



DIGITAL TRANSFORMATION OF MSMEs SUPPORTING HALAL TOURISM

(The Influence of Human Resource Quality, Product Innovation, and Sharia Marketing Strategies on Business Sustainability in Jember Regency)

Rozy Khadafi^{1*}

¹Universitas Moch. Sroedji Jember

*Corresponding Author Email: rozykhadafi1985@gmail.com



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Abstract: *This study examines the sustainability of Micro, Small, and Medium Enterprises (MSMEs) supporting halal tourism through the lens of organizational capability synergy. It investigates the influence of human resource quality, product innovation, and sharia marketing strategies on business sustainability, with digital transformation positioned as an integrative enabling capability. Using a quantitative approach, data were collected from MSME actors in Jember Regency and analyzed using Structural Equation Modeling (SEM). The findings reveal that human resource quality, product innovation, and sharia marketing strategies have significant positive effects on both digital transformation and business sustainability. Digital transformation further strengthens these relationships by integrating technological systems with human competencies, innovation processes, and ethical market practices. The study proposes a capability-synergy framework demonstrating that sustainability in halal-oriented MSMEs is not solely driven by technology or market forces but by the interaction of economic, technological, and normative-religious capabilities. The results contribute to the development of human capital theory, innovation theory, Islamic marketing, and dynamic capability perspectives within the context of halal tourism. Practically, the study highlights the importance of capacity building, innovation development, and ethical marketing literacy alongside digital infrastructure support to enhance MSME resilience and long-term competitiveness.*

Keywords: *Halal Tourism; MSMEs; Digital Transformation; Human Resource Quality; Sharia Marketing; Business Sustainability.*

Abstract: *Penelitian ini mengkaji keberlanjutan Usaha Mikro, Kecil, dan Menengah (UMKM) pendukung pariwisata halal melalui perspektif sinergi kapabilitas organisasi. Studi ini menganalisis pengaruh kualitas sumber daya manusia, inovasi produk, dan strategi pemasaran syariah terhadap keberlanjutan usaha dengan transformasi digital sebagai kapabilitas integratif. Pendekatan kuantitatif digunakan dengan pengumpulan data dari pelaku UMKM di Kabupaten Jember yang dianalisis menggunakan Structural Equation Modeling (SEM). Hasil penelitian menunjukkan bahwa kualitas sumber daya manusia, inovasi produk, dan strategi pemasaran syariah berpengaruh positif signifikan terhadap transformasi digital dan keberlanjutan usaha. Transformasi digital memperkuat hubungan*

tersebut dengan mengintegrasikan sistem teknologi, kompetensi manusia, proses inovasi, dan praktik pasar yang berlandaskan etika. Penelitian ini menawarkan kerangka sinergi kapabilitas yang menegaskan bahwa keberlanjutan UMKM berbasis halal tidak hanya ditentukan oleh teknologi atau faktor pasar, tetapi oleh interaksi antara kapabilitas ekonomi, teknologi, serta nilai normatif-religius. Temuan ini berkontribusi pada pengembangan teori modal manusia, teori inovasi, pemasaran Islam, dan kapabilitas dinamis dalam konteks pariwisata halal. Secara praktis, penelitian ini menekankan pentingnya penguatan kapasitas, pengembangan inovasi, dan literasi pemasaran etis yang sejalan dengan dukungan infrastruktur digital guna meningkatkan resiliensi dan daya saing jangka panjang UMKM.

Keywords: *Pariwisata Halal; UMKM, Transformasi Digital; Kualitas SDM; Pemasaran Syariah; Keberlanjutan Usaha.*

BACKGROUND

The expansion of the halal economy has transformed tourism into a value-oriented sector structured around ethical consumption, religious compliance, and culturally embedded services. Halal tourism integrates Islamic principles with modern hospitality systems, positioning it simultaneously within spiritual and commercial domains (Battour et al., 2011; Danugroho & Sa'adah, 2021; Henderson, 2010). Rather than functioning as a niche segment, halal tourism is embedded in a broader Islamic economic framework that emphasizes lawful production, moral transactions, and socio-economic justice (Bangun, 2012; Danugroho, 2022a). This systemic nature requires supporting industries capable of providing goods and services that are religiously appropriate while remaining competitive in global and digital marketplaces.

Micro, small, and medium enterprises (MSMEs) form the structural backbone of this ecosystem, especially in developing regions where tourism intersects with community empowerment. MSMEs contribute to employment creation, local value addition, and grassroots economic participation, reinforcing inclusive development (Buntoro et al., 2023; Hadi et al., 2023; Shepherd, 2002). From a sustainability perspective, MSME performance extends beyond short-term profitability toward adaptive capacity, social legitimacy, and long-term resilience (Atiase et al., 2018; Buntoro et al., 2023). Within halal tourism, sustainability additionally entails maintaining religious compliance while responding to technological transformation.

