factors of success. By achieving these objectives, this review will provide a foundational reference for academics seeking to advance research in this field and offer valuable insights for industry professionals and policymakers aiming to strengthen the integrity and resilience of global halal supply networks.

METHODOLOGY

Identification

The systematic review identified relevant publications in three stages. First, we identified key terms and expanded them by consulting thesauri, dictionaries, encyclopedias, and contemporary literature. Next, we developed and applied specific search strings in the Scopus and Web of Science (WoS) databases, as outlined in Table 1. This initial search yielded 35 articles from Scopus and 25 from WoS.

Table 1: The Search Strings

Data Base	Search String
Scopus	TITLE-ABS-KEY ((halal OR "sharia compliant") AND (purchase* OR "supplier selection" OR "supplier relationship") AND ("supply chain" OR "value chain" OR logistics OR "supply management"))
WOS	TS= ((halal OR "sharia compliant") AND (purchase* OR "supplier selection" OR "supplier relationship") AND ("supply chain" OR "value chain" OR logistics OR "supply management"))

Screening

The initial screening phase focused on removing duplicate publications. All 60 identified records were systematically examined against predefined selection criteria using database sorting tools. This step excluded 15 duplicates, yielding 45 unique articles for further assessment. Subsequent screening followed explicit inclusion and exclusion criteria. The primary inclusion criterion was article type, prioritizing primary research articles for their substantive, practical insights. To ensure methodological rigor, we considered only peer-reviewed journal articles presenting empirical data. Excluded publication types included systematic reviews, literature reviews, conceptual papers, meta-analyses, meta-syntheses, bibliometric studies, book chapters, conference proceedings, and monographs. Furthermore, the review was restricted to scientific articles published in English within a defined five-year period (2021 to 2025). To maintain precise thematic relevance, only studies explicitly conducted within the small and medium-sized enterprise (SMEs) sector were selected. This focus was crucial for directing the analysis specifically toward halal purchasing practices in an SME context, thereby eliminating research conducted in other settings.

Eligibility

During the eligibility assessment, the 45 remaining articles were evaluated based on their titles and full-text content to ensure they met the inclusion criteria and aligned with the study's objectives. This process excluded 20 papers, primarily because they lacked empirical data relevant to the SME context. The final selection comprised 25 articles, which proceeded to the data extraction phase, as shown in Table 2.

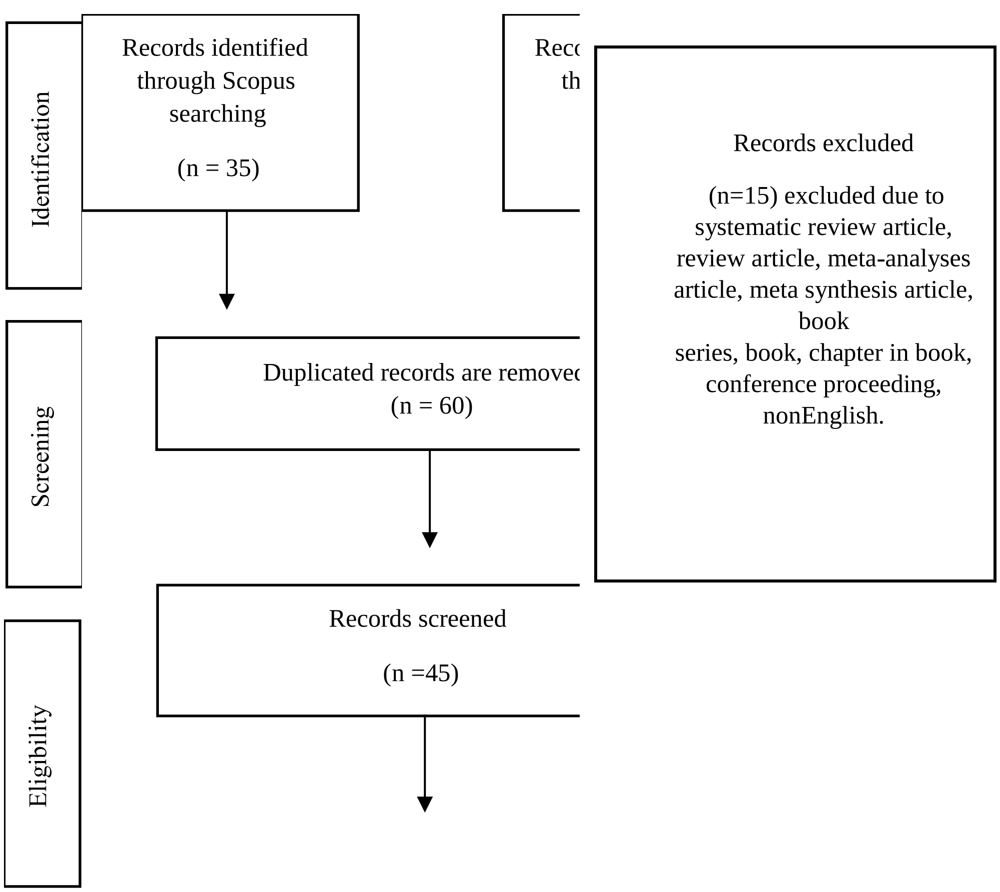
Table 2. Searching Criteria Based on Selection Criterion

