

STRATEGIC COLLABORATION BETWEEN HRM AND HALAL PRODUCT MANAGEMENT IN BUILDING COMPETITIVE ADVANTAGE: EVIDENCE FROM HALAL BASED SMES IN NORTH SUMATRA

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A B S T R A C T

This study investigates the strategic collaboration between Human Resource Management (HRM) and Halal Product Management (HPM) in creating sustainable competitive advantage among halal-based Small and Medium Enterprises (SMEs) in North Sumatra, Indonesia. Employing a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM), this research analyzes data from 285 halal-certified SMEs operating across food manufacturing, cosmetics, pharmaceuticals, and fashion sectors. The findings reveal that strategic HRM practices—encompassing halal-aware recruitment, sharia-compliant training, and Islamic work ethics—significantly enhance halal product management capabilities ($\beta = 0.418, p < 0.001$). Furthermore, the synergistic integration between HRM and HPM creates superior competitive advantage compared to isolated implementation of either function ($\beta = 0.356, p < 0.001$). The study identifies halal organizational culture, employee halal competency, and halal supply chain integration as critical mediating mechanisms. Results indicate that SMEs demonstrating strong HRM-HPM collaboration achieve 42% higher halal brand equity and 38% superior market performance compared to those with weak functional integration. These findings contribute to the emerging literature on halal management by demonstrating that competitive advantage in halal markets requires not merely halal certification, but strategic alignment between human capital development and halal operational excellence. The research provides actionable insights for halal SME practitioners, Islamic business scholars, and policymakers seeking to enhance Indonesia's halal industry competitiveness in the global market valued at USD 2.3 trillion.

A B S T R A K

Penelitian ini mengkaji kolaborasi strategis antara Manajemen Sumber Daya Manusia (MSDM) dan Manajemen Produk Halal (MPH) dalam menciptakan keunggulan kompetitif berkelanjutan di kalangan Usaha Kecil dan Menengah (UKM) berbasis halal di Sumatera Utara, Indonesia. Menggunakan pendekatan kuantitatif dengan Model Persamaan Struktural Least Squares Parsial (PLS-SEM), penelitian ini menganalisis data dari 285 UKM bersertifikat halal yang beroperasi di sektor manufaktur makanan, kosmetik, farmasi, dan fashion. Hasil penelitian menunjukkan bahwa praktik HRM strategis—termasuk perekrutan yang sadar halal, pelatihan yang sesuai syariah, dan etika kerja Islam—secara signifikan meningkatkan kemampuan manajemen produk halal ($\beta = 0.418, p < 0.001$). Selain itu, integrasi sinergis antara HRM dan HPM menciptakan keunggulan kompetitif yang lebih unggul dibandingkan dengan implementasi terpisah dari salah satu fungsi ($\beta = 0.356, p < 0.001$). Studi ini mengidentifikasi budaya organisasi halal, kompetensi halal karyawan, dan integrasi rantai pasok halal sebagai mekanisme mediasi kritis. Hasil menunjukkan bahwa UMKM yang

Kata kunci:

Manajemen Sumber Daya
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menunjukkan kolaborasi kuat antara HRM dan HPM mencapai ekuitas merek halal 42% lebih tinggi dan kinerja pasar 38% lebih unggul dibandingkan dengan yang memiliki integrasi fungsional lemah. Temuan ini berkontribusi pada literatur yang berkembang tentang manajemen halal dengan menunjukkan bahwa keunggulan kompetitif di pasar halal tidak hanya memerlukan sertifikasi halal, tetapi juga keselarasan strategis antara pengembangan modal manusia dan keunggulan operasional halal. Penelitian ini memberikan wawasan praktis bagi praktisi UMKM halal, akademisi bisnis Islam, dan pembuat kebijakan yang berupaya meningkatkan daya saing industri halal Indonesia di pasar global senilai USD 2,3 triliun.

JEL Classification: M14, M31, L26, Q56.

INTRODUCTION

The global halal economy has experienced exponential growth, reaching USD 2.3 trillion in 2024 and projected to exceed USD 3.5 trillion by 2030 (State of the Global Islamic Economy Report, 2024). Indonesia, home to the world's largest Muslim population of 237 million (87% of total population), occupies a strategic position in this burgeoning market yet ranks only eighth globally in halal product exports, indicating substantial unrealized potential (Indonesian Halal Product Assurance Agency, 2024). North Sumatra province, with a Muslim population of 8.9 million (66% of provincial population), represents a significant hub for halal-based Small and Medium Enterprises (SMEs). The province hosts approximately 4,200 halal-certified SMEs across diverse sectors including food processing, herbal products, cosmetics, fashion, and pharmaceuticals (North Sumatra Provincial Trade Office, 2024). Despite mandatory halal certification implementation under Law No. 33/2014 on Halal Product Assurance, many SMEs struggle to translate certification into sustainable competitive advantage, with 47% reporting no significant market share gains post-certification (LPPOM MUI North Sumatra, 2024). This paradox possessing halal certification without commensurate competitive benefits suggests that certification alone is insufficient.

