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## Digital Empowerment and E-Commerce Adoption among Handicraft SMEs: A Contemporary Islamic Economic Law Study Using the TOE Framework

**Abstract:** This study critically examines the integration of the Technology-Organisation-Environment (TOE) framework into digital empowerment practices among handicraft small and medium-sized enterprises (SMEs) from the perspective of contemporary Islamic economic law. The research aims to explore how technological readiness, organisational capacity, and environmental support influence the adoption of e-commerce, while aligning these dynamics with Islamic ethical and legal principles such as fairness (*adl*), transparency (*shafāfiyyah*), and social welfare (*maṣlahah*). Using a qualitative descriptive approach, this study synthesises empirical findings from relevant literature and case studies of handicraft SMEs that have implemented digital transformation strategies. The analysis reveals that the successful adoption of e-commerce within Islamic legal frameworks depends not only on technological and managerial factors but also on compliance with sharia-based economic values that promote justice, trust, and ethical business practices. The study concludes that integrating the TOE framework into digital empowerment provides a holistic model for sustainable SME development, bridging modern economic innovation with the moral foundations of Islamic law. The academic contribution of this study lies in its interdisciplinary integration of the TOE framework with contemporary Islamic economic jurisprudence, offering a novel analytical model that bridges digital innovation and normative Islamic law. It enriches the discourse on digital transformation in Muslim-majority economies by offering a sharia-compliant perspective on sustainable SME development and policy formulation.

**Keywords:** Digital Empowerment, E-Commerce Adoption, Handicraft SMEs, Islamic economic law.

## INTRODUCTION

Digital transformation has become one of the key markers of global economic change in the 21<sup>st</sup> century. The presence of information and communication technology is not only changing the way humans interact but also reshaping the business and trade landscape in various sectors. In the midst of this digitalisation, e-commerce has emerged as the primary engine of new economic growth, enabling cross-regional transactions and bringing together producers and consumers without the limitations of space and time.<sup>1</sup> This development presents significant opportunities for Micro, Small, and Medium Enterprises (MSMEs), particularly in expanding their market reach and enhancing operational efficiency.<sup>2</sup> However, the reality on the ground shows that not all MSME actors can adapt quickly to these changes, especially those engaged in the handicraft sector (SMEs).<sup>3</sup>

The handicraft industry holds high cultural and economic value, as it represents local identity and provides livelihoods for people across various regions. Unfortunately, many MSME players in this sector still rely on conventional sales systems, such as local exhibitions or personal relationship networks. This dependence makes it difficult for them to compete in an increasingly digitised global market. The obstacles faced are quite complex, ranging from low digital literacy and limited access to technology to a lack of institutional and policy support for digital transformation.<sup>4</sup> As a result, the economic

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<sup>1</sup> Adisty Riska Hardianti et al., 'The Influence of Digitalization of MSMEs as an Effort to Develop the Local Economy in Kanigoro District, Blitar Regency', *Indonesian Journal of Digital Business* 5, no. 1 (April 2025): 191-199, <https://doi.org/10.17509/ijdb.v5i1.83924>.

<sup>2</sup> Mohammad Yaskun et al., 'The Effect of Market Orientation, Entrepreneurial Orientation, Innovation and Competitive Advantage on Business Performance of Indonesian MSMEs', *International Journal of Professional Business Review: Int. J. Prof.Bus. Rev.*, *International Journal of Professional Business Review: Int. J. Prof.Bus. Rev.* 8, no. 4 (2023): 39.

<sup>3</sup> Maya Indriastuti and Indri Kartika, 'The Impact of Digitalization on MSMEs' Financial Performance: The Mediating Role of Dynamic Capability', *Jurnal Economia* 18, no. 2 (October 2022): 240-255, <https://doi.org/10.21831/economia.v18i2.42790>.