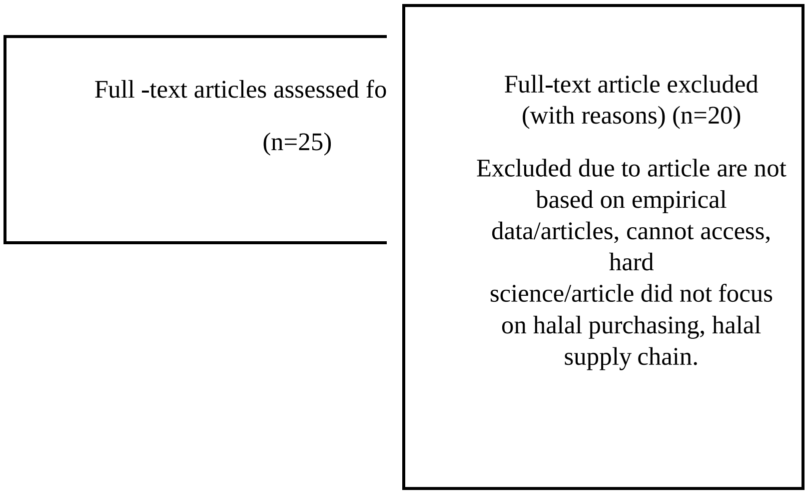
Criterion	Eligibility	Exclusion
Literature type	Research Article	Systematic review article, review article, meta-analyses article, meta-synthesis article, book series, book, chapter in book, conference proceeding, non-English.
Year	2021-2025	Before 2021
Language	English	Non-English
Discipline	Halal supply chain	Other than Halal supply chain
Focus of study	Halal purchasing	Other than Halal purchasing

Data Abstraction and Analysis

This study employed an integrative review methodology to synthesize findings from diverse research designs, including qualitative, quantitative, and mixed-methods studies. The core aim was to discern and elaborate upon the principal themes and their associated sub-themes related to the research focus. The analytical process began with a comprehensive data extraction phase, in which all relevant observations and content were systematically gathered from the 25 selected articles. A subsequent critical analysis of the critical success factors for halal purchasing in SMEs revealed four predominant, interconnected themes: Halal Traceability, Halal Integrity, Logistics Activities, and Halal Supply Chain Performance. The initial phase of the thematic analysis focused on generating themes by identifying recurring patterns within the extracted data from all reviewed publications. The team then systematically consolidated similar or conceptually linked data points into broader, preliminary groups.

These emergent themes subsequently underwent a rigorous evaluation to verify their accuracy and substantive relevance to the research objectives. To ensure validity, the team re-examined and deliberated on any discrepancies or divergent interpretations in the data until consensus was reached, leading to necessary refinements to the thematic framework. For each finalized theme, a detailed analysis was conducted to elucidate its characteristics, interdependencies with other themes, and underlying conceptual nuances. Throughout this analytical process, a detailed audit trail was meticulously maintained. This record documented the analysis's progression, shifts in perspective, methodological challenges, and key observations that enriched the interpretation of the data. A comparative assessment of the findings was also performed to reconcile any potential inconsistencies that arose during theme identification. When conceptual





ambiguities occurred, they were addressed through focused critical discussion. This iterative process culminated in refining the thematic

patterns to enure internal coherence and analytical robustness.

Figure 1. Flow diagram of selecting article

RESULTS AND DISCUSSION

Background of the Selected Articles

A systematic review of 25 meticulously selected articles revealed four primary themes: Halal traceability, logistics activities, Halal integrity, and Halal Supply Chain performance. Geographically, the research drew primarily from Malaysia and Indonesia, which together accounted for 9 articles. The remaining studies spanned a diverse range of countries, with two articles from the United Kingdom and Singapore, and one each from Thailand, India, Pakistan, Egypt, Jordan, Morocco, Qatar, Saudi Arabia, Tunisia, the UAE, Slovakia, and the Philippines. Table 3 condenses and presents the articles and themes.

Table 3: summary analysis 25 article related to Halal Purchasing in Value Chain Management

AUTHORS	TITLE	COUNTRY	THEORY	THEMES
Ali et al., (2021)	A sustainable Blockchain framework for the halal food supply chain: Lessons from Malaysia	Malaysia	Dynamic Capabilities Theory	Halal traceability
Hidayat & Musari (2022)	ASEAN Towards a Global Halal Logistics Through the Digitally Enabled Community	Malaysia, Indonesia, Singapore, Thailand	Not explicitly named	Logistics activities
Sumarliah et al. (2022)	Blockchain-Empowered Halal Fashion Traceability System in Indonesia	Indonesia	Diffusion of Innovation (DOI) & Institutional Theory	Halal traceability
Sarasi et al. (2025)	Evaluation of halal supply chain management performance in culinary enterprises	Indonesia	Systems Thinking / System Dynamics	Halal integrity
Nugroho et al. (2024)	Integrity and Legitimacy of Halal Products: Urgency of Technology Adoption	Indonesia	Not explicitly named.	Halal integrity