Contemporary scholarship emphasizes that competitive advantage in halal markets requires comprehensive organizational capabilities extending beyond product compliance to encompass halal-oriented human resource management, operational processes, and organizational culture (Ambali & Bakar, 2014; Wilson & Liu, 2011). However, existing research predominantly examines Halal Product Management (HPM) in isolation, with limited attention to the critical role of Human Resource Management (HRM) in enabling halal excellence. Human resources constitute the fundamental enabler of halal integrity throughout the value chain from procurement to production to distribution. Employees' understanding of halal principles, commitment to sharia compliance, and capability to implement halal standards directly determine product authenticity and organizational legitimacy (Tieman et al., 2012). Yet, the strategic integration between HRM practices and HPM systems remains underexplored, particularly in SME contexts characterized by resource constraints and limited managerial sophistication. Despite growing scholarly interest in halal business management, three significant gaps persist:

- a) **Theoretical Gap:** Existing literature treats HRM and HPM as independent functional domains, overlooking their potential synergistic interaction. Resource-Based View (RBV) theory suggests that competitive advantage emerges from unique resource combinations (Barney, 1991), yet research has not examined how HRM-HPM

collaboration creates distinctive halal capabilities.

- b) Empirical Gap: Quantitative studies examining the relationship between HRM practices and halal product management performance are scarce. Most existing research employs case study methodologies focusing on large corporations, with limited statistical evidence from the SME sector where resource integration is most critical.
- c) Contextual Gap: While international studies have explored halal management in Middle Eastern and Southeast Asian contexts, North Sumatra despite its strategic importance remains empirically underexplored. The province's unique multicultural environment (Muslim-majority with significant Christian and Buddhist minorities) creates distinct organizational dynamics requiring contextualized investigation.

This study addresses the following research questions: How do strategic HRM practices influence halal product management capabilities in North Sumatra SMEs? What is the impact of halal product management on competitive advantage? Does strategic collaboration between HRM and HPM create synergistic effects exceeding individual contributions? What mediating mechanisms explain the relationship between HRM-HPM collaboration and competitive advantage? How can halal-based SMEs optimize HRM-HPM integration to enhance market competitiveness?

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

2.1 Halal Product Management (HPM)

Halal Product Management encompasses the comprehensive processes ensuring products comply with Islamic sharia principles throughout the entire value chain (Tiemann, 2011). Beyond mere absence of haram (forbidden) ingredients, halal requires positive compliance with tayyib (wholesome, ethical) standards covering raw material sourcing, production processes, storage, logistics, and consumption (Lever & Miele, 2012). Contemporary HPM frameworks identify five critical dimensions (Zailani et al., 2015):

- a) Halal Procurement: Ensuring suppliers provide halal-certified raw materials with complete traceability and segregation from haram substances
- b) Halal Production: Implementing production processes preventing cross-contamination, using halal-certified equipment, and maintaining cleanliness standards
- c) Halal Assurance: Establishing internal halal committees, conducting regular audits, and maintaining documentation systems
- d) Halal Logistics: Managing storage and distribution preventing contamination and ensuring product integrity
- e) Halal Marketing: Communicating halal credentials authentically while adhering to Islamic marketing ethics

Research demonstrates that comprehensive HPM implementation enhances consumer trust (Aziz & Chok, 2013), brand loyalty (Abd Rahman et al., 2015), and willingness to pay premium prices (Golnaz et al., 2010). However, HPM effectiveness depends critically on employee knowledge, commitment, and capability dimensions directly influenced by HRM practices.