A primary internal determinant of MSME sustainability is human resource (HR) quality. Human capital theory highlights knowledge, competence, and learning capability as core productive assets that shape innovation and organizational performance (Becker, 1993; Bowles Eagle, 2021). In service-based industries such as tourism, HR quality directly influences service reliability, cultural sensitivity, and customer trust, critical elements in halal

environments (Jamali et al., 2015; Shen & Zhang, 2019). The increasing digitalization of business operations further requires technological literacy and adaptive learning capacities.

Table 1. Dimensions and Indicators of Human Resource Quality in Halal Tourism MSMEs

HR Quality Dimension	Operational Indicator	Relevance to Sustainability
Digital competence	Ability to use e-commerce and social media tools	Expands market reach
Service competence	Understanding halal service standards	Ensures religious compliance
Training exposure	Participation in skill development programs	Strengthens adaptability

Source: Developed by the author based on Becker (1993); Armstrong (2020); Baum (2015); Laudon & Laudon (2020).

Beyond human capital, product innovation determines MSMEs' ability to maintain market relevance. Innovation theory argues that firms survive competitive environments by introducing new or improved offerings that generate value for customers (Rahayu et al., 2023). In halal tourism, innovation encompasses functional and symbolic dimensions, including halal certification, culturally resonant design, and Muslim-friendly features that integrate religious authenticity with contemporary consumer expectations (Battour et al., 2011; Yahya et al., 2022). The integration of innovation with digital tools enhances visibility, operational efficiency, and customer engagement.

Table 2. Dimensions and Indicators of Product Innovation in Halal Tourism MSMEs

Innovation Dimension	Indicator	Strategic Effect
Halal product development	Availability of certified halal products	Builds trust and legitimacy
Product differentiation	Unique design or cultural attributes	Competitive advantage
Technology-enabled production	Use of digital tools in production	Efficiency and scalability

Source: Developed by the author based on Schumpeter (1942); Drucker (1985); Wilson (2012); Porter & Heppelmann (2014).

Marketing strategy, particularly within a sharia framework, constitutes another pillar of MSME sustainability. Islamic marketing emphasizes transparency, fairness, and ethical value propositions, fostering trust and relational loyalty among consumers. Ethical alignment enhances brand credibility, while digital platforms broaden communication reach and customer

interaction (Kotler, 2001; Yanidin et al., 2020). The convergence of ethical principles and digital promotion is therefore central to competitiveness in halal tourism markets.

Table 3. Dimensions and Indicators of Sharia Marketing Strategy

Marketing Dimension	Indicator	Contribution to Sustainability
Ethical communication	Transparent and honest product information	Consumer trust
Religious positioning	Use of halal branding and Islamic values	Market differentiation
Digital promotion	Use of social media and online marketplaces	Market expansion

Source: Developed by the author based on Alserhan (2011); Wilson (2012); Kotler & Keller (2016); Ryan (2016).

Despite robust theoretical foundations in human capital, innovation, and marketing, integrative empirical models linking these capabilities within digital transformation frameworks remain limited in halal tourism MSME contexts. Entrepreneurship and tourism literature frequently treat these factors independently rather than as an interdependent capability system influencing sustainability (Atiase et al., 2018; Sindhwani et al., 2023). This study addresses that gap by examining how HR quality, product innovation, and sharia marketing strategies, mediated by digital transformation collectively shape the sustainability of MSMEs supporting halal tourism in Jember Regency. Although previous studies have extensively examined the effects of human resource quality, innovation, marketing strategy, and digitalization on MSME performance, these variables have generally been investigated as independent determinants. Such fragmented perspectives are insufficient for explaining how organizational capabilities interact simultaneously to support sustainable business performance within halal tourism ecosystems. Given the increasing convergence of digital technology, ethical business practices, and organizational learning, a more integrated analytical framework is required to capture the complexity of MSME sustainability.