El Daouk (2022)	Introducing Ḥalal to Construction Supply Chains in the UK's Construction Sector	United Kingdom	Sharīʿa Principles	Halal integrity
Karim et al. (2021)	Impact of Halal Standards on Logistic Employee Performance	Indonesia	Theory of Motivation	Logistics activities
Teviana et al. (2025)	Impact of Islamic attributes and motivations on visitor satisfaction	Indonesia	Islamic attributes and motivation theories	Halal integrity
Haleem et al. (2021)	Understanding the Adoption of Halal Logistics through CSFs	India	Not explicitly named.	Logistics activities
Sarwar et al. (2021)	Analysis and prioritization of risk factors in the management of Halal supply chain management	Pakistan	Multi-criteria decisionmaking (MCDM)	Halal integrity
Hassam et al., (2024)	Blockchain Technology in the Halal Supply Chain: Comparative insights from Malaysian MSMEs	Malaysia	Technology adoption frameworks	Halal traceability
Susanty et al., (2025)	Consumer Acceptance Of Halal Food Traceability Systems	Indonesia	Modified UTAUT and DeLone & McLean IS Success Model	Halal traceability
Surjandari et al., (2021)	Designing a Permissioned Blockchain Network for the Halal Industry	Indonesia	Distributed Ledger Technology (DLT)	Halal traceability
Mabkhot (2023)	Factors Affecting the Sustainability of Halal Product Performance:	Malaysia	Triple bottom-line sustainability	Halal Supply Chain

	Malaysian Evidence			performance
Yakubu et al., (2025)	HalalChain: A decentralized blockchain model for enhanced data integrity, real-time compliance, and automated verification in halal food supply chain	Malaysia	Decentralized Trust/Cryptographic Theory	Halal integrity
Medhioub (2025)	Herding Behaviour in Arab Countries: Relationship Between Halal and Non-Halal Products	Egypt, Jordan, Morocco, Qatar, Saudi Arabia, Tunisia, UAE	Herding Behavior Theory	Halal Supply Chain performance
Sunmola et al., (2025)	Holistic Framework for Blockchain-Based Halal Compliance in Supply Chains Enabled by Artificial Intelligence	Malaysia	Information flow	Halal traceability
Mohamed et al., (2024)	Impact of Halal Supply Chain Management on Halal Integrity in Malaysia's TVET Food Industry	Malaysia	Halal Food Supply Chain Management (HFSCM) model	Halal integrity
Wong et al., (2023)	Implementation of Halal Logistics in Halal Pharmaceutical Industry: A Study on Halal Warehouse System in Pharmaniaga Life science	Malaysia	Halalan-Toyyiban and 7R Logistics principles	Logistics activities

Karyani et al., (2024)	Intention to adopt a blockchainbased halal certification: Indonesia consumers and regulatory perspective	Indonesia	Theory of Planned Behavior (TPB)	Halal integrity
Kusnirova et al., (2025)	Measuring Created Value for Suppliers and Buyers A Decision Matrix Approach Evidence from Slovak Enterprises	Slovakia	Stakeholder Theory	Halal Supply Chain performance
Buenafe et al., (2025	Why halal certification remains elusive: evidence from foodservice businesses in the Philippines	Philippines	Extended Theory of Planned Behavior	Halal Supply Chain performance
Azmi et al., (2025)	Operational supply risks of halal food manufacturer: A mitigation approach to supply chain risks	Malaysia	Agency Theory and Supply Chain Risk Framework	Halal integrity
Siaw & Okorie, (2022)	Value co-creation on technologyenabled platforms for business model responsiveness and position enhancement in global value chains	United Kingdom	Service ecosystems and Value Co-creation	Halal Supply Chain performance

Theme 1: Halal Traceability

The most prominent theme emerging from the literature is Halal Traceability, identified as the fundamental, non-negotiable prerequisite for trustworthy halal purchasing and value chain management. Analysis reveals that traceability transcends a mere logistical function it is reconceptualized as a religious ethical imperative (Susanty et al., 2025; Surjandari et al., 2021) essential for fulfilling the Islamic duty of trusteeship.

Scholars argue that the primary driver of traceability is mitigating risk from contamination and uncertainty about fraud in complex, globalized supply chains (Sunmola et al., 2025). However, the analysis shows a shift in perspective, with traceability increasingly framed as a strategic asset for value creation, not just a compliance cost. Effective traceability enables brand protection, builds consumer confidence, and opens access to lucrative Muslim-majority markets (Hassam et al., 2024). The literature highlights Blockchain Technology as a pivotal enabler, with studies proposing it as a solution to create immutable, transparent records from farm to fork, thereby addressing the trust deficit between distant stakeholders. Similarly, the integration of Internet of Things (IoT) sensors for real-time monitoring of storage conditions, temperature, and segregation is identified as a critical tool for maintaining halal status post-slaughter or during logistics.

Despite technological promises, the thematic analysis uncovers substantial barriers. A central challenge is the lack of universal standards and interoperability between different halal certification bodies and national regimes (Hasnan & Kohda, 2023). This fragmentation makes end-to-end digital traceability across borders technically and bureaucratically complex. Furthermore, studies point to the high cost of implementation, especially for small and medium-sized enterprises (SMEs) that dominate upstream supply tiers- farms and abattoirs- creating a significant adoption barrier (Rui & Sundram, 2024). Reluctance to share sensitive supply chain data with competitors, or even within vertical chains, is another recurrent theme, rooted in commercial secrecy that conflicts with the transparency demands of halal integrity (Munawar & Mugiono, 2024).

The literature establishes halal traceability as a cornerstone theme. However, a critical gap exists between conceptual proposals, blockchain frameworks, and empirical, large-scale implementations. Most studies are technical design-oriented or case-based, lacking robust analysis of the organizational change management, cost-benefit models, and governance structures required to operationalize these systems across multi-tier, global networks.

Theme 2: Halal Integrity

Emerging as the central normative and strategic theme, Halal Integrity transcends procedural traceability to encompass the ethical conviction, organizational commitment, and strategic alignment necessary to ensure uncompromising compliance throughout the value chain. The literature positions integrity not merely as an output but as the foundational input and governing ethos of halal purchasing.