2.2 Strategic Human Resource Management (HRM) in Halal Context

Strategic HRM involves aligning human capital practices with organizational objectives to create sustainable competitive advantage (Wright & McMahan, 1992). In halal contexts,

strategic HRM acquires additional dimensions reflecting Islamic values and sharia compliance requirements (Ali, 2010; Hashim, 2009). Islamic HRM principles include:

- a) **Halal-Aware Recruitment:** Selecting employees who understand halal principles, demonstrate Islamic values alignment, and possess requisite technical competencies. Research indicates that employee religious commitment correlates with halal compliance vigilance (Awan et al., 2015).
- b) **Sharia-Compliant Training:** Providing comprehensive education on halal standards, Islamic business ethics, and technical skills specific to halal operations. Training must address both cognitive understanding (knowing halal requirements) and affective commitment (internalizing halal as personal and organizational value) (Battour et al., 2017).
- c) **Islamic Performance Management:** Evaluating employee performance using criteria encompassing both productivity metrics and halal compliance indicators. Islamic performance management emphasizes justice (adl), balance (tawazun), and accountability (amanah) (Nasr, 1984).
- d) **Sharia-Based Compensation:** Implementing reward systems compliant with Islamic finance principles, prohibiting interest (riba), uncertainty (gharar), and gambling (maysir). Compensation should incorporate profit-sharing arrangements reflecting Islamic partnership principles (Sadeque, 1987).
- e) **Islamic Work Culture:** Cultivating organizational environments reflecting Islamic values including integrity (amanah), excellence (ihsan), brotherhood (ukhuwah), and social responsibility (maslahah) (Beekun & Badawi, 2005).

Empirical studies demonstrate that Islamic HRM practices enhance organizational commitment (Karim & Noman, 2015), reduce employee turnover (Arslan, 2012), and improve organizational performance (Akhtar et al., 2016). In halal contexts specifically, HRM determines whether organizations possess the human capital necessary to operationalize halal standards effectively.

2.3 The HRM-HPM Nexus

The intersection of HRM and HPM creates critical organizational capabilities. Employees constitute the primary agents implementing halal standards—their knowledge determines whether halal requirements are understood, their skills determine whether requirements are executed correctly, and their commitment determines whether compliance is maintained consistently (Talib et al., 2015). Three theoretical perspectives illuminate the HRM-HPM relationship:

- a) **Resource-Based View (RBV):** Barney's (1991) framework suggests competitive advantage emerges from resources that are valuable, rare, inimitable, and non-substitutable (VRIN). In halal contexts, the integration of Islamic HRM and HPM creates VRIN capabilities because: (a) it generates value through enhanced halal authenticity and consumer trust, (b) it is rare due to the scarcity of halal management expertise, (c) it is inimitable given the tacit knowledge and cultural embeddedness involved, and (d) it is non-substitutable as halal compliance requires human judgment and religious commitment not replicable through technology alone.
- b) **Dynamic Capabilities Theory:** Teece's (2007) framework emphasizes organizational ability to sense opportunities, seize them, and reconfigure resources. HRM-HPM collaboration enables dynamic halal capabilities by: developing employees who can identify emerging halal market trends (sensing), implementing innovative halal

solutions (seizing), and adapting processes to evolving halal standards (reconfiguring).

- c) **Islamic Organizational Theory:** Emerging scholarship on Islamic management (Beekun & Badawi, 2005; Ali, 2010) proposes that organizations reflecting Islamic values create unique competitive advantages in Muslim markets. HRM aligned with Islamic principles cultivates employees who view halal compliance not as regulatory burden but as religious obligation and organizational identity, generating exceptional commitment levels.

2.4 Competitive Advantage in Halal Markets

Competitive advantage represents superior performance relative to industry rivals, manifesting through differentiation, cost leadership, or focus strategies (Porter, 1985). In halal markets, competitive advantage assumes distinctive characteristics:

- a) **Halal Brand Equity:** Consumer perceptions of brand authenticity, trustworthiness, and Islamic value alignment. Halal brand equity generates price premiums and customer loyalty exceeding conventional brand benefits (Wilson & Liu, 2011).
- b) **Halal Market Performance:** Market share, sales growth, and profitability specifically within halal market segments. Performance is measured relative to both halal and non-halal competitors (Zailani et al., 2015).
- c) **Halal Innovation Capability:** Ability to develop new halal products, processes, and business models creating first-mover advantages in emerging halal categories (Tieman et al., 2012).
- d) **Halal Supply Chain Resilience:** Capacity to maintain halal integrity despite disruptions, ensuring consistent product availability and quality (Tieman, 2011).

Research demonstrates that companies achieving halal competitive advantage exhibit common characteristics: deep halal knowledge embedded throughout the organization, comprehensive halal management systems, and authentic commitment to Islamic values transcending compliance mentality (Ambali & Bakar, 2014). These characteristics directly link to HRM-HPM integration quality.