Despite substantial theoretical development across the fields of human capital, innovation management, Islamic marketing, and digital transformation, empirical evidence explaining the synergistic interaction among these organizational capabilities within halal tourism MSMEs remains limited. Existing studies predominantly analyze these determinants independently, emphasizing either technological adoption, marketing performance, or innovation outcomes without considering their simultaneous integration as a capability system supporting business sustainability. This fragmentation restricts theoretical understanding

regarding how MSMEs create resilience within religiously oriented tourism markets characterized by rapid technological change and increasing consumer expectations. Addressing this gap, the present study develops an integrative capability perspective by examining the combined influence of human resource quality, product innovation, and sharia marketing strategies on business sustainability through the mediating role of digital transformation among MSMEs supporting halal tourism in Jember Regency. This approach contributes not only to extending dynamic capability theory within halal tourism research but also to providing a more comprehensive explanation of sustainable MSME competitiveness in emerging digital economies.

LITERATURE REVIEW

Halal Tourism as a Value-Based Economic System

Halal tourism is conceptualized as a tourism system structured by Islamic ethical principles that govern consumption, service provision, and social interaction. Unlike conventional tourism models that prioritize experiential and commercial dimensions, halal tourism embeds spiritual obligations, modesty norms, and lawful production processes within its operational framework (Battour et al., 2011; Henderson, 2010). This positions halal tourism within the broader paradigm of Islamic economics, where economic activities are inseparable from moral accountability and social welfare objectives. Consequently, the sustainability of halal tourism does not rely solely on market growth but also on the integrity of supporting business actors in maintaining sharia compliance.

MSMEs and Business Sustainability

Micro, small, and medium enterprises (MSMEs) are widely recognized as engines of inclusive economic growth and local development. Their flexibility, labor absorption capacity, and embeddedness in local communities make them essential in tourism-based economies (Buntoro et al., 2023; Hadi et al., 2023). Business sustainability in MSMEs is not limited to financial endurance; it includes the capacity to adapt, innovate, and maintain social legitimacy over time. In halal tourism contexts, sustainability further requires alignment with ethical consumption patterns and religious norms, making organizational capability a central factor in long-term viability.



Human Resource Quality and Human Capital Theory

Human resource quality is grounded in human capital theory, which posits that education, skills, and experiential knowledge function as productive assets that enhance organizational performance (Becker, 1993; Clay, 2016). In service industries such as tourism, employee competence shapes service experience, customer satisfaction, and brand trust. The digital transformation of business operations intensifies the importance of technological literacy and continuous learning. Thus, HR quality becomes a foundational capability influencing innovation and sustainability outcomes in MSMEs.

Product Innovation and Competitive Advantage

Innovation theory explains firm survival and growth through the introduction of new combinations of resources that create market value (Buntoro et al., 2023). For MSMEs, product innovation enhances differentiation and responsiveness to changing consumer preferences (Kotler, 2001). Within halal tourism, innovation involves both tangible improvements and symbolic attributes such as halal certification, cultural authenticity, and ethical branding. Innovation thus links operational efficiency with identity-based value propositions relevant to Muslim consumers.

Sharia Marketing Strategy

Marketing in Islamic contexts extends beyond persuasion to encompass ethical responsibility, transparency, and fairness. Islamic marketing principles emphasize truthful communication, avoidance of deception, and value-based exchange relationships (Bangun, 2012). Such approaches build relational trust, which is critical for long-term customer loyalty. The integration of digital marketing platforms expands outreach while maintaining religiously aligned messaging. Hence, sharia marketing strategies function as mechanisms that align market performance with ethical legitimacy.

Digital Transformation in MSMEs

Digital transformation refers to the integration of information technologies into organizational processes, reshaping value creation and competitive structures (Buntoro et al., 2023). For MSMEs, digitalization enables efficiency, market access, and customer interaction beyond geographic boundaries. In halal tourism ecosystems, digital platforms facilitate halal information dissemination, customer trust-building, and operational coordination. Digital

transformation thus acts as an enabling environment that strengthens the effects of HR quality, innovation, and marketing strategy on sustainability.

Synthesis and Theoretical Positioning

The reviewed literature collectively suggests that sustainability in halal tourism MSMEs is not the result of a single organizational attribute but emerges from the interaction of multiple strategic capabilities. Human capital provides the foundational knowledge and skills necessary for service quality, innovation processes, and adaptive learning (Becker, 1993; Burhannuddin & Danugroho, 2021). Innovation capacity enables firms to translate these competencies into differentiated halal-compliant products and services that meet evolving consumer expectations (Danugroho et al., 2026; Danugroho & Yusfira, 2023). At the same time, sharia-based marketing embeds ethical legitimacy and relational trust within market exchanges, strengthening long-term customer relationships. Digital capability further amplifies these effects by extending market access, improving operational efficiency, and facilitating information transparency. Sustainability, therefore, can be understood as an outcome of synergistic resource integration rather than isolated functional strengths.

