

Green Value Creation Through Ethical Halal Supply Chain Management for Small and Medium Enterprises: An Ergo-Iconic Branding Framework

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ABSTRACT

This study develops a conceptual framework integrating Digital Halal Integrity (DHI), Ecological Aesthetics (ECA), and Green Ergo-Iconic Value (GEIV) to enhance global purchase intention for Indonesian halal MSMEs. Employing qualitative methodology (2026). Green value creation through ethical through document analysis, content halal supply chain management for small and analysis, and visual semiotic analysis of medium enterprises: An ergo-iconic branding MSME digital presence, this research framework. *International Journal of Applied* addresses the critical gap between halal certification requirements and green consumerism trends in the digital economy. The proposed framework synthesizes blockchain-enabled halal traceability with ecological aesthetics in digital branding, moderated by Digital Social Influence (DSI) and Perceived Economic Value (PEV). Findings reveal that the integration of ethical halal integrity with environmental aesthetics creates distinctive ergo-iconic value that minimizes barriers to global market entry for MSMEs. This research contributes theoretically by bridging the separation between integrity and aesthetics dimensions in halal supply chain literature, and practically by providing actionable strategies for MSMEs, policymakers, and certification bodies to enhance Indonesia's position in the global halal economy valued at USD 2.29 trillion.

Keywords: Green Ergo-Iconic Value; Digital Halal Integrity; Ecological Aesthetics; Halal Supply Chain; MSME Internationalization; Digital Branding

INTRODUCTION

The global halal industry has undergone profound transformation, evolving from religious obligation fulfillment to a strategic economic sector valued at USD 2.29 trillion (Cahyanto, 2024). As the world's largest Muslim-majority nation, Indonesia possesses immense potential to emerge as a global halal hub. However, significant gaps persist between this potential and implementation reality, particularly within the Small and Medium Enterprise (MSME) sector that constitutes Indonesia's economic backbone.

Indonesian MSMEs face dual pressures in the digital economy landscape. First, they must meet increasingly stringent halal standards to build trust among Muslim consumers, as empirical evidence demonstrates that halal labels exert positive and significant influence on consumer purchase decisions (Wicahyono et al., 2026). Second, market forces drive trends toward sustainable and ethical consumption—Green Consumerism. Recent phenomena indicate the emergence of critical consumer awareness on e-commerce platforms; while halal labels serve as initial prerequisites, consumer trust remains conditional and requires additional verification through reviews and certification transparency (Syarifah et al., 2026).

The Indonesian Halal Industry Context and MSME Challenges

Indonesia's halal industry experienced remarkable growth between 2020 and 2026, driven by domestic demand and export opportunities. According to the State of the Global Islamic Economy Report 2024, Indonesia ranks among the top five countries in halal food consumption, with Muslim consumer spending on food and beverages reaching approximately USD 169.7 billion in 2023. The Indonesian government strategically positioned halal certification as a national priority through Law No. 33 of 2014 on Halal Product Assurance (UU JPH), mandating halal certification for all products circulating in the Indonesian market (Sukoso, 2020).

The implementation of mandatory halal certification, fully effective in October 2024, created both opportunities and challenges for MSMEs. Data from the Halal Product Assurance Organizing Agency (BPJPH) indicates that as of 2024, over 850,000 products have received halal certification. However, MSMEs face significant barriers including high certification costs (averaging IDR 2-5 million per product), complex documentation requirements, and limited understanding of halal supply chain management principles (Indra et al., 2026).

Ergo-Iconic Value Emergence in Digital Platforms

In the digital landscape, visual product representation becomes crucial. Global consumers, including Muslims, seek not only Sharia compliance but also aesthetics and added value. The phenomenon of "Ergo-Iconic Value" where ecological or halal practices are manifested in attractive visual representations emerges as a differentiation strategy for green MSMEs (Andriyansah et al., 2023; Andriyansah, 2025). However, many MSMEs lag in adopting this strategy due to limited digital literacy and technology access (Qizwini & Purnama, 2025).

The convergence of halal integrity and ecological aesthetics in digital branding represents an underexplored opportunity for MSME internationalization. While blockchain technology offers solutions for halal traceability (Hew et al., 2020; Ali et al., 2023), and green marketing emphasizes environmental communication (Salisu et al., 2023), the integration of these dimensions into a unified value creation framework remains limited.

Research Gap and Objectives

This study addresses three critical gaps in existing literature. First, most studies focus on blockchain technology for halal integrity (supply chain side) or green marketing for aesthetics (marketing side) separately, lacking comprehensive models examining how synergy between these aspects creates market value. Second, limited research explores how the combination of ethical integrity and environmental aesthetics specifically minimizes international market entry barriers for MSMEs. Third, empirical evidence linking verified halal integrity signals with consumer perceptions of ecological aesthetics and ergo-iconic value in Indonesian MSME export settings remains sparse.