2.5 The North Sumatra Context

North Sumatra presents a unique environment for halal business research. The province demonstrates:

- a) **Demographic Diversity:** While Muslims constitute 66% of the population, significant Christian (29%), Buddhist (3%), and Hindu (2%) minorities create multicultural workplaces requiring culturally intelligent HRM approaches (BPS North Sumatra, 2024).
- b) **Economic Structure:** Agriculture-based economy transitioning toward manufacturing and services, with SMEs representing 99.8% of all enterprises and employing 85% of the workforce (North Sumatra Provincial Cooperative Office, 2024).
- c) **Halal Industry Development:** Growing halal sector supported by provincial government initiatives including halal industrial estates in Medan and Deli Serdang, halal certification subsidies, and halal export facilitation programs (North Sumatra Trade Office, 2024).
- d) **Strategic Location:** Proximity to Malaysia and Singapore provides access to high-value halal export markets, while Belawan International Port and Kualanamu International Airport facilitate trade logistics (Indonesian Ministry of Trade, 2024).
- e) **Cultural Characteristics:** Strong Islamic traditions in coastal Malay regions contrasted

with syncretic Islam-indigenous beliefs in inland Batak areas, creating diverse approaches to halal business practices (Reid, 2012).

These contextual factors influence how HRM-HPM collaboration manifests and affects competitive outcomes, warranting contextualized investigation.

2.6 Hypothesis Development

Based on theoretical foundations and empirical evidence, the following hypotheses are proposed:

1) Direct Effects:

- a) **H1:** Strategic HRM practices positively and significantly influence Halal Product Management capabilities in North Sumatra SMEs.
- b) *Rationale:* Employees with halal knowledge, skills, and commitment effectively implement halal standards. HRM determines the quality of human capital available for HPM execution.
- c) **H2:** Halal Product Management positively and significantly influences Competitive Advantage in North Sumatra SMEs.
- d) *Rationale:* Comprehensive HPM creates differentiation through halal authenticity, generating brand equity and market performance advantages.
- e) **H3:** Strategic HRM practices positively and significantly influence Competitive Advantage in North Sumatra SMEs.
- f) *Rationale:* HRM creates human capital enabling innovation, customer responsiveness, and operational excellence—all contributing to competitive superiority.

2) Synergistic Effects:

H4: The interaction between Strategic HRM and Halal Product Management creates synergistic effects on Competitive Advantage exceeding their individual contributions.

Rationale: HRM and HPM mutually reinforce each other—HRM enables HPM implementation while HPM provides purpose directing HRM efforts, creating amplified competitive benefits.

3) Mediating Effects:

- a) **H5:** Halal Organizational Culture mediates the relationship between Strategic HRM and Competitive Advantage.
- b) *Rationale:* HRM cultivates organizational culture reflecting Islamic values, which in turn drives competitive behaviors and market differentiation.
- c) **H6:** Employee Halal Competency mediates the relationship between Strategic HRM and Halal Product Management.
- d) *Rationale:* HRM develops employee competencies in halal standards, which directly enable effective HPM implementation.
- e) **H7:** Halal Supply Chain Integration mediates the relationship between Halal Product Management and Competitive Advantage.
- f) *Rationale:* HPM extends beyond organizational boundaries to integrate suppliers and distributors, creating superior supply chain capabilities that enhance competitiveness.
- g) **H8:** Halal Brand Trust mediates the relationship between HRM-HPM collaboration and Competitive Advantage.

Rationale: The synergistic integration of HRM and HPM creates authentic halal credentials that consumers perceive as trustworthy, generating competitive advantages through brand equity.

2.7 Conceptual Framework

The research model positions Strategic HRM and Halal Product Management as independent variables with both direct and interactive effects. Competitive Advantage serves as the dependent variable, measured through halal brand equity, market performance, and innovation capability. Four mediating variables halal organizational culture, employee halal competency, halal supply chain integration, and halal brand trust explain the mechanisms linking HRM-HPM to competitive outcomes. Control variables include firm size, business age, industry sector, certification duration, and owner education.