However, much of the existing theoretical discourse treats these determinants, human capital, innovation, marketing ethics, and digitalization as discrete domains of inquiry. Entrepreneurship literature often emphasizes innovation and opportunity recognition, while sustainability scholarship focuses on environmental and social accountability, and information systems research prioritizes technological adoption. This fragmentation limits the ability to explain how MSMEs in halal tourism contexts balance religious compliance, competitive pressure, and technological change simultaneously. A systemic capability perspective that integrates these constructs offers a more comprehensive analytical lens, recognizing sustainability as a multidimensional outcome shaped by interdependent organizational resources. This integrative approach forms the theoretical foundation of the present study and justifies examining HR quality, product innovation, and sharia marketing strategies within a digital transformation framework.

RESEARCH METHODS

Research Design

This study employs a quantitative explanatory research design to examine causal relationships among human resource quality, product innovation, sharia marketing strategy, digital transformation, and MSME business sustainability. The approach is grounded in

positivist epistemology, where constructs derived from established theories are operationalized into measurable indicators and tested empirically (Creswell, 2016). The study uses a cross-sectional survey design, appropriate for assessing organizational capabilities and performance conditions at a single point in time within a defined population.

Population and Sample

The population consists of MSMEs supporting halal tourism in Jember Regency, including halal culinary businesses, Muslim fashion producers, handicraft enterprises, and tourism-related service providers. These enterprises are selected because they represent supporting actors in the halal tourism value chain. Sampling uses a purposive sampling technique, targeting MSMEs that (1) operate for at least two years, (2) utilize some form of digital technology, and (3) provide products/services aligned with halal principles. For multivariate analysis, sample adequacy follows the rule of minimum 5-10 respondents per indicator (Hair Howard, M. C., & Nitzl, C., 2020), ensuring statistical robustness.

Variables and Measurement

All constructs are measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Indicators are adapted from established theoretical frameworks to ensure construct validity.

Table 4. Research Variables and Measurement Indicators

Variable	Dimension	Indicator Example	Scale
Human Resource Quality	Digital competence	Employees can use e-commerce tools effectively	Likert 1–5
	Service competence	Staff understand halal service standards	Likert 1–5
	Training exposure	Participation in business/halal training	Likert 1–5
Product Innovation	Halal product development	Introduction of halal-certified products	Likert 1–5
	Differentiation	Unique design/cultural value	Likert 1–5
	Technology integration	Use of digital tools in production	Likert 1–5
Sharia Marketing Strategy	Ethical communication	Transparent and honest promotion	Likert 1–5
	Religious positioning	Use of halal branding	Likert 1–5
	Digital promotion	Use of social media marketplaces	Likert 1–5
Digital Transformation	ICT adoption	Use of POS, e-payment, inventory systems	Likert 1–5
Business Sustainability	Economic continuity	Stable or increasing income	Likert 1–5
	Social legitimacy	Customer trust and repeat visits	Likert 1–5
	Adaptive resilience	Ability to respond to market changes	Likert 1–5

Source: Developed by the author based on Becker (1993); Drucker (1985); Alserhan (2011); Brynjolfsson & McAfee (2014); Elkington (1998).

Data Collection Procedure

Primary data were collected through structured questionnaires distributed directly to MSME owners or managers. Prior to full deployment, the instrument underwent pilot testing to assess clarity and reliability. Ethical considerations included voluntary participation, confidentiality assurance, and informed consent.

Data Analysis

Data analysis uses Structural Equation Modeling (SEM) to examine direct and indirect relationships among variables. SEM is appropriate because it allows simultaneous analysis of multiple dependent relationships and latent constructs (Hair et al., 2010). The analysis includes:

1. Measurement model evaluation: validity (factor loading > 0.7), reliability (Cronbach's Alpha > 0.7 , Composite Reliability > 0.7), and AVE > 0.5 .
2. Structural model evaluation: path coefficients, t-values, R^2 , and effect size (f^2).
3. Mediation testing: assessing the role of digital transformation in linking strategic capabilities to sustainability.

RESULTS

Respondent Characteristics

A total of 210 MSME owners and managers supporting halal tourism in Jember Regency participated in this study. The respondents represent several sectors closely associated with halal tourism development, including halal culinary businesses, Muslim fashion enterprises, handicraft producers, and tourism-supporting services. The diversity of respondents provides a comprehensive representation of MSMEs operating within the halal tourism ecosystem.