Research Objective: To develop a conceptual framework integrating Digital Halal Integrity, Ecological Aesthetics, and Green Ergo-Iconic Value that enhances global purchase intention for Indonesian halal MSMEs while minimizing international market entry barriers.

Research Question: How can the synergy between ethical halal integrity and ecological aesthetics in digital marketing strategies create market value that minimizes global market entry barriers for MSMEs?

LITERATURE REVIEW

Digital Halal Integrity and Blockchain Traceability

Digital Halal Integrity (DHI) represents the degree of consumer trust in halal certification validity, halal traceability information transparency, and confidence in contamination-free processes verifiable through digital platforms (Anwar, 2025; Razali & Samori, 2025). The integration of blockchain technology in halal supply chains addresses critical trust and transparency challenges. Hew et al. (2020) examined blockchain-based halal traceability systems, revealing that while the technology offers immutable record-keeping and enhanced transparency, implementation challenges persist, particularly for SMEs regarding cost, technical expertise, and interoperability.

Ali et al. (2023) investigated blockchain technology adoption intention in halal food SMEs, finding that supply chain integration moderates the relationship between technological factors and adoption intention. Their study emphasized that SMEs with higher supply chain integration levels demonstrate greater readiness to adopt blockchain solutions. Surjandari et al. (2021) designed a permissioned blockchain network for the halal industry using Hyperledger Fabric, demonstrating technical feasibility for creating transparent, tamper-proof halal certification records.

However, systematic reviews by Harsanto et al. (2024) highlight that despite growing interest in digital technologies for halal supply chains, empirical evidence on SME adoption feasibility and financial viability remains limited. Certification standardization and reliable certifying authorities remain uneven, complicating the mapping of traceability outputs to credible halal claims in consumer communications.

Ecological Aesthetics in Green Marketing

Ecological Aesthetics (ECA) encompasses consumer evaluation of visual beauty, the ability of visuals to communicate sustainability messages, and the modern-ecological impression from digital representations (Andriyansah, 2025; Yang et al., 2024). In the platform economy, visual representation serves as a critical differentiator for green MSMEs. Andriyansah (2025) explored ecological identity and social representation of green MSMEs, revealing that ergo-iconic value—the synthesis of functional ecological practices with iconic visual representation—enables MSMEs to construct legitimacy and market differentiation despite resource constraints.

Green marketing as an ethical practice for halal entrepreneurs emphasizes the alignment between Islamic environmental stewardship principles and sustainable business practices (Salisu et al., 2023). Anisah (2024) conceptualized “green halal” as the synergy between halal industry and sustainable development, arguing that environmental sustainability is inherent in Islamic teachings and should be integrated into halal product development and marketing.

Social media platforms amplify the impact of ecological aesthetics on consumer behavior. Sun and Xing (2022) found that social media information sharing significantly impacts green purchase intention among Generation Z through perceived green value mediation. The visual and narrative elements of green marketing on social media platforms create emotional connections and social identity alignment that drive sustainable consumption behaviors.

Green Ergo-Iconic Value: Synthesis of Ethics and Aesthetics

Green Ergo-Iconic Value (GEIV) represents consumer perception of unique value from the combination of halal compliance and design beauty, high social status, and perfect synergy between functional value (safe/halal) and aesthetic value (Andriyansah et al., 2023). This construct bridges the traditional separation between ethical integrity and aesthetic appeal in halal product marketing.

The ergo-iconic framework posits that in digital environments, functional attributes (ergonomic value) must be communicated through compelling visual representations (iconic value) to achieve market differentiation. For halal MSMEs, this means that blockchain-verified halal integrity (ergonomic) must be translated into aesthetically appealing, culturally resonant digital content (iconic) to capture global consumer attention.

Priyatno and Sayuti (2025) developed sustainable business models for halal products, emphasizing that value creation requires integration of religious compliance, environmental responsibility, and economic viability. Their framework highlights that MSMEs achieving this integration demonstrate superior market performance and export readiness.

Digital Social Influence and Perceived Economic Value

Digital Social Influence (DSI) encompasses the impact of positive reviews from other consumers, influencer/public figure recommendations, and tendencies to follow online community trends in choosing halal products (Gunawan & Bata Ilyas, 2026; Mingxian et al., 2025). In the context of halal cosmetics, empirical studies found that influencer marketing shows the strongest effect on purchasing decisions among Indonesian consumers, surpassing product quality and halal labeling effects.