A significant strand of literature argues that genuine halal integrity must be internalized as a core organizational value, moving beyond superficial certification to a holistic Halal Supply Chain Philosophy (Sarasi et al., 2025). This involves aligning purchasing strategy with Islamic business ethics, where concepts like trust, truthfulness, and God consciousness inform supplier selection and relationship management. Studies indicate that firms that internalize this approach treat halal integrity as a strategic resource that enhances brand equity, fosters consumer trust, and creates a competitive moat (Sarwar et al., 2021). The purchasing function, therefore, becomes a guardian of this integrity, requiring personnel with not only technical procurement skills but also Halal Literacy and a deep understanding of Islamic jurisprudence related to transactions and purity.

Externally, halal integrity is operationalized and signalled through structured governance mechanisms. The literature heavily critiques an overreliance on Halal Certification as a static halal passport, arguing that annual audits are insufficient for dynamic supply chains where risk is constant (Karyani et al., 2024). Consequently, scholars advocate a hybrid model that combines certification with robust, relationship-based governance. This includes conducting rigorous, often unannounced, supplier audits that go beyond paperwork to inspect processes, and fostering long-term, collaborative relationships with trusted suppliers to build mutual commitment to integrity standards (Romano & Dandolin, 2024). The concept of Halal Assurance Systems (HAS), analogous to Quality Management Systems, is proposed as a comprehensive framework to embed integrity controls at every critical control point in the purchasing and production process (Eris et al., 2023)

Literature convincingly frames halal integrity as the essential ethos guiding purchasing. However, a salient gap exists in the operational tension between this moral imperative and commercial pragmatism. There is limited empirical research on how purchasing managers navigate ethical trade-offs, such as choosing between a higher-cost integrity-assured supplier and a lower-cost certified but arms-length supplier. Furthermore, while the need for Halal Literacy is noted, studies lack concrete models for training, competency assessment, or incentivizing procurement staff on integrity-based KPIs beyond cost savings.

Theme 3: Logistics Activities

The analysis identifies Logistics Activities as the critical, operational theme where the abstract principles of halal integrity and traceability are physically tested and implemented. Literature conceptualizes logistics not as a neutral, value-adding function but as a high-risk, integrity-sensitive stage that can nullify halal compliance achieved during purchasing if not meticulously managed.

A dominant discourse in the literature emphasizes that halal logistics is fundamentally a risk-mitigation exercise against cross-contamination. Scholars argue that the entire logistics system from packaging, handling, and storage to transportation must be designed to prevent physical or perceived contact between halal and non-halal products (Karim et al., 2021). This extends beyond food to pharmaceuticals, cosmetics, and their raw materials. Halal Logistics Standards have emerged as a key focus, with studies examining operational protocols for dedicated facilities, shared facilities with rigorous cleansing procedures, and the use of segregated containers and pallets (Hidayat & Musari, 2022). The literature positions the purchasing function as responsible for specifying these logistics requirements in contracts and selecting third-party logistics (3PL) providers with demonstrable halal-compliant capabilities, thereby extending chain-of-custody responsibility beyond the point of sale.

Specific logistics nodes receive detailed scholarly attention. In transportation, the focus is on establishing a Halal-assured cold chain, pairing temperature control with segregation protocols to maintain both the safety and permissibility of perishable goods. The literature highlights dedicated vehicles or validated cleansing processes for multi-use vehicles as a non-negotiable but costly requirement (Góral et al., 2023). For warehousing, the literature discusses designing Halal Hubs or dedicated zones within shared warehouses, with features such as separate loading bays, storage racks, and material handling equipment (Karia, 2019). A key concern is documentation and custody transfer; each handoff point in the logistics chain requires clear halal status documentation and verification procedures to maintain an unbroken Chain of Custody (CoC), directly linking back to traceability systems initiated during purchasing.

Literature effectively details the technical and procedural requirements for halal logistics. However, a significant gap exists in the economic and strategic analysis of these constraints. Research remains limited on the total cost impact of underutilizing halal-compliant logistics assets, the complexity of reverse logistics for cleansing, and how supply chain partners negotiate and share these costs. Furthermore, while the need for specialized 3PLs is noted, few studies explore competency development and the certification landscape for halal logistics service providers.

Theme 4: Halal Supply Chain Performance

The literature converges on Halal Supply Chain (SC) Performance as a complex, multifaceted outcome that extends beyond traditional efficiency and financial metrics. Thematic analysis reveals that performance in a halal context is a dual-layered construct, measuring both compliance effectiveness and the competitive advantages it generates. A critical discourse in the literature critiques the inadequacy of conventional SC performance measures cost, speed, and flexibility for capturing halal integrity. Scholars advocate for hybrid performance frameworks that integrate religious compliance indicators with commercial metrics. Proposed dimensions include:

- Halal Integrity Performance: Measured by audit scores, traceability system completeness, frequency of noncompliance incidents, and supplier certification validity (Ismail et al., 2022).

- Process Assurance Performance: Assessing the robustness of control points, the efficacy of segregation protocols, and the reliability of cleansing procedures in logistics (Shamout, 2019).