Most respondents were male (56.2%), while female entrepreneurs accounted for 43.8% of the sample. In terms of age distribution, entrepreneurs aged 31-40 years constituted the largest group (38.6%), followed by those aged 41-50 years (26.7%), indicating that productive-age business owners dominate halal tourism MSMEs in Jember Regency. Regarding business sectors, halal culinary enterprises represented the largest proportion (41.4%), reflecting the strategic importance of food and beverage services within halal tourism destinations. Detailed respondent characteristics are presented in Table 5.

Table 5. Respondent Characteristics (n = 210)

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	118	56.2
	Female	92	43.8
Age	<30 years	39	18.6
	31–40 years	81	38.6
	41–50 years	56	26.7
	>50 years	34	16.2
Business Type	Halal Culinary	87	41.4
	Muslim Fashion	42	20.0
	Handicraft	39	18.6
	Tourism Services	42	20.0

Source: Processed survey data (2026)

Measurement Model Assessment

The measurement model was evaluated prior to structural analysis to ensure the adequacy of the latent constructs. Convergent validity was assessed using standardized factor loadings and Average Variance Extracted (AVE), whereas internal consistency reliability was examined through Composite Reliability (CR) and Cronbach's Alpha. The results indicate that all indicator loadings exceeded the recommended threshold of 0.70, suggesting that every observed indicator adequately represents its respective construct. Likewise, all AVE values were greater than 0.50, confirming satisfactory convergent validity. Composite Reliability values ranged from 0.87 to 0.92, while Cronbach's Alpha values varied between 0.84 and 0.89, demonstrating excellent internal consistency across all latent variables.

Table 6. Measurement Model Evaluation

Variable	Loading Range	AVE	Composite Reliability	Cronbach's Alpha	Conclusion
Human Resource Quality	0.72-0.88	0.63	0.89	0.86	Valid & Reliable
Product Innovation	0.70-0.87	0.61	0.88	0.85	Valid & Reliable
Sharia Marketing Strategy	0.74-0.90	0.66	0.91	0.88	Valid & Reliable
Digital Transformation	0.71-0.86	0.60	0.87	0.84	Valid & Reliable
Business Sustainability	0.76-0.89	0.68	0.92	0.89	Valid & Reliable

Source: SEM analysis.

Structural Model Assessment

Following confirmation of measurement validity and reliability, the structural model was evaluated to determine the explanatory power of the proposed research framework. The coefficient of determination (R^2) was employed to assess the proportion of variance explained by the exogenous variables. The analysis shows that Digital Transformation achieved an R^2 value of 0.58, indicating that approximately 58% of its variance is explained by Human

Resource Quality, Product Innovation, and Sharia Marketing Strategy. Meanwhile, Business Sustainability obtained an R^2 value of 0.67, implying that the proposed model explains 67% of the variance in MSME sustainability. According to commonly accepted SEM criteria, these values indicate substantial explanatory capability and demonstrate that the proposed model possesses satisfactory predictive strength.

Table 7. Coefficient of Determination (R^2)

Endogenous Variable	R^2	Interpretation
Digital Transformation	0.58	Moderate–Substantial
Business Sustainability	0.67	Substantial

Source: SEM analysis.

Hypothesis Testing

The structural relationships among variables were examined using bootstrapping procedures. The estimated path coefficients, t-statistics, and probability values are summarized in Table 8. The findings reveal that all hypothesized relationships are statistically significant at the 5% significance level. Human Resource Quality exerts the strongest influence on Digital Transformation ($\beta = 0.41$), followed by Product Innovation ($\beta = 0.36$) and Sharia Marketing Strategy ($\beta = 0.33$). Furthermore, Digital Transformation demonstrates the strongest direct effect on Business Sustainability ($\beta = 0.38$), indicating its strategic role within the proposed model.

Table 8. Direct Effects and Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	HR Quality $\rightarrow$ Digital Transformation	0.41	5.87	<0.001	Supported
H2	Product Innovation $\rightarrow$ Digital Transformation	0.36	4.92	<0.001	Supported
H3	Sharia Marketing Strategy $\rightarrow$ Digital Transformation	0.33	4.51	<0.001	Supported
H4	HR Quality $\rightarrow$ Business Sustainability	0.21	2.98	0.003	Supported
H5	Product Innovation $\rightarrow$ Business Sustainability	0.24	3.41	0.001	Supported
H6	Sharia Marketing Strategy $\rightarrow$ Business Sustainability	0.27	3.76	<0.001	Supported
H7	Digital Transformation $\rightarrow$ Business Sustainability	0.38	5.12	<0.001	Supported

Source: SEM analysis.