Social media platforms create network effects where consumer-generated content, influencer endorsements, and community discussions shape purchase intentions. The credibility of digital social influence depends on perceived authenticity, source expertise, and alignment with consumer values. For halal MSMEs, leveraging digital social influence requires strategic engagement with micro-influencers and community leaders who embody both Islamic values and environmental consciousness.

Perceived Economic Value (PEV) reflects consumer evaluation of price-quality-halal-environmental benefit alignment, value for money compared to non-halal/non-green alternatives, and long-term economic perception (Cascavilla et al., 2025; Nazarenko & Saleh, 2024). Studies on sustainable halal cosmetic consumption reveal that consumers willing to pay premium prices for products combining halal certification with

environmental sustainability perceive superior long-term value despite higher initial costs.

Global Purchase Intention for Halal MSMEs

Global Purchase Intention (GPI) represents consumer intention to purchase products despite competition with global brands, willingness to recommend to international consumers, and loyalty despite higher prices (Kshetri & Dwivedi, 2024; Olivieri & Testa, 2024). For Indonesian MSMEs, achieving global purchase intention requires overcoming multiple barriers including limited brand recognition, perceived quality gaps compared to established brands, and logistical challenges.

The integration of digital halal integrity and ecological aesthetics offers a pathway to differentiate Indonesian MSME products in global markets. By communicating verified halal compliance through blockchain traceability and presenting this integrity through compelling ecological aesthetics, MSMEs can position themselves as premium, values-aligned alternatives to conventional products.

RESEARCH METHOD

Qualitative Approach and Philosophical Foundation

This study employs a qualitative methodology grounded in interpretive epistemology to develop a conceptual framework for understanding how Indonesian halal MSMEs can create market value through the integration of digital halal integrity and ecological aesthetics. The qualitative approach is appropriate for this exploratory research because it enables deep examination of emerging phenomena—specifically, the convergence of blockchain-enabled halal traceability and green digital branding—where existing theoretical frameworks remain underdeveloped.

The research adopts a constructivist paradigm, recognizing that the meaning of “halal integrity” and “ecological aesthetics” is socially constructed through interactions among MSMEs, consumers, certification bodies, and digital platforms. This philosophical stance acknowledges that value creation processes are context-dependent and culturally embedded, requiring interpretive analysis rather than hypothesis testing.

Document Analysis Methodology

Document analysis serves as the primary data collection method, involving systematic examination of secondary sources to identify patterns, themes, and relationships relevant to the research question. The document corpus includes:

1. Policy and regulatory documents: Indonesian halal certification regulations (UU JPH No. 33/2014), BPJPH guidelines, Master Plan Industri Halal Indonesia 2023-2029, and international halal standards (SMIIC, GCC).
2. Industry reports: State of the Global Islamic Economy Reports (2020-2024), Indonesian halal industry market analyses, MSME digitalization reports, and blockchain adoption studies.
3. Academic literature: Peer-reviewed journal articles on halal supply chains, blockchain traceability, green marketing, ergo-iconic value, and MSME internationalization published between 2020-2026.
4. Digital platform content: MSME websites, e-commerce product pages, social media accounts, and digital marketing materials from Indonesian halal MSMEs.

Document selection followed purposive sampling criteria: relevance to halal MSME internationalization, publication/creation date (2020-2026), credibility of source, and availability of information on digital strategies or green marketing practices.

Content Analysis Procedures

Content analysis was conducted using thematic coding to identify recurring concepts, strategies, and challenges related to digital halal integrity and ecological aesthetics. The analysis followed an iterative process:

1. Initial coding: Open coding of documents to identify first-order concepts related to halal certification, blockchain technology, green marketing, visual branding, and MSME challenges.
2. Axial coding: Grouping first-order concepts into second-order themes representing theoretical constructs (DHI, ECA, GEIV, DSI, PEV, GPI).
3. Selective coding: Identifying relationships among constructs and developing the integrated conceptual framework.

RESULTS

Thematic Findings from Document and Content Analysis

The document and content analyses identified six interrelated themes that explain how Indonesian halal MSMEs can create distinctive market value through the integration of ethical integrity, environmental sustainability, and digital branding. These themes were categorized as Digital Halal Integrity (DHI), Ecological Aesthetics (ECA), Green Ergo-Iconic Value (GEIV), Digital Social Influence (DSI), Perceived Economic Value (PEV), and Global Purchase Intention (GPI). The findings indicate that these dimensions do not operate independently but form an interconnected value-creation process in which technical halal integrity and ecological visual communication jointly contribute to consumer perceptions and international market attractiveness.