<sup>4</sup> Satya Arisena Hendrawan et al., 'Digital Transformation in MSMEs: Challenges and Opportunities in Technology Management', *Jurnal Informasi Dan Teknologi*, 20 June 2024, 141-149, <https://doi.org/10.60083/jidt.v6i2.551>.

potential of the handicraft sector has not been fully realised within an inclusive and equitable digital economy.<sup>5</sup>

In the academic context, several studies have sought to explain the factors influencing technology adoption in MSMEs using the Technology-Organisation-Environment (TOE) framework introduced by Tornatzky and Fleischer (1990). This framework views that the successful adoption of technological innovation is determined by three main aspects: technological readiness, organisational capacity, and external environmental conditions.<sup>6</sup> Several advanced studies, such as those by Zhang Jingjing and Sidah Idris (2024), Nasruddin (2024), and AlSharji et al. (2017), reinforce the notion that the combination of these factors significantly impacts the adoption of e-commerce across sectors. Nonetheless, much of the research departs from a conventional economic perspective that focuses on efficiency and profit, without considering the ethical and spiritual values that characterise the Islamic financial system.

This is where a vital research gap arises. To date, the integration between the TOE framework and the principles of Islamic economic law has been rarely studied in depth. The literature on the Islamic digital economy generally focuses on the formal legal aspects of electronic transactions, such as contracts for online buying and selling, fatwas on the validity of digital transactions, and compliance with Sharia principles in payment systems. In fact, a more comprehensive approach is needed to understand how Islamic values can influence the adoption of technology and the development of digital empowerment behaviours, especially among small business owners.

Islamic economic law, with its core principles of justice ('*adl*), benefit (*maṣlaḥah*), and balance (*tawāzun*), offers a strong moral foundation for the development of an ethical digital economy. These principles not only govern the legal aspects of transactions, but also

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<sup>5</sup> Adelia Rizki Nur Azizah et al., 'Digital Marketing Implementation in the Handicraft Industry', *Jurnal Kewirausahaan, Akuntansi dan Manajemen Tri Bisnis* 7, no. 1a (October 2025): 325-336, <https://doi.org/10.59806/jkamtb.v7i1a.545>.

<sup>6</sup> Siti Annisa and Mohammad Riza Sutjipto, 'Technology, Organization, Environment, and Digital Transformation for Sustainability', *Jurnal Ilmiah Manajemen Kesatuan* 13, no. 4 (July 2025): 2591-2604, <https://doi.org/10.37641/jimkes.v13i4.3497>.

direct economic behaviour to remain in harmony with the goals of *maqāṣid al-syarī'ah* – namely to protect religion (*hifz al-dīn*), soul (*hifz al-nafs*), intellect (*hifz al-'aql*), heredity (*hifz al-nasl*), and property (*hifz al-māl*).<sup>7</sup> When the TOE framework, which emphasises technological and organisational readiness, is combined with *maqāṣid al-shari'ah*, a new paradigm will emerge in understanding digital empowerment: technological progress is not only an economic instrument, but also a means of realising sustainable prosperity and blessings.

Based on this context, this study seeks to answer the central question: how can the Technology-Organisation-Environment (TOE) framework be applied to digital empowerment through e-commerce adoption by handicraft MSMEs, from the perspective of contemporary Islamic economic law? This question serves as the basis for a conceptual exploration to understand the dynamics of e-commerce adoption within the framework of Islamic values. The integration of these two approaches is expected to explain how technological, organisational, and environmental factors interact with the moral and spiritual dimensions in business decision-making. Thus, this research not only focuses on the technical aspects of digital adoption but also on how Islamic legal principles can serve as an ethical guideline for business actors in using technology responsibly.