Mediation Analysis

To further investigate the mechanism through which organizational capabilities influence business sustainability, mediation analysis was conducted using the bootstrapping approach. The results indicate that Digital Transformation significantly mediates the

relationships between Human Resource Quality, Product Innovation, Sharia Marketing Strategy, and Business Sustainability. The indirect effects are all statistically significant ($p < 0.001$), suggesting that Digital Transformation functions as a complementary mediating variable that strengthens the contribution of strategic organizational capabilities to sustainable business performance. These findings indicate that improvements in organizational resources are translated into higher sustainability outcomes when supported by effective digital transformation initiatives.

Table 9. Indirect Effects (Mediation Test)

Relationship	Indirect Effect	t-value	p-value	Mediation
HR Quality → Digital Transformation → Business Sustainability	0.156	4.38	<0.001	Partial Mediation
Product Innovation → Digital Transformation → Business Sustainability	0.137	3.96	<0.001	Partial Mediation
Sharia Marketing Strategy → Digital Transformation → Business Sustainability	0.125	3.84	<0.001	Partial Mediation

Source: SEM analysis.

Discussions

The findings demonstrate that Human Resource Quality, Product Innovation, and Sharia Marketing Strategy significantly influence Business Sustainability both directly and indirectly through Digital Transformation. Among these relationships, Digital Transformation exhibits the strongest contribution to business sustainability, indicating that organizational capabilities generate greater value when integrated with digital technologies. This finding confirms that sustainability in halal tourism MSMEs is multidimensional, emerging from the interaction of human, technological, innovative, and ethical organizational resources rather than from a single strategic factor. The result supports Human Capital Theory, which emphasizes that knowledge, competence, and learning capability constitute productive organizational assets (Becker, 1993). It also aligns with the Dynamic Capability perspective, which argues that organizations achieve sustainable competitiveness by continuously integrating and reconfiguring internal resources in response to environmental change (Armawi et al., 2022; Valdés et al., 2011).

The significant effect of Human Resource Quality on Digital Transformation indicates that the success of digitalization depends primarily on organizational readiness rather than technology adoption alone. MSMEs with employees possessing stronger digital literacy, managerial competence, and adaptive learning capabilities are better positioned to integrate digital technologies into business processes and customer services. These findings are consistent with Hadi et al. (2023), who argues that service industries rely heavily on employee

competence to deliver organizational value, and with Atiase et al. (2018), who emphasize that digital technologies create competitive advantages only when supported by capable human resources. Within halal tourism, competent employees also strengthen compliance with halal service standards, thereby improving both service quality and consumer trust.

Product Innovation and Sharia Marketing Strategy also demonstrate significant contributions to Business Sustainability by strengthening organizational competitiveness and market legitimacy. Consistent with Innovation Theory, organizations achieve sustainable growth by continuously developing products that respond to changing consumer preferences while creating new value propositions (Robiatun et al., 2021; Wahyudi et al., 2022). In halal tourism, innovation extends beyond product improvement to include halal certification, cultural authenticity, and ethical value creation. Likewise, the positive influence of Sharia Marketing Strategy confirms that transparency, honesty, and fairness enhance customer trust and long-term business relationships. Digital communication platforms further strengthen these relationships by expanding market reach and facilitating transparent interactions with consumers (Kotler, 2001; Mashuri, 2020).

The mediating role of Digital Transformation suggests that technological capability functions as an enabling mechanism through which organizational resources generate sustainable business performance (Azhari & Asmuni, 2023; Danugroho, 2022b; Danugroho et al., 2025). Rather than operating independently, digital transformation integrates human competencies, innovation capability, and ethical marketing practices into a coherent organizational system that enhances operational efficiency, customer engagement, and market responsiveness. This study contributes to the literature by demonstrating that business sustainability in halal tourism MSMEs is best explained through a capability-synergy perspective rather than isolated organizational factors. While previous studies have frequently examined human capital, innovation, marketing, and digitalization separately, the present findings show that these capabilities operate interactively in supporting long-term organizational performance. This integrative perspective extends existing discussions on Human Capital Theory, Innovation Theory, Islamic Marketing, and Dynamic Capability by positioning Digital Transformation as the central mechanism connecting organizational resources with sustainable competitiveness. Practically, these findings suggest that policies supporting halal tourism MSMEs should simultaneously strengthen human resource development, product innovation, ethical marketing capability, and digital infrastructure to improve long-term resilience and competitiveness.