The analysis further revealed that Indonesian halal MSMEs face three recurring challenges in digital and international markets: establishing consumer trust, differentiating their products from established competitors, and communicating credible value propositions. These challenges are particularly relevant for resource-constrained MSMEs that cannot compete primarily through economies of scale, extensive distribution networks, or strong international brand recognition. Consequently, the findings indicate that the integration of verifiable halal integrity and ecological aesthetics provides an alternative differentiation mechanism based on ethical credibility and symbolic value.

Digital Halal Integrity as the Functional Foundation of Value Creation

The analysis identified Digital Halal Integrity as a fundamental component of consumer trust in halal MSME products. Across the analyzed documents, halal integrity was consistently associated with certification validity, traceability transparency, supply-chain assurance, and confidence that products remain compliant with halal requirements throughout production and distribution processes.

Digital technologies, particularly blockchain-enabled traceability systems, emerged as an important mechanism for strengthening the visibility and credibility of halal information. Such technologies allow certification and supply-chain information to be communicated more transparently through digital platforms. For MSMEs, this capability is particularly relevant because limited brand recognition may increase information asymmetry between firms and consumers.

However, the findings also indicate that technological verification alone is insufficient to create strong market differentiation. Digital Halal Integrity primarily provides the functional and ethical foundation of the proposed value-creation process. Its market

potential becomes more visible when halal integrity is translated into consumer-accessible and visually meaningful digital communication.

Ecological Aesthetics as a Visual Communication Mechanism

The analysis identified Ecological Aesthetics as the second major component of the framework. Ecological Aesthetics reflects how sustainability values are communicated through visual product presentation, environmental symbolism, digital content, and contemporary ecological design.

The findings suggest that visual communication plays a critical role in digital marketplaces because consumers frequently encounter MSME products through websites, social media, and e-commerce platforms before directly experiencing the physical product. Consequently, visual elements become an important mechanism for communicating environmental responsibility and differentiating products within crowded digital environments.

The visual semiotic analysis indicates that ecological aesthetics become particularly meaningful when sustainability-related visual elements are aligned with authentic product characteristics and halal values. In this context, ecological design does not merely function as decoration but serves as a symbolic representation of the MSME's environmental and ethical orientation.

At the same time, the analysis suggests that ecological aesthetics without credible supporting information may generate skepticism. Sustainability-oriented visual communication therefore requires substantive alignment with actual environmental and halal practices to avoid perceptions of superficial green claims.

Formation of Green Ergo-Iconic Value

The integration of Digital Halal Integrity and Ecological Aesthetics resulted in the central conceptual finding of the study: Green Ergo-Iconic Value. The analysis indicates that Green Ergo-Iconic Value emerges when the functional and ethical qualities of halal products are effectively combined with visually compelling representations of ecological responsibility.

Digital Halal Integrity represents the functional or "ergo" dimension by providing credible evidence of halal compliance, transparency, and supply-chain integrity. Ecological Aesthetics represents the "iconic" dimension by transforming these functional characteristics into visually recognizable and emotionally meaningful brand representations. The integration of both dimensions creates a distinctive value proposition that combines religious compliance, environmental responsibility, and aesthetic appeal.

The findings further indicate that the relationship between these dimensions is complementary. Halal integrity without effective visual communication may remain insufficiently visible to consumers in digital marketplaces. Conversely, ecological aesthetics without verifiable integrity may lack credibility. Green Ergo-Iconic Value therefore represents the synthesis through which technical integrity and symbolic communication jointly contribute to perceived market value.

Digital Social Influence and Perceived Economic Value

The analysis identified Digital Social Influence and Perceived Economic Value as contextual factors that may shape the relationship between Green Ergo-Iconic Value and Global Purchase Intention.

Digital Social Influence emerged through consumer reviews, influencer recommendations, user-generated content, and online community interactions. These mechanisms provide social validation for the ethical, environmental, and aesthetic claims communicated by MSMEs. Positive digital social influence may reinforce the credibility of Green Ergo-Iconic Value by allowing potential consumers to evaluate products through the experiences and recommendations of other digital users.

Perceived Economic Value emerged as the consumer's assessment of whether the combination of halal integrity, environmental benefits, product quality, and aesthetic differentiation justifies the price paid. The findings suggest that ethical and ecological attributes alone may not be sufficient to encourage purchase when consumers perceive the economic trade-off as unfavorable. Therefore, MSMEs need to communicate not only ethical and environmental benefits but also the functional and economic value associated with their products.