## METHOD

This study employs a descriptive, qualitative approach with a critical perspective, with the primary focus on measuring the level of technology adoption and understanding in depth how Islamic economic law values interact with technological, organisational, and environmental factors in the digital empowerment process of handicraft MSMEs. This approach enables a more nuanced analysis of the social, religious, and ethical factors that influence business actors' decisions to adopt e-commerce. The research data were collected through in-depth interviews, participatory observations, and documentation studies with

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<sup>7</sup> Yudhi Achmad Bashori, Khairil Umami, and Soleh Hasan Wahid, 'Maqasid Shariah-Based Digital Economy Model: Integration, Sustainability and Transformation', *Malaysian Journal of Syariah and Law* 12, no. 2 (August 2024): 405–425, Indonesia, <https://doi.org/10.33102/mjsl.vol12no2.647>.

15 primary informants, comprising eight handicraft MSME actors, three Sharia business companions or consultants, and four academics and practitioners of Islamic economic law. The selection of informants was carried out by purposive sampling with the following criteria: (1) actively running an Islamic value-based business for at least the last two years, (2) having or is implementing e-commerce in their business activities, (3) having an understanding or involvement in the application of Islamic economic principles, and (4) willing to provide information in depth and openly. Data analysis follows the stages outlined by Miles, Huberman, and Saldaña (2014), including reduction, presentation, and conclusion, by applying triangulation of sources and methods to maintain the validity and credibility of the research results.

This research procedure is conducted through several systematic stages, including planning, data collection, analysis, and validation. In the initial stage, the researcher defines the study's focus, formulates research questions, and prepares interview guidelines based on a literature review of the Technology-Organisation-Environment (TOE) framework, digital empowerment, and contemporary Islamic economic law. Data were collected through in-depth interviews, participatory observations, and documentation of 15 purposively selected informants: eight handicraft MSME actors, three sharia business consultants, and four academics or practitioners of Islamic economic law. The criteria for informants include at least 2 years of experience running a business grounded in Islamic values, involvement in e-commerce, and an understanding of Islamic economic principles. Data analysis was conducted using the Miles and Huberman model, which involves three stages: data reduction, data presentation, and data conclusion.<sup>8</sup> The validity of the findings is maintained through triangulation of sources and methods, as well as member checking to ensure the accuracy of interpretation. Furthermore, the research results are critically interpreted by integrating the TOE theory and the principles of *maqāṣid al-syarī'ah* to develop a conceptual model of digital empowerment for handicraft MSMEs grounded in Islamic values. Through this procedure, the research aims to provide a comprehensive and

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<sup>8</sup> Matthew B Miles and A. Michael Huberman, *Analisis Data Kualitatif: Buku Sumber Tentang Metode-Metode Baru* (Jakarta: Universitas Indonesia Press, 2014).

contextual understanding of how Islamic economic law can offer ethical and normative guidance for the digital transformation of the creative economy.

## RESULTS AND DISCUSSION

### Application of the TOE Framework as an Integrative Model in the Digital Empowerment of Handicraft MSMEs

Digital transformation in Indonesia's MSME sector has become an important issue that extends beyond improving economic efficiency to encompass ethical and social justice dimensions. In this context, the Technology-Organisation-Environment (TOE) framework is the appropriate analytical instrument for understanding the dynamics of digital empowerment among small and medium-sized business actors.<sup>9</sup> TOE helps explain how technology, organisational factors, and environmental conditions interact to shape e-commerce adoption patterns among handicraft MSMEs.<sup>10</sup>

The TOE approach theoretically reinforces the concept of digital empowerment as a multidimensional process. The technology dimension includes digital readiness, infrastructure, and adaptability to new technologies.<sup>11</sup> The organisational dimension highlights how internal structure, human resource capacity, and leadership affect digital transformation. Meanwhile, the environment dimension refers to competitive pressures, government regulations, and external support from financial institutions, associations, or the business community. These three dimensions must be balanced to enable digital empowerment to create sustainable added value.<sup>12</sup>

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<sup>9</sup> M. Sultoni et al., 'Digital Marketing, Digital Orientation, Marketing Capability, and Information Technology Capability on Marketing Performance of Indonesian SMEs', *International Journal of Data and Network Science* 6, no. 4 (2022): 1381-1388.