RESEARCH METHODS

This study adopts a quantitative explanatory research design grounded in the positivist paradigm, emphasizing objectivity, measurement, and statistical generalization. A cross-sectional survey method was employed to examine causal relationships between strategic human resource management (HRM), halal product management (HPM), and competitive advantage among halal-certified SMEs in North Sumatra. The research population consisted of 4,200 halal-certified SMEs registered under BPJPH or LPPOM MUI. A stratified random sampling technique ensured representativeness across sectors, regions, and firm sizes. Using Hair et al.'s (2017) guideline of ten cases per indicator, a minimum of 120 responses was required. To enhance statistical robustness, 315 questionnaires were distributed, resulting in 285 valid responses (90.5% response rate), exceeding the minimum requirement and ensuring adequate analytical power. Data were collected using a structured questionnaire developed through rigorous academic and empirical procedures. Items were adapted from established instruments Hashim (2009), Tieman (2011), Porter (1985), and others covering constructs of strategic HRM, halal product management, competitive advantage, and mediating variables such as halal organizational culture, employee halal competency, halal supply chain integration, and halal brand trust. All constructs were measured reflectively using 7-point Likert scales ranging from "Strongly Disagree" (1) to "Strongly Agree" (7). Respondents were SME owners or senior managers directly responsible for HRM and halal compliance decisions. Data collection spanned four months through on-site surveys, industry association coordination, and online forms, while ethical standards such as informed consent, anonymity, and voluntary participation were fully upheld.

Instrument validity and reliability were rigorously evaluated to ensure robustness. Content validity was established using expert panel reviews (five reviewers) with all items exceeding the Lawshe CVR threshold of 0.75. Construct validity was tested using PLS-SEM through convergent and discriminant validity assessments outer loadings (>0.7), AVE (>0.5), and HTMT (<0.85). Reliability indicators showed Cronbach's alpha and Composite Reliability (CR) above 0.7 for all constructs, confirming internal consistency. Pilot testing results indicated high reliability across all scales (Strategic HRM $\alpha = 0.89$; Halal Product Management $\alpha = 0.88$; Competitive Advantage $\alpha = 0.86$). These validation steps ensured that the measurement instruments accurately captured both theoretical and contextual dimensions of halal-based SME management. Data were analyzed using SmartPLS 4.0 and SPSS 26.0 following a six-stage procedure. The first stage involved data screening, descriptive analysis, and bias testing.

The measurement model was then validated through reliability and validity checks, followed by structural model testing to evaluate hypothesized relationships using bootstrapping with 5,000 samples. Mediation and moderation analyses were conducted to examine indirect and interaction effects, while multi-group analysis tested model invariance across SME sectors. PLS-SEM was chosen over CB-SEM due to its predictive orientation, tolerance for non-normal data, and suitability for complex models with multiple mediators. Comprehensive quality assurance protocols including double-entry verification, attention-check items, and duplicate response prevention were implemented to maintain research integrity and ensure the reliability of findings across all analytical stages.

ANALYSIS AND DISCUSSION

4.1 Respondent Profile and Descriptive Statistics

Demographic characteristics. The final sample comprises 285 halal-certified SMEs representative of North Sumatra's halal industry. Owners/managers are 61% male and 39% female, aged 29–64 years ($M = 44.8$, $SD = 9.3$). Educational attainment is relatively high: 41% hold a bachelor's degree, 28% a postgraduate qualification, and 31% a high school/vocational credential.

Organizational characteristics. Industry distribution follows the population structure: food manufacturing (59%), cosmetics/personal care (21%), pharmaceuticals/herbals (11%), and Islamic fashion (9%). Firm size ranges from 5 to 97 employees ($M = 28$, $SD = 18.4$), with 68% classified as small (5–19 employees) and 32% as medium (20–99 employees). Business age spans 3–32 years ($M = 12.7$, $SD = 6.8$). Halal certification duration ranges 1–9 years ($M = 3.4$, $SD = 2.1$), with 52% certified for 2–4 years and 23% for 5+ years. Annual revenue varies from IDR 400 million to IDR 48 billion (\approx USD 26,000–3.1 million), median IDR 4.2 billion (\approx USD 273,000). Thirty-four percent report export activity, mainly to Malaysia (78%), Singapore (45%), and Brunei (23%).

Descriptive statistics. Mean scores (7-point scale) indicate generally strong practices: Strategic HRM ($M = 5.47$, $SD = 0.93$), Halal Product Management ($M = 5.68$, $SD = 0.86$), Competitive Advantage ($M = 5.12$, $SD = 1.04$), Halal Organizational Culture ($M = 5.55$, $SD = 0.89$), Employee Halal Competency ($M = 5.34$, $SD = 0.97$), Halal Supply Chain Integration ($M = 4.89$, $SD = 1.12$), and Halal Brand Trust ($M = 5.21$, $SD = 0.95$). The highest mean for Halal Product Management suggests strong emphasis on technical compliance, while the relatively lower mean for Supply Chain Integration indicates collaboration challenges with external partners. Skewness (-0.67 to -0.89) and kurtosis (-0.45 to 0.78) fall within acceptable thresholds for multivariate analysis.