These findings indicate that social validation and economic rationality provide two distinct contextual mechanisms surrounding Green Ergo-Iconic Value. Digital Social Influence strengthens social credibility, whereas Perceived Economic Value reflects consumers' evaluation of the overall benefits received relative to financial sacrifice.

Green Ergo-Iconic Value and Global Purchase Intention

The analysis suggests that Green Ergo-Iconic Value provides a potential pathway toward stronger Global Purchase Intention for Indonesian halal MSMEs. By integrating verifiable halal integrity with ecological aesthetics, MSMEs can construct a differentiated market position based on values and identity rather than relying exclusively on price, scale, or brand recognition.

The proposed relationship is particularly relevant in international markets where Indonesian MSMEs may compete against established global brands. A product that communicates halal credibility, environmental responsibility, cultural authenticity, and visual attractiveness simultaneously may provide consumers with a more distinctive value proposition.

However, the findings also indicate that the translation of Green Ergo-Iconic Value into purchase intention remains contingent upon consumers' social and economic evaluations. Positive reviews, credible recommendations, community validation, and favorable perceptions of economic value can reinforce consumers' willingness to purchase and recommend MSME products internationally.

Integrated Green Ergo-Iconic Value Framework

Based on the thematic and visual analyses, the findings produce an integrated framework consisting of a sequential value-creation mechanism. Digital Halal Integrity provides the functional and ethical foundation, while Ecological Aesthetics provides the visual and symbolic dimension. Their integration generates Green Ergo-Iconic Value, which subsequently contributes to Global Purchase Intention. Digital Social Influence and Perceived Economic Value operate as contextual factors that may strengthen or constrain the translation of perceived Green Ergo-Iconic Value into purchasing intentions.

The resulting framework can be summarized as follows:

Digital Halal Integrity (DHI) → Green Ergo-Iconic Value (GEIV)

Ecological Aesthetics (ECA) → Green Ergo-Iconic Value (GEIV)

Green Ergo-Iconic Value (GEIV) → Global Purchase Intention (GPI)

with Digital Social Influence (DSI) and Perceived Economic Value (PEV) serving as moderating contextual factors in the relationship between Green Ergo-Iconic Value and Global Purchase Intention.

Overall, the results demonstrate that the strategic value of halal digitalization does not derive solely from certification or technological traceability. Instead, market value emerges from the integration of credible halal integrity, ecological responsibility, and effective visual communication. This integration forms the Green Ergo-Iconic Value proposition that constitutes the central outcome of the conceptual framework developed in this study.

DISCUSSION

Framework Implications for MSME Internationalization

The proposed Green Ergo-Iconic Value framework offers a strategic pathway for Indonesian halal MSMEs to overcome traditional barriers to international market entry. Unlike conventional internationalization models that emphasize scale economies, brand recognition, and distribution networks—resources typically unavailable to MSMEs—this framework leverages digital platforms to create distinctive value propositions through the synthesis of ethical integrity and aesthetic appeal.

The framework addresses three critical internationalization barriers simultaneously. First, the trust barrier is minimized through blockchain-enabled Digital Halal Integrity that provides transparent, verifiable certification information accessible to global consumers. This technological solution reduces information asymmetry that typically disadvantages small, unknown brands in international markets. Second, the differentiation barrier is overcome through Ecological Aesthetics that transform functional halal compliance into visually compelling, culturally resonant brand narratives. This aesthetic dimension enables MSMEs to compete on values and identity rather than price or scale. Third, the legitimacy barrier is addressed through Green Ergo-Iconic Value that positions MSMEs as premium, ethically-aligned alternatives to conventional products, appealing to growing segments of conscious global consumers.

Empirical observations from Indonesian MSME digital practices reveal that successful internationalization increasingly depends on the ability to communicate complex value propositions—combining religious compliance, environmental sustainability, and cultural authenticity—through concise, visually engaging digital content. The framework provides a structured approach for MSMEs to develop this communication capability systematically.

Integration of Halal Integrity and Ecological Aesthetics

The core innovation of this framework lies in integrating dimensions traditionally treated separately in halal supply chain and green marketing literatures. Digital Halal Integrity represents the “ergonomic” dimension functional, technical, and operational excellence in ensuring Sharia compliance throughout the supply chain. Ecological Aesthetics represents the “iconic” dimension symbolic, visual, and emotional resonance that creates brand meaning and consumer connection.

The synergy between these dimensions creates multiplicative rather than additive value. Halal integrity without aesthetic appeal remains invisible in crowded digital marketplaces where visual impact determines consumer attention. Conversely, ecological aesthetics without verifiable integrity risks greenwashing accusations and consumer skepticism. The integration of both dimensions through Green Ergo-Iconic Value creates authentic,

compelling value propositions that resonate with global Muslim consumers increasingly concerned with both religious compliance and environmental responsibility.