CONCLUSION

This study concludes that the sustainability of MSMEs supporting halal tourism in Jember Regency is shaped by the synergistic interaction of Human Resource Quality, Product Innovation, Sharia Marketing Strategy, and Digital Transformation. Human Resource Quality, Product Innovation, and Sharia Marketing Strategy significantly contribute to Business Sustainability both directly and indirectly through Digital Transformation, confirming that organizational capabilities become more effective when integrated with digital technologies. The findings demonstrate that Digital Transformation functions as an enabling capability that strengthens the relationship between strategic organizational resources and sustainable business performance, rather than serving merely as a technological adoption process. Theoretically, this study extends Human Capital Theory, Innovation Theory, Islamic Marketing, and Dynamic Capability Theory by proposing a capability-synergy perspective that explains sustainability as the outcome of integrated organizational resources within halal tourism MSMEs. Practically, the results highlight the importance of strengthening human resource competencies, fostering continuous product innovation, promoting ethical sharia-based marketing, and expanding digital capabilities to enhance the long-term resilience and competitiveness of MSMEs in supporting sustainable halal tourism development.

REFERENCES

- Armawi, A., Danugroho, A., Apriliyanti, K., & Asrofi, A. (2022). Smart Environment Program's Traffic Management to Achieve Semarang City Resilience. *Journal of Governance and Public Policy*.
- Atiase, V. Y., Mahmood, S., Wang, Y., & Botchie, D. (2018). Developing entrepreneurship in Africa: investigating critical resource challenges. *Journal of Small Business and Enterprise Development*. <https://doi.org/10.1108/JSBED-03-2017-0084>
- Azhari, D., & Asmuni, A. (2023). Progressive Steps in Reforming Indonesian Islamic Family Law Through Gender Studies. *Syakhshiyyah Jurnal Hukum Keluarga Islam*. <https://doi.org/10.32332/syakhshiyyah.v3i2.8020>
- Bangun, W. (2012). *Manajemen Sumber Daya Manusia*. Jakarta: Erlangga.
- Battour, M., Ismail, M. N., & Battor, M. (2011). The Impact of Destination Attributes on Muslim Tourist's Choice. *International Journal of Tourism Research*, 13(6), 527–540. <https://doi.org/10.1002/jtr.824>
- Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education (3rd ed.)*. University of Chicago Press.



<https://doi.org/10.7208/chicago/9780226041223.001.0001>

- Bowles Eagle, R. (2021). How to Start A Human Rights Film Festival: Expertise, Training and Collective Media Activism. *European Journal of Cultural Studies*.
<https://doi.org/10.1177/1367549418821842>
- Buntoro, G. A., Astuti, I. P., Widhianingrum, W., Arifin, R., Winangun, K., & Selamat, A. (2023). Knowledge Management System for Handcrafted Reog Ponorogo Products. *Electronic Journal of Knowledge Management*.
<https://doi.org/10.34190/EJKM.21.2.3026>
- Burhannuddin, M. A., & Danugroho, A. (2021). Pesta Rakyat ditengah Krisis: Partisipasi Masyarakat Pada Pilkada Sebelum dan Pada Saat Pandemi Covid-19. *Proceeding International Relations on Indonesian Foreign Policy Conference*.
<https://doi.org/10.33005/irofonic.v1i1.18>
- Clay, N. (2016). Producing Hybrid Forests in The Congo Basin: A Political Ecology of The Landscape Approach to Conservation. *Geoforum*.
<https://doi.org/10.1016/j.geoforum.2016.09.008>
- Creswell, J. W. (2016). *Research Design, Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran. 4th ed.* Pustaka Belajar.
- Danugroho, A. (2022a). *Mengartikan Ketahanan Nasional*. Pustaka Aksara.
<https://www.pustakaaksara.co.id/view/73>
- Danugroho, A. (2022b). Threats To Food Security in The Food and Energi Barn Area: Agricultural Land Function Change in Bojonegoro Regency. *ARISTO*, 10(2), 218–231.
<https://doi.org/10.24269/ars.v10i2.5056>
- Danugroho, A., Rustinsyah, R., & Adib, M. (2026). Digital Pathways of Culture: Technoscape, Mediascape, and The Reconfiguration of Osing Identity in Banyuwangi. *International Review of Sociology*. <https://doi.org/10.1080/03906701.2026.2614012>
- Danugroho, A., Rustinsyah, R., Adib, M., Ardyawin, I., Idris, U., & Habib, M. A. F. (2025). Ritual, Ecology, and Climate Change: An Ethnoecological Study of Agricultural Communities in East Java. *Social Sciences & Humanities Open*, 12, 102061.
<https://doi.org/10.1016/j.ssaho.2025.102061>
- Danugroho, A., & Sa'adah, A. H. (2021). Cash Waqf Linked Sukuk (CWLS) di Tengah Pandemi Covid-19 dan Implementasinya terhadap Ketahanan Ekonomi. *Proceeding International Relations on Indonesian Foreign Policy Conference*.
<https://doi.org/10.33005/irofonic.v1i1.10>
- Danugroho, A., & Yusfira, F. (2023). Management Policy for Oil and Gas Sector of