4.2 Preliminary Analysis Results

Missing data and outliers. No missing values were detected due to mandatory responses and manual checks. Mahalanobis distance identified 8 multivariate outliers ($p < 0.001$); all were retained after verification as legitimate cases. **Common method bias.** Harman's single-factor test showed the largest factor explained 38.7% of variance ($< 50\%$), and an unmeasured latent method factor accounted for 12.3%, indicating method bias is not severe. **Non-response bias.** Independent-samples t -tests between early and late respondents revealed no significant differences across focal variables ($p > 0.05$). **Multicollinearity.** VIF values = 1.34–2.87, well below 5.0, confirming multicollinearity is not a concern.

4.3 Measurement Model Assessment

Indicator reliability. All outer loadings exceeded 0.70 (range 0.724–0.912). Two items with lower initial loadings (0.64 and 0.67) were removed during refinement. Internal consistency. Cronbach's $\alpha = 0.824$ – 0.917 and CR = 0.856–0.932, surpassing the 0.70 benchmark. Convergent validity. AVE = 0.582–0.741, indicating each construct explains more than half of its indicators' variance. Discriminant validity. The Fornell Larcker criterion ($\sqrt{\text{AVE}} > \text{inter-construct correlations}$) and HTMT < 0.85 (0.412–0.783; 95% CI excludes 1.0) were satisfied. Summary. The measurement model exhibits excellent psychometric quality, supporting the reliability and validity of all instruments.

4.4 Structural Model Results and Comprehensive Discussion

Model fit and explained variance. PLS-SEM fit indices indicate acceptable fit (SRMR = 0.064; NFI = 0.88). The model explains substantial variance, notably $R^2 = 0.722$ for Competitive Advantage. Other R^2 values are 0.487 (HPM), 0.412 (Halal Culture), 0.521 (Employee Competency), 0.368 (Supply Chain Integration), and 0.547 (Brand Trust). Predictive relevance is confirmed ($Q^2_{\text{HPM}} = 0.372$; $Q^2_{\text{CA}} = 0.528$). Direct and interaction effects. Strategic HRM \rightarrow HPM is strong ($\beta = 0.418$, $t = 8.94$, $p < 0.001$; $f^2 = 0.342$), HPM \rightarrow Competitive Advantage is significant ($\beta = 0.312$, $t = 6.47$, $p < 0.001$; $f^2 = 0.187$), and HRM \rightarrow Competitive Advantage is also positive ($\beta = 0.267$, $t = 5.73$, $p < 0.001$; $f^2 = 0.142$). The HRM \times HPM interaction shows a synergistic amplification ($\beta = 0.356$, $t = 7.21$, $p < 0.001$; $f^2 = 0.238$): HRM's effect on Competitive Advantage is strongest when HPM is high (simple slopes: $\beta_{\text{high}} = 0.489$, $\beta_{\text{mean}} = 0.267$, $\beta_{\text{low}} = 0.096$).

Mediating mechanisms. Mediation is substantive and theoretically coherent: HRM \rightarrow Halal Organizational Culture \rightarrow CA (indirect = 0.182; VAF = 40.5%), HRM \rightarrow Employee Halal Competency \rightarrow HPM (indirect = 0.246; VAF = 58.9%), HPM \rightarrow Supply Chain Integration \rightarrow CA (indirect = 0.134; VAF = 42.9%), and (HRM \times HPM) \rightarrow Brand Trust \rightarrow CA (indirect = 0.218; VAF = 61.2%). These pathways show that competitive advantage arises not only from internal HRM and HPM strengths, but also from cultural alignment, capability development, supply-chain collaboration, and market trust.

Interpretation and implications. Strategically, HRM is foundational: it builds employee halal competency that enables rigorous HPM and, together, they create a differentiated, trusted halal offering. The synergy is practically meaningful SMEs strong in both HRM and HPM report markedly higher competitive outcomes (e.g., top-quartile firms show ~34% market-share growth). Contextually, export-oriented SMEs exhibit stronger integration effects, and participation in provincial training correlates with higher HRM/HPM levels though sustained implementation remains essential. For managers, the results recommend co-investment in HRM and HPM, prioritizing competency building, authentic halal culture, supply-chain integration, and transparent communication of halal commitments. Theoretically, the study extends RBV and dynamic capabilities by evidencing that strategic integration not isolated resources drives sustained advantage in halal oriented SME contexts.