- Stakeholder Trust Performance: Gauged through consumer confidence indices, brand reputation scores related to halal purity, and the strength of trust-based relationships with certified suppliers (Madun et al., 2022). The literature highlights a shift towards Balanced Scorecard-inspired approaches for Halal SCs, proposing perspectives that balance financial, customer (consumer trust), internal process (halal assurance), and learning/growth (halal literacy) objectives

Research investigates the tangible and intangible outcomes of effective halal SC management. The primary outcome is Risk Mitigation, reducing the probability of costly recalls, brand scandals, and legal penalties associated with integrity breaches. Beyond risk avoidance, a strong theme posits halal performance as a source of Sustainable Competitive Advantage. This is achieved through:

- Enhanced Brand Equity and Loyalty: A reputation for uncompromising integrity fosters deep trust in Muslimmajority markets and increasingly among non-Muslim consumers seeking ethical assurance (Sharma & Jain, 2019).
- Market Access and Premiumization: Robust halal SC performance is a prerequisite for entering regulated markets in Indonesia and the GCC countries and enables firms to command price premiums (Ademola et al., 2024).
- Operational Resilience: The stringent controls and traceability required for halal compliance often led to more transparent, documented, and disciplined processes, inadvertently strengthening overall SC resilience and quality management (Hendayani & Fernando, 2022).

While the literature successfully argues for multidimensional performance and links it to strategic benefits, a pronounced gap exists in empirical validation and standardized measurement. Most performance frameworks remain conceptual, and few studies apply and validate them using large-scale survey data or longitudinal case studies. Little consensus exists on key performance indicators (KPIs) or benchmarking data. Furthermore, research often assumes a positive linear relationship between halal investment and performance and lacks analysis of diminishing returns or context-specific contingencies.

Domains of Critical Success Factors

The critical success factors for halal purchasing and supply chain management are multidimensional, encompassing technological, organizational, and ethical domains. The successful establishment and operation of a global halal supply chain hinge on a multifaceted set of Critical Success Factors spanning technological, organizational, relational, regulatory, and ethical domains. From a technological and digital perspective, foundational CSFs include adopting disruptive technologies like blockchain and IoT to create a verifiable digital DNA, developing unbroken halal traceability systems, and supporting robust ICT infrastructure within a digitally enabled consumer community (Kamath, 2018). These elements are non-negotiable for real-time transparency and product integrity from source to consumer. Internally, organizational and managerial factors are equally decisive.

Success is predicated on unwavering top management commitment to drive both halal standards and innovation, supported by specialized employee training and a holistic, halal-oriented approach across all business functions. This internal transformation must be economically viable, achieved through economies of scale, and reinforced by objective performance management systems to ensure compliance and boost morale (Khan et al., 2018).

Externally, success depends on deep supply chain integration and collaboration. Maintaining halal integrity requires extensive partnership and reliable communication with all stakeholders, from suppliers to retailers (Sadiyah & Erawati, 2024). Furthermore, the supply chain must show both operational flexibility to handle demand shifts and overall agility to navigate market turbulence, without compromising religious standards. The broader ecosystem, defined by regulatory and environmental factors, provides the essential scaffolding. Proactive government support, clear regulations especially for SMEs, and the harmonization of internationally accepted halal standards are indispensable to reduce fraud and complexity.

At the same time, firms are influenced by socio-cultural religious awareness and institutional pressures, which drive the adoption of authentication technologies and traceability systems to maintain legitimacy and competitive advantage. Ultimately, these efforts must be anchored in core ethical and Sharia-compliant principles. Implementing concepts such as identification, commitment, and integrity ensures a verifiable chain. Legally binding halal contracts and an unwavering commitment to ethical behaviour among all service providers ensure that commercial success is never achieved at the cost of religious violation, thereby fulfilling the fundamental ethical obligations of the halal industry.

Key Theories Informing Halal Supply Chain Research

The theoretical landscape underpinning research on halal supply chains and purchasing is highly diverse, drawing from multiple disciplines to explain the complex dynamics of technology adoption, stakeholder behavior, system design, and ethical compliance. A primary stream of inquiry utilizes technological adoption and institutional theories to explain organizational behavior. The Diffusion of Innovation (DOI) Theory is often applied to assess technology features such as compatibility and relative advantage in shaping a firm's intent to adopt systems like blockchain. This is often coupled with Institutional Theory, which posits that normative, mimetic, and coercive pressures from external actors compel companies to adopt technologies for legitimacy. Furthermore, Dynamic Capabilities Theory examines how firms, especially SMEs, internally sense, seize, and transform opportunities created by disruptive technologies.

A second major category involves behavioral and motivational theories that focus on human factors. Herzberg Two-Factor Theory is used to dissect employee performance by separating motivators from hygiene factors in a logistics setting. Consumer and travel motivations are analyzed through Push and Pull Motivation Theories, while the Islamic Work Ethic (IWE) provides a foundational principle for embedding ethical totality (Kaffah) into organizational conduct. More broadly, the Theory of Planned Behavior (TPB) is a prominent tool for examining consumers' and regulators' intentions toward new systems like blockchain-based certification. Technology acceptance is specifically modelled by the Unified Theory of Acceptance and Use of Technology (UTAUT), often integrated with the Information Success Model and by the Integrative Model of Blockchain Supply Chain Acceptance for MSMEs. In financial contexts, Herding Behavior Theory explores crowd following investment patterns.

To model complex interactions, researchers employ systems thinking and process models. Systems Thinking and System Dynamics, visualized through Causal Loop Diagrams (CLD), map feedback loops between variables such as trust and certification quality. The Supply Chain Operations Reference (SCOR) Model provides a standardized framework for evaluating core business processes against performance metrics. For risk and prioritization, frameworks like the Supply Chain Risk Management (SCRM) Framework used alongside Agency Theory and Multi Criteria Decision Making (MCDM) methods, such as the Fuzzy Best Worst Method (BWM), are applied to identify and prioritize risks. Other supply chain-specific models include the Halal Food Supply Chain Management (HFSCM) Model and theories of Value Cocreation and Service Ecosystem.