This integration is particularly powerful in the Indonesian context where Islamic teachings emphasize environmental stewardship (khalifah fil ardh) and ethical consumption. The concept of “green halal” represents not a marketing innovation but a return to foundational Islamic principles that view environmental sustainability as integral to halal compliance. MSMEs articulating this integrated message authentically can differentiate themselves from conventional halal products that focus narrowly on ritual slaughter and ingredient permissibility.

Practical Applications for MSMEs

The framework translates into actionable strategies across four domains:

Digital Infrastructure Development: MSMEs should prioritize investment in blockchain-compatible traceability systems, even at modest scales. Collaborative platforms like Hyperledger Fabric enable shared infrastructure that reduces individual MSME costs while providing credible verification mechanisms. Government support through BPJPH and industry associations can facilitate collective adoption, creating network effects that enhance system value.

Visual Branding Strategy: MSMEs must develop coherent visual identities that communicate both halal integrity and ecological values. This requires moving beyond generic halal logos to create distinctive brand aesthetics incorporating Islamic geometric patterns, natural color palettes, and sustainability symbols. Visual consistency across digital touchpoints (websites, social media, e-commerce platforms) reinforces brand recognition and ergo-iconic value perception.

Content Marketing Approach: Effective communication of Green Ergo-Iconic Value requires storytelling that connects product attributes to broader narratives about Islamic ethics, environmental stewardship, and cultural heritage. MSMEs should develop content strategies emphasizing transparency (showing supply chain processes), authenticity (highlighting artisanal production methods), and impact (demonstrating environmental and social benefits). User-generated content and influencer partnerships amplify these narratives through Digital Social Influence mechanisms.

Value-Based Pricing: The framework supports premium pricing strategies justified by verified integrity and aesthetic differentiation. However, MSMEs must carefully communicate Perceived Economic Value by emphasizing long-term benefits (health, environmental impact, spiritual alignment) that justify higher prices. Transparent cost breakdowns showing certification expenses, sustainable sourcing premiums, and artisanal labor investments help consumers understand and accept price differentials.

Moderating Roles of Social Influence and Economic Value

The framework recognizes that Green Ergo-Iconic Value does not automatically translate into Global Purchase Intention; this relationship is contingent on social and economic contextual factors.

Digital Social Influence acts as an amplification mechanism. When MSMEs successfully engage influencers, generate positive reviews, and build online communities, the impact of ergo-iconic value on purchase intention strengthens significantly. This moderation effect is particularly pronounced among younger, digitally-native Muslim consumers who rely heavily on social proof in purchase decisions. MSMEs should strategically cultivate relationships with micro-influencers who embody both Islamic values and environmental consciousness, creating authentic endorsements that resonate with target audiences.

Perceived Economic Value serves as a rationality check. Even consumers attracted to ergo-iconic value will hesitate if they perceive poor value for money. This moderation effect highlights the importance of transparent communication about product benefits, cost justifications, and long-term value propositions. MSMEs can enhance perceived economic value through strategies like subscription models (reducing per-unit costs), bundling (increasing perceived benefits), and loyalty programs (rewarding repeat purchases).

The interaction between these moderators is particularly important. High social influence can partially compensate for moderate economic value perceptions, as social validation reduces perceived risk. Conversely, strong economic value perceptions can sustain purchase intention even with limited social influence, as rational cost-benefit analysis justifies the decision independently.

Policy Implications

The framework generates several policy recommendations for government agencies, certification bodies, and industry associations:

Certification Streamlining: BPJPH should continue efforts to reduce certification costs and complexity for MSMEs through subsidized programs, simplified documentation requirements for small-scale producers, and digital certification platforms. The current average cost of IDR 2-5 million per product remains prohibitive for many MSMEs; targeted subsidies for export-oriented MSMEs could accelerate internationalization.

Digital Infrastructure Support: Government investment in shared blockchain platforms for halal traceability would create public goods that benefit the entire MSME ecosystem. Such platforms should prioritize interoperability with international halal standards (SMIIC, GCC) to facilitate export market access.

Capacity Building Programs: Training programs should integrate technical skills (blockchain literacy, digital marketing) with strategic capabilities (brand development, visual design, content creation). Current programs often focus narrowly on certification compliance without addressing the broader marketing and branding capabilities required for international competitiveness.

Green Halal Standards Development: Indonesia should lead in developing integrated "green halal" standards that combine religious compliance with environmental sustainability criteria. Such standards would position Indonesian products as premium offerings in global markets and align with growing consumer demand for ethical products.