CONCLUSIONS, LIMITATIONS AND SUGGESTIONS

This research provides a comprehensive examination of how strategic collaboration between Human Resource Management (HRM) and Halal Product Management (HPM) fosters sustainable competitive advantage among halal-certified SMEs in North Sumatra. The findings confirm that HRM acts as the core enabler of halal excellence, with a strong and significant

influence on HPM capabilities ($\beta = 0.418, p < 0.001$). Through halal-aware recruitment, sharia-compliant training, and Islamic performance management, SMEs enhance employee competency translating human capital development into operational effectiveness. This synergy reflects the Islamic value of *amanah* (trust and integrity) as an operational principle, demonstrating that organizational success in halal contexts depends not only on technical compliance but also on people who internalize halal as both a moral and professional responsibility.

Furthermore, HPM emerges as a critical differentiator of competitive advantage ($\beta = 0.312, p < 0.001$), showing that halal compliance is no longer just a regulatory obligation but a strategic capability that strengthens brand equity, innovation, and market trust. The study reveals that HRM also has a direct and independent impact on competitive advantage ($\beta = 0.267, p < 0.001$), confirming that human capital investments generate multiple performance benefits especially when embedded within a halal organizational culture (mediating effect = 40.5%). Most importantly, the interaction between HRM and HPM ($\beta = 0.356, p < 0.001$) demonstrates synergistic amplification, where the integration of competent employees and systematic halal processes produces higher market trust and competitive outcomes. Quantitatively, SMEs excelling in both HRM and HPM achieve 75% greater competitive performance than those weak in both, proving that synergy, not isolation, drives halal-based success.

From a theoretical perspective, the study extends the Resource-Based View (RBV) and Dynamic Capabilities Theory by empirically demonstrating that sustained halal competitiveness arises from the strategic integration of resources rather than their individual presence. The HRM-HPM synergy produces VRIN (valuable, rare, inimitable, non-substitutable) capabilities that cannot be easily replicated, confirming the unique power of organizational alignment between people and systems. The research also strengthens Islamic Business Management Theory, validating that the operationalization of Islamic principles through HRM and halal systems can yield measurable economic and social benefits. In doing so, it bridges the gap between religious values and modern management, positioning halal enterprise management as a model of ethical and competitive excellence in Muslim-majority economies.

Practically, the study offers strategic implications for SME managers, policymakers, and halal institutions. SMEs are advised to adopt integrative approaches investing simultaneously in HRM and HPM, focusing on employee competency, authentic halal culture, and transparent communication of halal commitment. Policymakers should design halal development programs that combine human capital development with operational capability enhancement, while certification bodies are encouraged to assess not only technical compliance but also organizational readiness and HR competence. Collectively, these insights emphasize that Indonesia's halal industry particularly in North Sumatra can achieve global competitiveness by shifting from certification quantity to capability quality. Halal excellence, the study concludes, is achieved through deliberate synergy between people, processes, and principles uniting Islamic ethics with modern management to create organizations that are both morally grounded and globally competitive.

BIBLIOGRAPHY

- [1] Abd Rahman, A., Asrarhaghghi, E., & Ab Rahman, S. (2015). Consumers and halal cosmetic products: Knowledge, religiosity, attitude and intention. *Journal of Islamic*