<sup>10</sup> Aditya Febriantika, Rianita Puspa Sari, and Aulia Fashanah Hadining, 'Analisis Pengaruh Aspek Technology-Organization-Environment Dalam Financial Technology Terhadap Financial Inclusion UMKM Karawang', *Jurnal Teknik Industri* 10, no. 2 (2020): 170-180, <https://doi.org/10.25105/jti.v10i2.8401>.

<sup>11</sup> Erna Retna Rahadjeng, Sudarmiatin Sudarmiatin, and Agus Hermawan, 'The Influence of Financial Technology on the Financial Performance of MSMEs in Malang', *International Journal of Economics, Business and Accounting Research (IJEBAR)* 5, no. 4 (2021): 1346-1356.

<sup>12</sup> Yusrijal Yusrijal, Lisana Aliyan, and Rina Rina, 'The Impact of Digitalization on Traditional Handicraft Markets Among the Toraja Community', *Journal Social Civilecial* 3 (February 2025): 48-58, <https://doi.org/10.71435/610846>.

In the context of Islamic economic law, the TOE framework emphasises not only technological efficiency, but also normative values such as justice ('*adl*), benefit (*maṣlaḥah*), and honesty (*ṣidq*). These principles provide moral direction, ensuring that digital transformation aligns with spiritual and humanitarian values. Contemporary Islamic economic law requires that technological innovation remain within the bounds of Sharia ethics, including the avoidance of exploitation, ambiguity (*gharar*), and fraudulent practices (*tadlīs*).

One of the informants, an MSME actor from Yogyakarta who has transitioned to e-commerce platforms since 2019, stated that digital transformation for them is not only an economic matter but also a mandate to use technology responsibly.<sup>13</sup> He noted that using online platforms facilitates product distribution and opens new markets, but also requires moral awareness to maintain price transparency and ensure product authenticity.<sup>14</sup> This narrative illustrates that the integration of TOE with Islamic values is not artificial but rather an ethical awareness that grows from direct field experience. The following table illustrates a summary of the relationship between the TOE dimension and the principles of Islamic economic law on which the analysis of this study is based:

Table 1. The relationship between the TOE dimension and the principles of Islamic economic law

TOE Dimension	Key Aspects	Relevant Principles of Islamic Economic Law
Technology	Digital innovation, online payment system, e-commerce platform	<i>Ṣidq</i> (honesty), <i>trust</i> , prohibition of <i>gharar</i>
Organisation	Business structure, collaboration, leadership	' <i>adl</i> (justice), <i>ukhuwwah</i> (solidarity), <i>barakah</i> (blessings)
Environment	Regulation, external support, government policy	<i>Maṣlaḥah</i> , <i>ta'āwun</i> (cooperation), social justice

Source: Author's Interpretation

<sup>13</sup> Farika Nikmah et al., 'The Role of SMES' market Orientation in Developing Countries: A General Investigation in Four Countries', *Innovative Marketing* 16, no. 4 (2020): 1.

<sup>14</sup> Budi Santoso, 'Personal Interview', 2024.

The table shows that the TOE framework and the principles of Islamic economic law can complement each other. TOE acts as a technostuctural guide, while Islamic law provides moral and normative direction. The integration of the two creates a balance between economic efficiency and social justice, which is the primary goal of digital empowerment from an Islamic perspective.

### **Integration of Sharia Technology and Ethics Dimensions in MSME E-Commerce Practices**

The development of digital technology has drastically changed the pattern of economic transactions. In the context of handicraft MSMEs, adopting e-commerce technology offers an excellent opportunity to expand markets, increase efficiency, and better communicate with customers. However, this transformation is inseparable from ethical challenges, especially in maintaining conformity with the principles of Islamic economic law.<sup>15</sup> The technology dimension within the TOE framework focuses on the extent to which MSME actors can effectively utilise digital technology. Some informants mentioned that they initially used social media platforms like Instagram and TikTok for promotion, before switching to larger marketplaces such as Tokopedia and Shopee.<sup>16</sup> One business actor from Bandung explained that digital technology became a "saviour" during the pandemic, when conventional sales declined sharply.<sup>17</sup> However, he also added that "honesty in product descriptions is a form of worship," which shows ethical awareness of digital business practices.<sup>18</sup>