Export Promotion Strategies: Trade promotion agencies should emphasize the unique value proposition of Indonesian halal products combining Islamic authenticity, environmental sustainability, and cultural heritage. Marketing campaigns targeting global Muslim consumers should highlight these integrated values rather than competing on price with established exporters.

Theoretical Contributions

This research contributes to three theoretical domains:

Halal Supply Chain Literature: The framework bridges the traditional separation between technical integrity dimensions (certification, traceability) and marketing dimensions (branding, positioning). By demonstrating how these dimensions interact to create market value, the study advances understanding of value creation mechanisms in halal supply chains beyond operational efficiency and compliance.

Green Marketing Theory: The integration of religious ethics (halal) with environmental ethics (green) extends green marketing theory into faith-based consumer contexts. The concept of Green Ergo-Iconic Value provides a theoretical lens for understanding how

ethical commitments are communicated and perceived in digital environments where visual representation dominates.

MSME Internationalization Theory: The framework challenges resource-based views of internationalization that emphasize scale, capital, and networks as prerequisites for global market entry. By demonstrating how digital platforms enable value creation through integrity-aesthetic synthesis, the study contributes to emerging perspectives on digital internationalization pathways for resource-constrained firms.

CONCLUSION

This study developed a comprehensive conceptual framework integrating Digital Halal Integrity, Ecological Aesthetics, and Green Ergo-Iconic Value to enhance global purchase intention for Indonesian halal MSMEs. The framework addresses critical gaps in existing literature by synthesizing technical integrity dimensions with aesthetic communication dimensions, demonstrating how their synergy creates distinctive market value that minimizes international market entry barriers.

The research makes three primary contributions. Theoretically, it bridges the separation between halal supply chain integrity and green marketing aesthetics, introducing Green Ergo-Iconic Value as a mediating construct that explains how ethical compliance and visual appeal combine to influence consumer behavior. Methodologically, it demonstrates the value of qualitative approaches document analysis, content analysis, and visual semiotic analysis for developing conceptual frameworks in emerging research domains where quantitative data remain limited. Practically, it provides actionable strategies for MSMEs, policymakers, and certification bodies to enhance Indonesia's competitiveness in the global halal economy.

The framework reveals that successful internationalization for Indonesian halal MSMEs increasingly depends on the ability to communicate complex value propositions through digital platforms. Blockchain-enabled traceability provides the technical foundation for trust, while compelling visual branding transforms this integrity into iconic value that resonates emotionally with global consumers. The synthesis of these dimensions Green Ergo-Iconic Value creates premium positioning opportunities that enable MSMEs to compete on values and identity rather than price or scale.

Policy implications emphasize the need for integrated support systems that address both technical capabilities (certification, traceability) and strategic capabilities (branding, content creation). Government investment in shared digital infrastructure, streamlined certification processes, and capacity building programs can accelerate MSME adoption of the framework. Development of integrated "green halal" standards would position Indonesia as a leader in ethical, sustainable halal products.

The framework's emphasis on Digital Social Influence and Perceived Economic Value as moderating factors highlights the importance of social validation and economic rationality in purchase decisions. MSMEs must strategically cultivate online communities, engage authentic influencers, and transparently communicate value propositions to maximize the impact of ergo-iconic value on global purchase intention. Ultimately, this research demonstrates that the future of Indonesian halal MSME competitiveness lies not in competing with established exporters on traditional dimensions of scale and price, but in leveraging digital platforms to create distinctive value through the authentic integration of Islamic ethics, environmental sustainability, and cultural heritage. The Green Ergo-Iconic Value framework provides a roadmap for this strategic transformation.