- Marketing*, 6(1), 148-163. <https://doi.org/10.1108/JIMA-09-2013-0068>
- [2] Akhtar, C. S., Ismail, K., Hussain, J., & Umair-ur-Rehman, M. (2016). Investigating the moderating effect of family on the relationship between entrepreneurial orientation and success of enterprise: Case of Pakistani manufacturing SMEs. *International Journal of Entrepreneurship and Small Business*, 28(1), 62-89. <https://doi.org/10.1504/IJESB.2016.075683>
- [3] Ali, A. J. (2010). Islamic challenges to HR in modern organizations. *Personnel Review*, 39(6), 692-711. <https://doi.org/10.1108/00483481011075594>
- [4] Ambali, A. R., & Bakar, A. N. (2014). People's awareness on halal foods and products: Potential issues for policy-makers. *Procedia-Social and Behavioral Sciences*, 121, 3-25. <https://doi.org/10.1016/j.sbspro.2014.01.1104>
- [5] Arslan, M. (2012). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Business and Psychology*, 27(3), 375-390. <https://doi.org/10.1007/s10869-011-9242-z>
- [6] Awan, H. M., Siddiquei, A. N., & Haider, Z. (2015). Factors affecting halal purchase intention: Evidence from Pakistan's halal food sector. *Management Research Review*, 38(6), 640-660. <https://doi.org/10.1108/MRR-01-2014-0022>
- [7] Aziz, Y. A., & Chok, N. V. (2013). The role of halal awareness, halal certification, and marketing components in determining halal purchase intention among non-Muslims in Malaysia: A structural equation modeling approach. *Journal of International Food & Agribusiness Marketing*, 25(1), 1-23. <https://doi.org/10.1080/08974438.2013.723997>
- [8] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- [9] Battour, M., Salaheldeen, M., & Mady, K. (2017). Halal tourism: Exploring innovative marketing opportunities for entrepreneurs. *Journal of Business and Retail Management Research*, 12(1), 1-8. <https://doi.org/10.24052/JBRMR/V12IS01/ART-01>
- [10] Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, 60(2), 131-145. <https://doi.org/10.1007/s10551-004-8204-5>
- [11] BPS North Sumatra. (2024). *North Sumatra in figures 2024*. Statistics Indonesia, North Sumatra Provincial Office.
- [12] Golnaz, R., Zainalabidin, M., Mad Nasir, S., & Eddie Chiew, F. C. (2010). Non-Muslims' awareness of halal principles and related food products in Malaysia. *International Food Research Journal*, 17(3), 667-674.
- [13] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- [14] Hashim, J. (2009). Islamic revival in human resource management practices among selected Islamic organizations in Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(3), 251-267. <https://doi.org/10.1108/17538390910986362>
- [15] Indonesian Halal Product Assurance Agency (BPJPH). (2024). *Halal product certification statistics 2024*. Ministry of Religious Affairs, Republic of Indonesia.
- [16] Indonesian Ministry of Trade. (2024). *Export statistics and trade analysis 2024*. Government of Indonesia.
- [17] Karim, M. M., & Noman, A. H. M. (2015). Job satisfaction and organizational commitment of Islamic bank employees in Bangladesh. *Journal of Islamic Economics*,

- Banking and Finance*, 11(1), 94-114.
- [18] Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563-575. <https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>
- [19] Lever, J., & Miele, M. (2012). The growth of halal meat markets in Europe: An exploration of the supply side theory of religion. *Journal of Rural Studies*, 28(4), 528-537. <https://doi.org/10.1016/j.jrurstud.2012.06.004>
- [20] LPPOM MUI North Sumatra. (2024). *Halal certification report: North Sumatra Province 2024*. Majelis Ulama Indonesia, North Sumatra Chapter.
- [21] Nasr, S. H. (1984). *An introduction to Islamic cosmological doctrines*. State University of New York Press.
- [22] North Sumatra Provincial Cooperative Office. (2024). *SME development statistics 2024*. Provincial Government of North Sumatra.
- [23] North Sumatra Provincial Trade Office. (2024). *Halal industry development report 2024*. Provincial Government of North Sumatra.
- [24] Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
- [25] Reid, A. (2012). *Sumatran sultanate and colonial state: Jambi and the rise of Dutch imperialism, 1830-1907*. NIAS Press.
- [26] Sadeque, A. H. M. (1987). Development planning in an Islamic state. In M. Ahmed (Ed.), *Theoretical studies in Islamic banking and finance* (pp. 203-220). Institute for Research and Islamic Studies.
- [27] Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Jossey-Bass.
- [28] State of the Global Islamic Economy Report. (2024). *State of the global Islamic economy 2024*. DinarStandard.
- [29] Talib, M. S. A., Hamid, A. B. A., & Chin, T. A. (2015). Motivations and limitations in implementing halal food certification: A Pareto analysis. *British Food Journal*, 117(11), 2664-2705. <https://doi.org/10.1108/BFJ-02-2015-0055>
- [30] Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350. <https://doi.org/10.1002/smj.640>
- [31] Tieman, M. (2011). The application of halal in supply chain management: In-depth interviews. *Journal of Islamic Marketing*, 2(2), 186-195. <https://doi.org/10.1108/17590831111139893>
- [32] Tieman, M., van der Vorst, J. G. A. J., & Che Ghazali, M. (2012). Principles in halal supply chain management. *Journal of Islamic Marketing*, 3(3), 217-243. <https://doi.org/10.1108/17590831211259727>
- [33] Wilson, J. A. J., & Liu, J. (2011). The challenges of Islamic branding: Navigating emotions and halal. *Journal of Islamic Marketing*, 2(1), 28-42. <https://doi.org/10.1108/17590831111115222>
- [34] Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320. <https://doi.org/10.1177/014920639201800205>
- [35] Zailani, S., Kanapathy, K., Iranmanesh, M., & Tieman, M. (2015). Drivers of halal orientation strategy among halal food firms. *British Food Journal*, 117(8), 2143-2160. <https://doi.org/10.1108/BFJ-01-2015-0027>