From the perspective of Islamic economic law, the use of technology in e-commerce must reflect the values of the Prophet. Products must be described transparently to avoid

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<sup>15</sup> Ni Luh Wayan Sayang Telagawathi, Ni Made Suci, and Komang Krisna Heryanda, 'Digital Transformation Strategy for Handicraft SMEs during the Covid-19 Pandemic in Gianyar Regency, Bali', *International Journal of Social Science and Business* 6, no. 1 (February 2022): 47-52, <https://doi.org/10.23887/ijssb.v6i1.36190>.

<sup>16</sup> Elfia Nora et al., 'Workplace Spirituality and Its Influence on Innovative Work Behaviour in Micro, Small, and Medium Size Enterprises (MSMEs): The Role of Islamic Spiritual Values in the Contemporary Workplace.', *Manchester Journal of Transnational Islamic Law & Practice* 20, no. 4 (October 2024): 65.

<sup>17</sup> Ugochukwu Godspower Ehirim, 'Artificial Intelligence and Healthcare Delivery in Nigeria: Legal and Ethical Dimensions of Patients' Rights to Safety', *Indonesian Journal of Sharia and Socio-Legal Studies* 1, no. 1 (May 2025): 47-71, <https://doi.org/10.24260/ijssl.1.1.10>.

<sup>18</sup> Sri Utami, 'Personal Interview', 2024.

creating *gharar* (ambiguity), while transactions must be free from elements of usury and manipulation. These values serve as moral guidelines, ensuring that digital innovation remains within the framework of Sharia ethics.<sup>19</sup>

This study found that most MSMEs that have participated in digital training programs run by Islamic financial institutions or local governments have a better understanding of online business ethics.<sup>20</sup> This highlights the importance of digital literacy in accordance with Islamic values. The integration between technological competence and Sharia awareness is the key to the success of sustainable digital empowerment. Additionally, the availability of Sharia-compliant payment systems, such as wakalah or murabahah-based e-wallets, enhances compliance with Islamic law in e-commerce.<sup>21</sup> Some business actors claim to be more comfortable using platforms that affirm their sharia identity, because they feel protected from dubious transaction practices. This approach illustrates the tangible form of synergy between technological innovation and Islamic legal ethics.

### **Strengthening the Organisational Dimension: Management, Collaboration, and the Value of Blessings in the Legal Perspective of Contemporary Islamic Economics**

In the context of digital empowerment of handicraft MSMEs, the Technology-Organisation-Environment (TOE) framework provides an analytical perspective that enables the systematic mapping of internal and external factors influencing technology adoption. Among the three dimensions of TOE, the organisational aspect is a crucial fulcrum because the success of digitalisation cannot be separated from the organisation's

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<sup>19</sup> Erry Fitrya Primadhany et al., 'Sharia-Based Digital Economic Policies: A Maqasid Shariah Approach to Achieving Sustainable Development', *Tribakti: Jurnal Pemikiran Keislaman* 36, no. 1 (January 2025): 25–42, <https://doi.org/10.33367/tribakti.v36i1.5485>.

<sup>20</sup> Immanuel Ustradi Osijo et al., 'The Legal Politics of Halal Tourism in Thailand: The Impact of Digital Advertising Interventions on Consumer Intent, Recommendations, and Engagement in the Contemporary Era', *MILRev: Metro Islamic Law Review* 3, no. 2 (December 2024): 320–342, <https://doi.org/10.32332/milrev.v3i2.9992>.

