



Islamic Marketing, Customer Service, and Technological Innovation: Advancing Women's Empowerment in Indonesian MSMEs

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ABSTRACT

This study investigates the influence of Islamic marketing and customer service on the economic empowerment of women entrepreneurs in Indonesian micro, small, and medium-sized enterprises (MSMEs), with technological innovation acting as a mediating variable. It examines how Islamic business ethics and service orientation, combined with digital innovation, promote women's roles in household welfare, employment, and inclusive growth. A quantitative approach was conducted among 130 women-led MSMEs in Lampung Province, Indonesia. Partial least squares structural equation modeling (PLS-SEM) was employed to test seven hypotheses that link Islamic marketing, customer service, technological innovation, and women's empowerment. Both measurement and structural models were assessed to ensure validity and reliability. The results indicate that Islamic marketing has no significant direct effect on women's empowerment, while customer service demonstrates a strong positive influence. Technological innovation emerges as the most critical predictor, mediating the impact of both Islamic marketing and customer service. These findings suggest that Islamic business practices must be supported by digital adoption to drive empowerment. This study is among the first to empirically examine the mediating role of technological innovation in the relationship between Islamic marketing, customer service, and women's empowerment in the context of MSMEs. It offers new insights into how combining Islamic values with digital transformation supports sustainable and inclusive economic development in Muslim-majority regions.

Keywords: Islamic Marketing, Digital Transformation, Gender and Entrepreneurship, Inclusive Economic Growth

JEL Classifications: M15, M31, O32

1. INTRODUCTION

Women's economic participation has become an increasingly global priority in achieving inclusive and sustainable development. International institutions, such as UN Women and the World Bank, highlight women's entrepreneurship as a crucial mechanism for poverty reduction, improving household welfare, and generating employment, particularly in developing economies (UN Women, 2024). Within Muslim-majority markets, women's entrepreneurial engagement is further shaped by religiosity, Islamic ethics, and access to social and financial capital (ChoudhuryKaul et al.,

2023; Khan, 2024). Hence, exploring women's empowerment through Islamic marketing, customer service, and technological innovation is essential to bridge social welfare objectives and business sustainability.

In Indonesia, micro, small, and medium enterprises (MSMEs) form the backbone of the national economy, contributing approximately 60.5% to the GDP and serving as key agents of resilience (Sinha et al., 2024). A substantial proportion are women-led, highlighting their dual role in household stability and national economic growth. However, women entrepreneurs often face persistent

barriers, including limited market access, insufficient marketing skills, and inconsistent service practices that do not fully align with Islamic ethical standards (Naieema and Farid, 2016; Tondro et al., 2025). Furthermore, low technological adoption remains a structural obstacle restricting market expansion and operational efficiency (Quaye et al., 2024; Yuwono et al., 2024).

Marketing and service excellence are widely recognized as crucial for the performance of MSMEs. Classical marketing research confirms the positive impact of segmentation, promotion, and customer service on business success (Kotler and Keller, 2016; Zeithaml et al., 2020; Ricardianto et al., 2023). However, studies integrating Islamic marketing perspectives remain limited. Islamic marketing emphasizes ethics, justice, honesty, and blessing (barakah) beyond profit maximization (Tondro et al., 2025; Wilson and Liu, 2011), while Islamic customer service is assessed not only by satisfaction but by moral and ethical integrity in transactions (Othman et al., 2025; Yusoff, 2019).

Despite its relevance, the literature rarely connects Islamic marketing and customer service directly with women's economic empowerment, particularly in MSMEs driven by Islamic values (Naieema and Farid, 2016). Moreover, technological innovation is often viewed as a mere supporting factor, although it can serve as a strategic mediator linking marketing practices, service quality, and empowerment outcomes in the digital economy (Vial, 2019; Mutmainah et al., 2025). Understanding this mediating mechanism is particularly crucial in Muslim MSME contexts, where digital tools can amplify women's roles in sustaining household and community welfare (Endris and Kassegn, 2022; Khan, 2024; Tondro et al., 2025).