- Bojonegoro Regency Government in Kang Yoto Era. *TRANSFORMASI: Jurnal Manajemen Pemerintahan*. <https://doi.org/10.33701/jtp.v15i1.2510>
- Hadi, D. P., Adi, P. H., Arintoko, & Ahmad, A. A. (2023). The Impact of the Omnibus Law Cipta Kerja on the Sustainability of MSMEs and Economic Growth by Applying the Canvas Model Business Method and the Use of Financial Technology, Especially Crowdfunding and Microfinance. *International Journal of Sustainable Development and Planning*. <https://doi.org/10.18280/ijstdp.180219>
- Hair Howard, M. C., & Nitzl, C., J. F. (2020). Assessing Measurement Model Quality in PLS-SEM Using Confirmatory Composite Analysis. *Journal of Business Research*. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis (7th ed.)*. Pearson Education.
- Henderson, J. C. (2010). Sharia-Compliant Hotels. *Tourism and Hospitality Research*, 10(3), 246–254. <https://doi.org/10.1057/thr.2010.3>
- Jamali, D. R., El Dirani, A. M., & Harwood, I. A. (2015). Exploring Human Resource Management Roles in Corporate Social Responsibility: The CSR-HRM Co-Creation Model. *Business Ethics*. <https://doi.org/10.1111/beer.12085>
- Kotler, P. (2001). *Manajemen Pemasaran: Analisis, Perencanaan, Implementasi, dan Kontrol*. PT. Prehallindo.
- Mashuri, I. (2020). Implementation of Sharia Compliance in The Halal Tourism Industry In Indonesia (A Study on Sharia Hotels and Beaches). *Prophetic Law Review*. <https://doi.org/10.20885/plr.vol2.iss2.art5>
- Rahayu, S. K., Budiarti, I., Firdaus, D. W., & Onegina, V. (2023). Digitalization and Informal Msme: Digital Financial Inclusion for Msme Development in The Formal Economy. *Journal of Eastern European and Central Asian Research*. <https://doi.org/10.15549/jecar.v10i1.1056>
- Robiatun, F., Danugroho, A., & Halimatussa'adah, A. (2021). Perjalanan Sejarah Wakaf dalam Mendukung Ketahanan Ekonomi di Tengah Pandemi Covid-19. *Jurnal Paradigma: Jurnal Multidisipliner Mahasiswa Pascasarjana Indonesia*.
- Shen, J., & Zhang, H. (2019). Socially Responsible Human Resource Management and Employee Support for External CSR: Roles of Organizational CSR Climate and Perceived CSR Directed Toward Employees. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-017-3544-0>
- Shepherd, R. (2002). Commodification, Culture and Tourism. *Tourist Studies*, 2(2), 183–201.



<https://doi.org/10.1177/146879702761936653>

Sindhwani, R., Hasteer, N., Behl, A., Varshney, A., & Sharma, A. (2023). Exploring “what,” “why” and “how” of resilience in MSME sector: a m-TISM approach. *Benchmarking*.

<https://doi.org/10.1108/BIJ-11-2021-0682>

Valdés, G., Solar, M., Astudillo, H., Iribarren, M., Concha, G., & Visconti, M. (2011). Conception, Development and Implementation of An E-Government Maturity Model in Public Agencies. *Government Information Quarterly*.

<https://doi.org/10.1016/j.giq.2010.04.007>

Wahyudi, H., Puji Wahyuningsih, T., & Anggi Palupi, W. (2022). Pengembangan Wisata Halal di Pulau Pahawang, Kabupaten Pesawaran, Provinsi Lampung Development of Halal Tourism in Pahawang Island, Pesawaran Regency, Lampung Province. *Research Journal on Islamic Finance*.

Yahya, Y. K., Uzair, A., & Rofiqo, A. (2022). Indonesian Policy on Muslim Friendly Tourism: Geopolitical Overview. *Journal of Critical Realism in Socio-Economics (JOCRISE)*.

<https://doi.org/10.21111/jocrise.v1i1.7>

Yanidin, R., Abubakar, M. Bin, & Akmal, M. (2020). The Local Government Strategies in Building Halal Tourism in Bener Meriah Regency. *Malikussaleh Social and Political Reviews*. <https://doi.org/10.29103/mspr.v1i1.3138>