Uniquely to the field, Sharia-compliant frameworks transplant Islamic legal principles directly into management theory. This includes models built on operational procedures like identification, commitment, and integrity, and the application of Contract Theory to enforce standards within the secular legal system. Technical and sustainability frameworks provide analytical lenses. Studies examine Distributed Ledger Technology (DLT) and the Consensus Theory underlying blockchain architecture. The broader impact is assessed through the Triple Bottom Line (TBL) for sustainability, Stakeholder Theory for value creation, and operational principles like the 7R Logistics Principle to evaluate implementation efficacy. This rich tapestry of theories allows for a multidimensional analysis of the technological, human, systemic, and ethical challenges within the global halal ecosystem.

CONCLUSION

Through a comprehensive analysis guided by the PRISMA framework, this study reveals a complex, interdependent system in which religious-ethical imperatives must be seamlessly integrated with modern commercial and logistical practices. The four core themes Halal Traceability, Halal Integrity, Logistics Activities, and Halal Supply Chain Performance collectively demonstrate that achieving trustworthy compliance is a multidimensional challenge. It requires not only advanced technological

enablers like blockchain and IoT but also a profound organizational internalization of Islamic ethics, meticulous physical logistics protocols, and a sophisticated performance measurement framework that values integrity alongside efficiency. The identified Critical Success Factors and Barriers further underscore that this integration is a strategic endeavor, dependent on top management commitment, cross-chain collaboration, regulatory harmonization, and significant investment, while being hindered by economic constraints, technological fragmentation, and a lack of universal standards. The diverse theoretical foundations applied in the literature from technology adoption and institutional theories to Sharia-compliant frameworks reflect the necessity of interdisciplinary lenses to fully capture this ecosystem.
By synthesizing existing literature, this study effectively bridged the gap between sustainability goals and technological advancement in halal supply chain. The findings thus provide valuable insights for policymakers, SMEs and researchers, guiding them in developing effective halal supply chain processes. Despite its thoroughness, this systematic literature review has a few limitations. Primarily, it included only articles from the Scopus and Web of Science (WoS) databases, meaning it may have missed relevant studies from other sources or unpublished works. Second, the review considered only English-language journal articles published between 2021 and 2025. This might have excluded important research in other languages or foundational studies published before 2021, introducing a potential linguistic and time-based bias.

Ultimately, the future of halal supply chains lies in moving beyond conceptual models and isolated case studies to achieve scalable, socio-technical integration. This demands empirical research that bridges the gaps between ethical conviction and commercial pragmatism, develops standardized metrics, and creates viable pathways for all stakeholders, especially SMEs, to participate in a globally transparent and resilient halal economy.

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CONFLICT OF INTEREST

The authors declare no known competing financial interests or personal relationships that could have appeared to influence the work reported in the paper.

AUTHOR CONTRIBUTION STATEMENT

Muhammad Hamdi Che Hassan- Muhammad Hamdi Che Hassan conducted the research and wrote the article. His contributions encompassed the entire research process, from conceptualizing the core research idea to establishing the underlying theoretical framework. He was also solely responsible for designing the research plan and executing the study. A rigorous process of referral to and discussion with the supervisor ensured the validity of the emergent themes and approved for submission.

ETHICS STATEMENT

This research was conducted in accordance with the ethical standards of Universiti Kebangsaan Malaysia and adhered to the principles outlined in the Declaration of Helsinki. All participants were informed about the study's purpose and provided written informed consent before participating. The study strictly maintained participants' privacy and confidentiality, and used the collected data solely for academic purposes.

REFERENCES

Ademola, F., Kartika, B., & Najiha, A. (2024). Benefit of unified halal certification in nigeria halal industry. Amorti: Jurnal Studi Islam Interdisipliner, 139-146. https://doi.org/10.59944/amorti.v3i3.373

Ali, M. H., Chung, L., Kumar, A., Zailani, S., & Tan, K. H. (2021). A sustainable Blockchain framework for the halal food supply chain: Lessons from Malaysia. Technological Forecasting & Social Change, 170, 120870. https://doi.org/10.1016/j.techfore.2021.120870

Azmi, F. R., Sultan, A. A. M., Alghamdi, A. S., Sobri, S. A., & Sukri, N. M. (2025). Operational supply risks of halal food manufacturer: A mitigation approach to supply chain risks. Decision Science Letters, 14, 47–62. https://doi.org/10.5267/j.dsl.2024.11.003

Buenafe, K. A., Bandico, X. S., Neri, L. A. W., & Manala-O, S. D. (2025). Why halal certification remains elusive: evidence from foodservice businesses in the Philippines. Cogent Business & Management, 12(1), 2582802. https://doi.org/10.1080/23311975.2025.2582802

Dashti, L. A. H. F., Jackson, T., West, A., & Jackson, L. (2024). Enhancing halal food traceability: a model for rebuilding trust and integrity in Muslim countries. Journal of Islamic Marketing, 15(12), 3382-3408. https://doi.org/10.1108/jima-06-2023-0167

El Daouk, M. (2022). Introducing Ḥalal to construction supply chains in the United Kingdom’s construction sector. Journal of Islamic Marketing. Advance online publication. https://doi.org/10.1108/JIMA-01-2022-0016