Against this background, this study aims to analyze the influence of Islamic marketing and customer service on the economic empowerment of women entrepreneurs in MSMEs in Lampung Province, with technological innovation as a mediating variable. This region was selected due to its large concentration of women-managed MSMEs, providing a relevant setting for examining how Islamic values and digital transformation intersect to shape empowerment dynamics. Theoretically, this research integrates perspectives from Islamic marketing, service management, and digital innovation, extending the discussion into the domain of women-led MSMEs (Naieema and Farid, 2016; Tondro et al., 2025). It also builds upon prior works emphasizing digital transformation as a key enabler of MSME resilience and competitiveness in developing countries (Salaheldeen et al., 2024; Vial, 2019).

This study makes a significant contribution to the literature in three primary ways. First, it proposes a comprehensive model that links Islamic marketing, customer service, and technological innovation as key determinants of women's empowerment. Second, it empirically tests the mediating role of technological innovation, addressing a gap in prior studies that often considered innovation as an external or control variable (Rofiq et al., 2024). Third, it contextualizes the relationship between Islamic business practices and empowerment within Indonesia's growing digital MSME ecosystem, providing localized insights relevant to emerging

Muslim economies. Earlier studies have supported the relevance of this integration. For instance, Islamic digital marketing and branding have a positive impact on MSME performance when strengthened by innovation (Rofiq et al., 2024), while entrepreneurial knowledge and risk tolerance mediate innovation-driven initiatives among women-led enterprises (Fanaja et al., 2023). Similarly, digital marketing strategies have been shown to accelerate women's business growth and competitiveness (Rosepti and Niasari, 2022). Building on these insights, this study aims to bridge the theoretical gap by developing an integrated framework that combines Islamic marketing ethics, customer service quality, and technological innovation to explain women's economic roles in MSMEs.

Ultimately, the study aims to contribute both theoretically and practically: theoretically by extending the discourse on Islamic marketing and innovation-mediated empowerment, and practically by providing guidance for MSME actors and policymakers on developing Shariah-compliant, digitally empowered business models that enhance women's participation in sustainable economic development.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Role of Women MSME Entrepreneurs

Women entrepreneurs managing micro, small, and medium enterprises (MSMEs) significantly contribute to economic development through job creation, poverty reduction, and enhanced competitiveness (Endris and Kassegn, 2022; Nurbaeti et al., 2024). In Indonesia, many MSMEs are women-led, yet they often face limitations in market access, management, and the use of technology (Fanaja et al., 2023; Naieema and Farid, 2016). While most studies emphasize social and cultural aspects of empowerment, few examine its association with Islamic-based marketing and service practices (Rofiq et al., 2024; Yusoff, 2019). This study draws upon the Theory of Planned Behavior (Ajzen, 1991), which explains that entrepreneurial action is influenced by attitudes, norms, and perceived control. Additionally, it incorporates the Resource-Based View (Barney, 1991), which views technology, service quality, and Islamic values as strategic resources that enhance women's economic empowerment. From an Islamic perspective, Qur'anic principles of 'adl (justice) and ihsan (excellence) are emphasized in QS. An-Nahl: 90 aligns with maqāsid al-sharī'ah values protecting faith, life, intellect, progeny, and wealth (Saleh et al., 2023). Thus, Islamic marketing and service practices serve not only business goals but also ethical and economic empowerment objectives.

2.2. Islamic Marketing and Women's Economic Role

Islamic marketing, grounded in halal, fairness, and transparency, promotes ethical conduct and long-term growth (Tondro et al., 2025; Yusoff, 2019). Studies highlight its relevance in digital zakat fundraising and other Islamic economic activities (Soleh, 2020; Oemar et al., 2023). However, research directly linking Islamic marketing to women-led MSMEs remains limited (Trianto et al., 2021; Mujiatun et al., 2023).