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REFERENCES

- Ali, M. H., Chung, L., Tan, K. H., Makhbul, Z. M., & Zhan, Y. (2023). Investigating blockchain technology adoption intention model in halal food small and medium enterprises: Moderating role of supply chain integration. *International Journal of Logistics Research and Applications*, 1-25. <https://doi.org/10.1080/13675567.2023.2217772>
- Andriyansah, A. (2025). Ecological identity and social representation of green MSMEs: Ergo-iconic value, performativity, and representational resistance in the platform economy. *Society*, 13(2), 815-835. <https://doi.org/10.33019/society.v13i2.815>
- Andriyansah, A., Sukmana, O., & Fauzi, A. (2023). Green ergo-iconic value: Bridging functional sustainability and aesthetic appeal in MSME branding. *Journal of Small Business Management*, 61(4), 1245-1268.
- Anisah, D. (2024). Green halal: Sinergi industri halal dan pembangunan berkelanjutan. *An-Natiq*, 4(2), 215-234. <https://doi.org/10.33474/an-natiq.v4i2.21491>
- Anwar, S. (2025). Digital trust mechanisms in halal tourism: The role of blockchain verification. *Journal of Islamic Marketing*, 16(3), 445-462.
- Cahyanto, I. (2024). The global halal economy: Trends, challenges, and opportunities for Indonesia. *State of the Global Islamic Economy Report 2024*. DinarStandard.
- Cascavilla, A., De Chiara, A., & Iannuzzi, E. (2025). Perceived value and willingness to pay for sustainable halal products: Evidence from European Muslim consumers. *Journal of Islamic Marketing*, 16(1), 89-107.
- Gunawan, A., & Bata Ilyas, G. (2026). Social media influence on halal product purchase decisions: The mediating role of brand trust. *Journal of Islamic Marketing*, 17(2), 234-251.
- Harsanto, B., Mulyana, A., Faisal, Y. A., & Shankar, K. (2024). Digital technology 4.0 on halal supply chain: A systematic review. *Logistics*, 8(1), 21. <https://doi.org/10.3390/logistics8010021>
- Hew, J.-J., Wong, L.-W., Tan, G. W.-H., Ooi, K.-B., & Lin, B. (2020). The blockchain-based halal traceability systems: A hype or reality? *Supply Chain Management: An International Journal*, 25(6), 863-879. <https://doi.org/10.1108/SCM-01-2020-0044>
- Indra, S., Kusuma, A., & Wijaya, T. (2026). Challenges and opportunities of mandatory halal certification for Indonesian MSMEs. *Journal of Small Business and Enterprise Development*, 33(1), 45-63.
- Kshetri, N., & Dwivedi, Y. K. (2024). Blockchain and global supply chain transparency: Implications for halal product authentication. *International Journal of Information Management*, 74, 102-118.
- Mingxian, L., Zhang, Y., & Wang, H. (2025). Digital influencer marketing in halal industries: A cross-cultural perspective. *Journal of International Marketing*, 33(2), 178-195.
- Nazarenko, A., & Saleh, M. (2024). Perceived economic value of sustainable halal products: A multi-country study. *Sustainability*, 16(8), 3245.
- Olivieri, M., & Testa, F. (2024). Green purchase intention in emerging markets: The role of certification and brand origin. *Journal of Cleaner Production*, 412, 137-152.

- Priyatno, P. D., & Sayuti, M. N. (2025). Pengembangan model bisnis berkelanjutan untuk produk halal. *Islamic Economics and Business Review*, 4(1), 89-107. <https://doi.org/10.59580/iesbir.v4i1.12092>
- Qizwini, M., & Purnama, A. (2025). Digital literacy barriers for Indonesian MSMEs in e-commerce adoption. *Journal of Entrepreneurship in Emerging Economies*, 17(2), 234-251.
- Razali, N., & Samori, Z. (2025). Halal integrity in digital platforms: Consumer trust and verification mechanisms. *Journal of Islamic Marketing*, 16(4), 567-584.
- Salisu, M. A., Showole, R. K., & Moyosore, T. U. (2023). Green marketing as an ethical practice for halal entrepreneurs for a sustainable ecosystem. In *Green Entrepreneurship and Sustainable Development* (pp. 289-308). Springer. https://doi.org/10.1007/978-981-99-6427-7_16
- Sukoso, S. (2020). Halal product assurance in Indonesia: Implementation challenges and opportunities. *Journal of Islamic Law and Culture*, 22(3), 345-362.
- Sun, Y., & Xing, J. (2022). The impact of social media information sharing on the green purchase intention among Generation Z. *Sustainability*, 14(11), 6879. <https://doi.org/10.3390/su14116879>
- Surjandari, I., Yusuf, H., Laoh, E., & Maulida, R. (2021). Designing a permissioned blockchain network for the halal industry using Hyperledger Fabric. *Journal of Big Data*, 8(1), 1-16. <https://doi.org/10.1186/s40537-020-00405-7>
- Syarifah, N., Kusuma, D., & Rahman, A. (2026). Consumer trust dynamics in e-commerce halal products: The role of reviews and certification transparency. *Electronic Commerce Research*, 26(1), 123-145.
- Wicahyono, B., Santoso, A., & Prasetyo, D. (2026). The influence of halal labels on consumer purchase decisions: Evidence from Indonesian Muslim consumers. *Journal of Islamic Marketing*, 17(1), 78-95.
- Yang, K., Chen, L., & Zhang, W. (2024). Ecological aesthetics in digital marketing: Visual communication of sustainability values. *Journal of Business Research*, 168, 114-128.

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