Eris, F. R., Najah, Z., Rusbana, T. B., Wulandari, P., Annadzifah, N., & Riyanto, R. A. (2023). Halal Critical Point of Beneng Taro Products Identification Produced by Micro Enterprise in Serang City, Banten. Food ScienTech Journal, 5(1), 93. https://doi.org/10.33512/fsj.v5i1.20914

Góral, M., Góral, D., & Nakonieczny, P. (2023). Analysis of Transport Conditions for Frozen Food on the Way from the Shop to Home. Transport and Telecommunication Journal, 24(2), 97-109. https://doi.org/10.2478/ttj-2023-0009

Haleem, A., Khan, M. I., & Khan, S. (2021). Understanding the adoption of Halal logistics through critical success factors and stakeholder objectives. Logistics, 5(2), 38. https://doi.org/10.3390/logistics5020038

Handayani, D. I., Masudin, I., Haris, A., & Restuputri, D. P. (2021). Ensuring the halal integrity of the food supply chain through halal suppliers: a bibliometric review. Journal of Islamic Marketing, 13(7), 1457-1478. https://doi.org/10.1108/jima-10-2020-0329

Hasnan, N. & Kohda, Y. (2023). Halal Supply Chain: Challenges of Halal Certification in Japan. The European Proceedings of Social and Behavioural Sciences, 132, 764-778. https://doi.org/10.15405/epsbs.2023.11.02.60

Hassam, S. F., Talip, A., Mustapha, Y. A. A., & Shaharudin, M. R. (2024). Blockchain Technology in the Halal Supply Chain: Comparative insights from Malaysian micro, small, and medium enterprises. Environment-Behaviour Proceedings Journal, 10(SI28). https://doi.org/10.21834/e-bpj.v10iSI28.6971

Hendayani, R. and Fernando, Y. (2022). Adoption of blockchain technology to improve Halal supply chain performance and competitiveness. Journal of Islamic Marketing, 14(9), 2343-2360. https://doi.org/10.1108/jima-02-2022-0050

Hidayat, S. E., & Musari, K. (2022). ASEAN towards a global halal logistics through the digitally enabled community. International Journal of Asian Business and Information Management, 13(2). https://doi.org/10.4018/IJABIM.20220701.oa1

Ismail, S., Nazarudin, N., & Muhamad, M. Z. (2022). Governance of Halal Logistics Compliance. Journal of Contemporary Islamic Studies, 8(3). https://doi.org/10.24191/jcis.v8i3.6

Karıa, N. (2019). Halal logistics: practices, integration and performance of logistics service providers. Journal of Islamic Marketing, 13(1), 100-118. https://doi.org/10.1108/jima-08-2018-0132

Karim, A., Setiawan, M., Indrawati, N. K., & Mugiono, M. (2021). Impact of Halal standards on logistic employee performance. Acta Logistica, 8(3), 269–277. https://doi.org/10.22306/al.v8i3.237

Karyani, E., Geraldina, I., Haque, M. G., & Zahir, A. (2024). Intention to adopt a blockchain-based halal certification: Indonesia consumers and regulatory perspective. Journal of Islamic Marketing, 15(7), 1766–1782. https://doi.org/10.1108/JIMA-03-2023-0069

Khan, S., Haleem, A., Khan, M. I., Abidi, M. H., & Al-Ahmari, A. (2018). Implementing Traceability Systems in Specific Supply Chain Management (SCM) through Critical Success Factors (CSFs). Sustainability, 10(1), 204. https://doi.org/10.3390/su10010204

Kusnadi, A., Arkeman, Y., Syamsu, K., & Wijaya, S. H. (2024). Assurance of Halal Beef Products Using a Traceability System in Enterprise Resource Planning Applications. IOP Conference Series: Earth and Environmental Science, 1358(1), 012020. https://doi.org/10.1088/1755-1315/1358/1/012020

Kusnirova, D., Bubeliny, O., & Durisova, M. (2025). Measuring Created Value for Suppliers and Buyers: A Decision Matrix Approach—Evidence from Slovak Enterprises. Administrative Sciences, 15(6), 226. https://doi.org/10.3390/admsci15060226

Mabkhot, H. (2023). Factors Affecting the Sustainability of Halal Product Performance: Malaysian Evidence. Sustainability, 15(3), 1850. https://doi.org/10.3390/su15031850

Madun, A., Kamarulzaman, Y., & Abdullah, N. (2022). The Mediating Role of Consumer Satisfaction in Enhancing Loyalty Towards Malaysian Halal-Certified Food and Beverages. Online Jurnal of Islamic Management and Finance, 2(1), 1-20. https://doi.org/10.22452/ojimf.vol2no1.1

Medhioub, I. (2025). Herding Behaviour in Arab Countries: Relationship Between Halal and Non-Halal Products. International Journal of Islamic Finance and Sustainable Development, 17(2), 50–64. https://doi.org/10.55188/ijifsd.v17i2.934

Mohamed, Y. H., Abdul Fattah, M. F., Hassan, A. M., Rani, M. H., & Puteh, F. (2024). Impact of Halal Supply Chain Management on Halal Integrity in Malaysia's TVET Food Industry. Journal of Technical Education and Training, 16(2), 231–240. https://doi.org/10.30880/jtet.2024.16.02.020

Munawar, M. and Mugiono, A. (2024). Framework for smart contract blockchain in halal traceability, integrity, and transparency. International Journal of Electrical and Computer Engineering (IJECE), 14(3), 2875. https://doi.org/10.11591/ijece.v14i3.pp2875-2884