H₁: Islamic marketing has a positive influence on the economic role of women in MSMEs.

2.3. Customer Service and Women's Economic Role

Service quality affects customer satisfaction and loyalty through responsiveness, reliability, assurance, empathy, and tangibles (Yeong et al., 2020). Within Islamic values, it also entails moral integrity and the pursuit of barakah (Tondro et al., 2025; Yusoff, 2019). High service quality enhances MSME performance (Ali et al., 2021; Setiawan et al., 2022), though few studies explore its effect on women's empowerment (ChoudhuryKaul et al., 2023).

H₂: Customer service has a positive influence on the economic role of women in MSMEs.

2.4. Technological Innovation and Women's Economic Role

Digital innovation enables MSMEs to enhance efficiency, reach, and competitiveness (Setiawan et al., 2023; Vial, 2019). In Islamic economic contexts, digital transformation supports inclusive growth (Salaheldeen et al., 2024). However, few works explore technology as a direct driver of women's empowerment (ChoudhuryKaul et al., 2023; Rofiq et al., 2024).

H₃: Technological innovation has a positive impact on the economic role of women in MSMEs.

2.5. Islamic Marketing and Technological Innovation

Marketing increasingly depends on digital platforms, e-commerce, and online payment systems. Prior studies confirm that technology-based marketing expands market reach (Setiawan et al., 2023; Vial, 2019), but the link between Islamic marketing and digital adoption remains underexplored (Rofiq et al., 2024; Salaheldeen et al., 2024).

H₄: Islamic marketing positively influences technological innovation.

2.6. Customer Service and Technological Innovation

Digital tools such as CRM systems and online platforms enhance customer service efficiency (Setiawan et al., 2023; Endara et al., 2025). In Islamic business ethics, service excellence includes honesty and moral conduct (Tondro et al., 2025; Yusoff, 2019). However, empirical connections between Islamic-oriented service and technology adoption in women-led MSMEs are scarce (ChoudhuryKaul et al., 2023).

H₅: Customer service positively influences technological innovation.

2.7. Mediating Role of Technological Innovation

Technological innovation acts as a bridge amplifying the effects of marketing and service quality on business outcomes (Setiawan et al., 2023; Vial, 2019). For women-led MSMEs, it translates Islamic-based practices into tangible economic benefits (ChoudhuryKaul et al., 2023; Endris and Kassegn, 2022). However, few studies explicitly examine its mediating role (Rofiq et al., 2024; Salaheldeen et al., 2024).

H₆: Technological innovation mediates the effect of Islamic marketing on the economic role of women in MSMEs.

H₇: Technological innovation mediates the effect of customer service on the economic role of women in MSMEs.

A summary of the hypotheses is presented in Table 1, and the conceptual framework is illustrated in Figure 1.

3. METHODOLOGY

3.1. Research Design

This study employed a quantitative cross-sectional design, using partial least squares-structural equation modeling (PLS-SEM) with Smart-PLS 4.0. PLS-SEM was selected for its suitability in testing complex causal models with small to medium samples and non-normal data (Ali et al., 2021; Hair et al., 2019; Sarstedt et al., 2022). The model examines the effects of Islamic marketing (X_1) and customer service (X_2) on the economic role of women MSMEs (Y), mediated by technological innovation (Z) (Naieema and Farid, 2016; Rofiq et al., 2024).

3.2. Instrument Development

Data were gathered through a structured five-point Likert questionnaire (1 = strongly disagree; 5 = strongly agree) developed in two stages. First, a pre-survey and interviews with 12 female MSME experts identified key constructs, meeting recommended exploratory sample sizes (Hennink and Kaiser, 2022; Nurhayati et al., 2025). Participants met the criteria of business ownership for at least 5 years, a minimum turnover of IDR 35,000,000, and active MSME mentorship (Huda et al., 2022; Karaman, 2021). Second, five academic experts reviewed the questionnaire for clarity, construct relevance, and content validity, consistent with best practices in Islamic marketing research (Kamarudin et al., 2022; Zulkifli et al., 2024). Revisions ensured adequate reliability and validity for hypothesis testing.

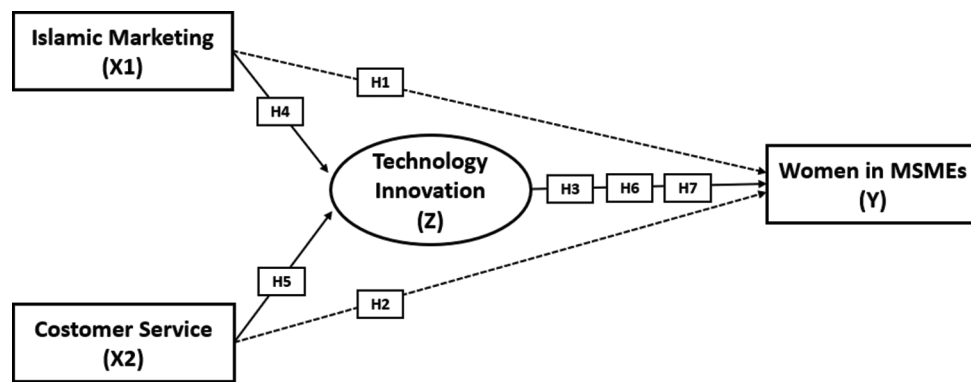
3.3. Sampling and Respondents

Purposive sampling targeted female MSME entrepreneurs in Lampung Province, Indonesia, meeting criteria of ≥ 2 years in operation and monthly turnover \geq IDR 9,000,000. This ensured data from economically stable, experienced entrepreneurs (Huda et al., 2022; Zulkifli et al., 2024).

Table 1: Summary of research hypotheses

Code	Hypothesis statement
H ₁	Islamic marketing has a positive influence on the economic role of women in MSMEs.
H ₂	Customer service has a positive influence on the economic role of women in MSMEs.
H ₃	Technological innovation has a positive impact on the economic role of women in MSMEs.
H ₄	Islamic marketing positively influences technological innovation.
H ₅	Customer service positively influences technological innovation.
H ₆	Technological innovation mediates the effect of Islamic marketing on the economic role of women in MSMEs.
H ₇	Technological innovation mediates the effect of customer service on the economic role of women in MSMEs.

MSMEs: Micro, small, and medium-sized enterprises

Figure 1: Structural equation modeling style diagram

Lampung was chosen due to its high number of women-led MSMEs, which provides a suitable Islamic marketing context (Badan Pusat Statistik, 2025; ChoudhuryKaul et al., 2023; Huda et al., 2022).

Data were collected from May to July 2025, coinciding with Ramadan and Eid al-Adha, when MSME activity peaks in food, clothing, and service sectors (Bravo-Ortega et al., 2023; Utama et al., 2024).

3.4. Data Collection Procedure

A mixed online-offline approach was used. The online survey, built with Google Forms, was shared through MSME mentor networks and social media. Offline distribution was conducted through direct visits to reach participants who are less digitally literate. This approach improved representativeness and minimized digital exclusion bias (Huda et al., 2022; Karaman, 2021; Naieema and Farid, 2016; Zulkifli et al., 2024).

3.5. Variables and Measurement

The study included four latent variables: Islamic marketing (X₁), customer service (X₂), technological innovation (Z), and women's economic role (Y), each measured on a five-point Likert scale. Operational definitions and indicators are summarized in Table 2.