Munawar, M. and Mugiono, A. (2024). Framework for smart contract blockchain in halal traceability, integrity, and transparency. International Journal of Electrical and Computer Engineering (IJECE), 14(3), 2875. https://doi.org/10.11591/ijece.v14i3.pp2875-2884

Nugroho, A. A., Sumiyati, S., & Hamsani, H. (2024). Integrity and legitimacy of Halal products: The urgency of Halal supply chain management technology adoption in halal product authentication traceability evidence from Indonesia. The South East Asian Journal of Management, 18(1), 54–80. https://doi.org/10.21002/seam.v18i1.1485

Rahman, M. M., Razimi, M. S. A., Ariffin, A. S., & Hashim, N. (2024). Navigating moral landscape: Islamic ethical choices and sustainability in Halal meat production and consumption. Discover Sustainability, 5, 225. https://doi.org/10.1007/s43621-024-00388-y

Randeree, K. (2019). Demography, demand and devotion: driving the Islamic economy. Journal of Islamic Marketing, 11(2), 301-319. https://doi.org/10.1108/jima-06-2018-0102

Romano, C. A. and Dandolin, C. S. d. L. (2024). Relationship between civil construction companies and suppliers: comparative analysis with companies in other sectors. Caderno Pedagógico, 21(7), e5897. https://doi.org/10.54033/cadpedv21n7-179

Rui, F. & Sundram, V. P. K. (2024). Technological Innovation for Sustainable Supply Chain Management in the Food

Industry. Information Management and Business Review, 16(3S(I)a), 892-903. https://doi.org/10.22610/imbr.v16i3s(i)a.4173

Sadiyah, S. & Erawati, E. (2024). Effectiveness of Halal Traceability and Self-Declared Certification on Indonesian MSMEs Performance. Indonesian Journal of Islamic Economic Law, 1(2), 72-90. https://doi.org/10.23917/ijoel.v1i2.4816

Sarasi, V., Yunizar, & Satmoko, N. D. (2025). Evaluation of halal supply chain management's performance in culinary enterprises. Cogent Business & Management, 12(1), 2440128. https://doi.org/10.1080/23311975.2024.2440128

Sarwar, A., Zafar, A., & Qadir, A. (2021). Analysis and prioritization of risk factors in the management of Halal supply chain management. Discover Sustainability, 2(1), 30. https://doi.org/10.1007/s43621-021-00039-6

Shamout, M. D. (2019). Does Supply Chain Analytics Enhance Supply Chain Innovation and Robustness Capability?. Organizacija, 52(2), 95-106. https://doi.org/10.2478/orga-2019-0007

Sharma, R. and Jain, V. (2019). CSR, Trust, Brand Loyalty and Brand Equity: Empirical Evidences from Sportswear Industry in the NCR Region of India. Metamorphosis: A Journal of Management Research, 18(1), 57-67. https://doi.org/10.1177/0972622519853158

Siaw, C. A., & Okorie, C. (2022). Value co-creation on technology-enabled platforms for business model responsiveness and position enhancement in global value chains. Strategic Change, 31(1), 9–18. https://doi.org/10.1002/jsc.2475

Sumarliah, E., Li, T., Wang, B., Fauziyah, F., & Indriya, I. (2022). Blockchain-empowered halal fashion traceability system in Indonesia. International Journal of Information Systems and Supply Chain Management, 15(2). https://doi.org/10.4018/IJISSCM.287628

Sunmola, F., Baryannis, G., Tan, A., Co, K., & Papadakis, E. (2025). Holistic Framework for Blockchain-Based Halal Compliance in Supply Chains Enabled by Artificial Intelligence. Systems, 13(1), 21. https://doi.org/10.3390/systems13010021

Surjandari, I., Yusuf, H., Laoh, E., & Maulida, R. (2021). Designing a Permissioned Blockchain Network for the Halal Industry using Hyperledger Fabric with multiple channels and the raft consensus mechanism. Journal of Big Data, 8(1), 10. https://doi.org/10.1186/s40537-020-00405-7

Susanty, A., Puspitasari, N. B., Jie, F., Akhsan, F. A., & Jati, S. (2025). Consumer acceptance of halal food traceability systems: a novel integrated approach using modified UTAUT and DeLone & McLean models to promote sustainable food supply chain practices. Cleaner Logistics and Supply Chain, 15, 100226. https://doi.org/10.1016/j.clscn.2025.100226

Teviana, T., Rahman, H., Siregar, Z., & Syahreza, D. S. (2025). The impact of Islamic attributes and motivations on visitor satisfaction and word of mouth in halal supply chain management. Journal of Project Management, 10(2025), 119–128. https://doi.org/10.5267/j.jpm.2024.10.003

Wong, M. S. M. A., Hussin, Z. I., & Moidin, S. (2023). Implementation of Halal Logistics in Halal Pharmaceutical Industry: A Study on Halal Warehouse System in Pharmaniaga Lifescience. Global Journal Al-Thaqafah (GJAT).

Yakubu, M. M., Hassan, M. F. B., Danyaro, K. U., Yakubu, B. M., Alabdulatif, A. A., Beevi, S. Z., & Garba, A. (2025). HalalChain: A decentralized blockchain model for enhanced data integrity, real-time compliance, and automated verification in halal food supply chain. Results in Engineering, 27, 106591. https://doi.org/10.1016/j.rineng.2025.106591