Table 2: Operationalization of research variables

Variable	Dimensions/ indicators	Scale	Sources
X ₁ : Islamic marketing	Strategy, target market, digital promotion, evaluation	Likert 1-5	(Kotler and Keller, 2016; Mamun et al., 2021; Tjiptono, 2017)
X ₂ : Customer service	Responsiveness, Islamic ethics, satisfaction	Likert 1-5	(Knox et al., 2020; Tjiptono, 2017)
Z: Technological innovation	Digitalization, payment systems, Shariah-based innovation	Likert 1-5	(Dwityas et al., 2021; OECD, 2005; Rogers, 2003)
Y: Women's economic role	Independence, family income, and leadership	Likert 1-5	(Kabeer, 1999; Minot et al., 2022)

Table 3: Respondent profile

Variable	Category	Percentage
Business duration	2-3 years	9.2
	3-5 years	19.2
	5-10 years	30.8
	>10 years	40.8
Type of business	Culinary	29.2
	Snack products	3.1
	Handicrafts	2.3
	Others (trade, services)	65.4
Monthly turnover	IDR 9-10 million	22.3
	>IDR 10 million	77.7

Source: Primary data, 2025

These characteristics confirm the suitability of the sample, as all respondents met the inclusion criteria and represented stable women-led MSMEs.

4.2. Measurement Model Evaluation

The measurement model was tested through convergent and discriminant validity (Hair et al., 2019; 2021). All indicator loadings exceeded 0.70 except one item (P5), which was removed. Composite reliability (CR) and average variance extracted (AVE) values met the recommended thresholds, indicating reliable and valid results. To ensure construct validity, the study evaluated indicator loadings, average variance extracted (AVE), and composite reliability (CR). The results, presented in Table 4,

4. RESULTS

4.1. Respondent Profile and Research Context

This study was conducted in Lampung Province, Indonesia, where MSMEs, particularly in the culinary, retail, and service sectors, play a vital role in the local economy with women as dominant actors (Huda et al., 2022). Most respondents were women entrepreneurs managing micro and small enterprises; over 70% had run their businesses for more than 5 years, reflecting substantial entrepreneurial experience (ChoudhuryKaul et al., 2023).

The demographic characteristics of respondents, including age, business type, and years of operation, are summarized in Table 3. These descriptive results provide a foundational understanding of the profiles of women entrepreneurs, which contextualize the subsequent analysis (Hair et al., 2019).

indicate that all constructs exceeded the recommended thresholds (Fornell and Larcker, 1981; Hair et al., 2019).

Discriminant validity (Fornell-Larcker criterion) confirmed that the square root of AVE for each construct exceeded inter-construct correlations, indicating construct uniqueness (Fornell and Larcker, 1981).

4.3. Construct Reliability and Discriminant Validity

The construct reliability and discriminant validity test, as shown in Table 5, confirms that each construct is distinct from others, with the square root of AVE values exceeding the corresponding inter-construct correlations (Fornell and Larcker, 1981).

All constructs exhibited strong internal consistency ($\alpha > 0.90$) and convergent validity ($AVE > 0.50$). Thus, the instrument was deemed valid and reliable for PLS-SEM analysis (Hair et al., 2019).

4.4. Structural Model Assessment

As shown in Table 6, the R^2 and Q^2 values suggest that the model possesses satisfactory explanatory and predictive power, aligning with the thresholds proposed by Chin (1998) and Hair et al. (2019). The structural model yielded R^2 values of 0.659 for women's

economic role and 0.637 for technological innovation, indicating moderate explanatory power (Chin, 1998). Effect size (f^2) analysis revealed that technological innovation ($f^2 = 0.277$) had the most potent effect, followed by customer service ($f^2 = 0.115$), while Islamic marketing had no direct influence ($f^2 = 0.000$).

4.5. Hypothesis Testing

Path analysis using bootstrapping revealed significant results for four of the five hypotheses.

The structural model results, summarized in Table 7, show both direct and indirect relationships among constructs. Notably, technological innovation mediates the effects of Islamic marketing and customer service on women's empowerment (Hair et al., 2019; Preacher and Hayes, 2008). Islamic marketing showed no direct effect on women's empowerment, consistent with literature emphasizing the mediating role of digital adoption (Alalwan, 2018). Conversely, customer service and technological innovation have significantly enhanced women's economic roles, aligning with studies that highlight service quality and digitalization as empowerment enablers (Izogo and Jayawardhena, 2018; Nambisan et al., 2019).

4.6. Mediation Analysis

Following Preacher and Hayes (2008), mediation tests confirmed that technological innovation mediated the effects of Islamic marketing and customer service on women's economic role. These results indicate that Islamic marketing contributes to empowerment only when integrated with technology, while customer service exerts both direct and indirect positive effects. Technological innovation thus serves as a key mediator, bridging the gap between ethical marketing and women's economic empowerment (Zhang et al., 2020; Suryatni et al., 2024).

4.7. Model Fit

Model adequacy was confirmed with an average AVE of 0.744 and an average R^2 of 0.648, demonstrating robust convergent validity and predictive power (Hair et al., 2019; Henseler et al., 2016). Accordingly, the model effectively explains the interplay between Islamic marketing, customer service, technological innovation, and women's economic role in MSMEs.

5. DISCUSSION

The findings offer valuable insights into the interplay between Islamic marketing, customer service, technological innovation, and women's empowerment in MSMEs in Lampung Province. The results confirm that Islamic marketing has no significant direct influence on women's economic empowerment (H_1 not

Table 4: Measurement model evaluation

Construct	Loading range	CR	AVE
Islamic marketing	0.839-0.913	≥ 0.70	≥ 0.50
Customer service	0.783-0.902	≥ 0.70	≥ 0.50
Technological innovation	0.867-0.905	≥ 0.70	≥ 0.50
Women's economic role	0.783-0.848	≥ 0.70	≥ 0.50

Source: Primary data, 2025. CP: Composite reliability, AVE: Average variance extracted

Table 5: Construct reliability and discriminant validity (Fornell-Larcker criterion)

Construct	Cronbach's alpha	CR	AVE
Islamic marketing	0.925	0.940	0.72
Customer service	0.912	0.934	0.66
Technological innovation	0.931	0.945	0.78
Women's economic role	0.905	0.927	0.67

Source: Primary data, 2025. CP: Composite reliability, AVE: Average variance extracted

Table 6: Structural model evaluation (R^2 and f^2)

Dependent construct	R^2	Predictor	f^2	Interpretation
Women's economic role	0.659	Technological innovation	0.277	Moderate
		Customer service	0.115	Small
		Islamic marketing	0.000	None
Technological innovation	0.637	—	—	—

Source: Primary data, 2025

Table 7: Path coefficients and hypothesis testing

Relationship	β	t-value	P-value	Result
Islamic marketing→Women's role	-0.009	0.086	0.932	Not supported
Customer service→Women's role	0.318	3.515	0.000	Supported
Technological innovation→Women's role	0.544	5.324	0.000	Supported
Islamic marketing→Technological innovation	0.512	4.739	0.000	Supported
Customer service→Technological innovation	0.363	3.414	0.001	Supported

Source: Primary data, 2025

supported). This suggests that halal compliance and fairness alone are insufficient to enhance women's empowerment without the integration of technology. According to the resource-based view (RBV), digital capability represents a unique strategic resource that drives competitiveness and business sustainability (Barney, 1991; Vial, 2019). Although Islamic marketing was not directly significant, it became influential when mediated by technological innovation, consistent with the theory of planned behavior (TPB), which posits that beliefs and social norms shape the adoption of innovation (Ajzen, 1991). This aligns with contemporary studies highlighting the behavioral and social drivers of digital adoption in MSMEs (Loo et al., 2023).

Conversely, customer service was found to have both direct and indirect effects on women's empowerment (H_2 and H_7 were supported). This supports prior research emphasizing the role of service quality and ethical interaction in the success of small businesses (Knox et al., 2020; Zeithaml et al., 2020). In the Shariah context, service excellence also embodies *ihsan* (excellence), *adl* (justice), and *barakah* (blessing) (Tondro et al., 2025). These principles are further grounded in QS. An-Nahl: 90 and the Prophet's hadith encouraging fairness and honesty in transactions, reflecting *maqāṣid al-sharī'ah* in protecting wealth (*ḥifẓ al-māl*) and ensuring justice (Saleh et al., 2023).

Technological innovation emerged as the strongest determinant of empowerment (H_3 , H_6 , and H_7 supported). It acts as a mediator linking marketing and service practices with empowerment outcomes, reinforcing the view that digital technologies serve as enablers of competitiveness and inclusion (Al-Slehat, 2023; Setiawan et al., 2023). Within RBV logic, digital capacity is a valuable, inimitable asset that underpins sustainable advantage (Barney, 1991). This finding is consistent with Visiana (2025), who highlighted digitalization as a catalyst for resilience among women-led MSMEs. Theoretically, this study integrates Islamic marketing, customer service, and technological innovation to explain women's economic empowerment, extending prior Islamic marketing research, which has been primarily focused on the banking or halal industry (Naeema and Farid, 2016; Wilson and Liu, 2011), to the MSME sector. It also supports the literature on digital transformation as a driver of business inclusion and sustainability (Vial, 2019).

5.1. Practical Implications

For women entrepreneurs, empowerment requires integrating Islamic marketing ethics with digital technologies to expand market access and strengthen competitiveness. Training in Shariah-based digital marketing and application-based customer service can enhance operational efficiency and effectiveness. For policymakers, MSME programs should emphasize digitalization aligned with Islamic values, including access to Shariah-compliant financing and digital infrastructure. These initiatives can strengthen women's roles in regional economic growth. For technology providers, opportunities exist to design Shariah-oriented digital solutions, such as halal e-commerce platforms and Islamic service management applications. These can support ethical and professional business operations consistent with *maqāṣid al-sharī'ah*, especially *ḥifẓ al-māl* and equitable wealth distribution.

5.2. Limitations and Future Research

This study's limitations include its geographical scope (Lampung Province) and sectoral focus (culinary, trade, and services), which may limit generalizability. Self-reported data and the cross-sectional design may introduce perception bias and limit causal inference. Future research could expand to other regions or Muslim-majority countries, incorporate diverse MSME sectors, and employ longitudinal or mixed-methods designs to capture deeper behavioral and cultural dynamics. Such approaches will enrich understanding of how Islamic values and digital innovation jointly foster women's economic empowerment.

6. CONCLUSION

This study examined the influence of Islamic marketing and customer service on the economic empowerment of women-owned MSMEs, with technological innovation as a mediating variable. The results reveal that Islamic marketing does not directly affect women's economic empowerment but becomes significant when mediated by technological innovation. Conversely, customer service exerts both direct and indirect influences through technology, while technological innovation emerges as the strongest predictor of women entrepreneurs' empowerment.

Theoretically, this study contributes to Islamic marketing and service management literature by integrating the Theory of Planned Behavior (Ajzen, 1991) and the Resource-Based View (Barney, 1991) within the context of women-owned MSMEs. Practically, the findings highlight the pivotal role of digital technology adoption in linking Islamic marketing and service quality to women's economic empowerment. This relevance aligns with Allah's command in QS. An-Nahl: 90 to uphold justice and benevolence in socio-economic activities and with the *maqāṣid al-sharī'ah* framework, particularly *ḥifẓ al-māl* (protection of wealth), in sustaining women-led businesses grounded in Islamic principles. Overall, this research presents an integrative model positioning technological innovation as a bridge between Shariah-compliant business practices and women's empowerment. Although limited to MSMEs in Lampung Province, these findings open opportunities for further research in other regions and sectors to deepen the understanding of women's roles in Shariah-based economic development and digitalization.

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