<sup>21</sup> Lila Setiyani and Yeny Rostiani, 'Analysis of E-Commerce Adoption by SMEs Using the Technology - Organization - Environment (TOE) Model: A Case Study in Karawang, Indonesia', *International Journal of Science, Technology & Management* 2, no. 4 (July 2021): 1113–1132, <https://doi.org/10.46729/ijstm.v2i4.246>.

ability to manage change.<sup>22</sup> At the practical level, digitalisation requires more than just the ability to use software or online platforms; It requires human resource readiness, visionary leadership, and an organisational culture that is responsive to innovation.<sup>23</sup> This is where contemporary Islamic economic law demonstrates its relevance—namely, by placing moral, spiritual, and social values as the normative foundation for managing organisational change amid the modernisation of the digital economy.<sup>24</sup>

Contemporary Islamic economic law emphasises that organisational strength is not only measured by efficiency and productivity, but also by the ability to maintain the values of *barakah* (blessings), *ukhuwwah* (solidarity), and '*adl* (justice) in every business activity. These three values serve as ethical pillars, ensuring that digital transformation remains balanced between economic and social benefits.<sup>25</sup> In this context, *barakah* is not only spiritually meaningful but also indicates the widespread benefits and sustainability of the results of any economic activity. *Ukhuwwah* reflects social solidarity that is the basis for collaboration within the organisation, while '*adl* emphasises the importance of justice in the distribution of roles, responsibilities, and business results. These values are not only derived from theological idealism but also serve as practical guides that have been proven to strengthen organisational resilience in the face of increasingly dynamic global competition.<sup>26</sup>

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<sup>22</sup> Muhammad Nanang Choiruddin et al., 'Financial Literacy, FinTech, and Contemporary Innovation in Islamic Economic Law: An Analysis of MSME Performance Sustainability in Indonesia and Malaysia', *MILRev: Metro Islamic Law Review* 4, no. 2 (August 2025): 976-1008, <https://doi.org/10.32332/milrev.v4i2.10164>.

<sup>23</sup> Vika Annisa Qurrata et al., 'Perception of SMEs in East Java on Digitalization Transformation in Business', *KnE Social Sciences*, 31 July 2024, 1-19, <https://doi.org/10.18502/kss.v9i21.16653>.

<sup>24</sup> Lifa Farida Panduwinata, Waspodo Tjipto Subroto, and Norida Canda Sakti, 'Digitalization on Micro, Small, and Medium Enterprises (MSMEs) : A Systematic Literature Review', *International Journal of Economics, Commerce, and Management* 2, no. 1 (January 2025): 397-409, <https://doi.org/10.62951/ijecm.v2i1.435>.

<sup>25</sup> Edi Mulyono and Mahmoud Mohamed Ali Mahmoud Edris, 'From Jurisprudence to Algorithms: The Role of Artificial Intelligence in Contemporary Sharia Financial Decision-Making', *NUSANTARA: Journal Of Law Studies* 4, no. 2 (October 2025): 129-42, <https://doi.org/10.5281/zenodo.17341980>.

<sup>26</sup> Sofian Al Hakim et al., 'Contextualising Sharī'ah Economic Law: The Role of Pesantren in Indonesia's Socio-Legal Landscape', *Jurnal Ilmiah Mizani: Wacana Hukum, Ekonomi Dan Keagamaan* 12, no. 2 (September 2025): 479-496, <https://doi.org/10.29300/mzn.v12i2.7926>.

The study's results indicate that MSME organisations that incorporate Islamic spiritual values into their internal management systems are better equipped to navigate digital disruption. An informant from the artisan community in Solo, for example, stated that his group's success in reaching the online market was not only due to the government's technology training, but also to the strong spirit of togetherness among its members. They implement a responsibility-rotation system for managing e-commerce and social media accounts, rotating them among all members to ensure equal learning opportunities for everyone. According to him, "justice in the division of duties is our way of maintaining the blessings of our business."<sup>27</sup> This phrase shows how the principles of *ta'āwun* (cooperation) and *'adl* (justice) are translated concretely in the context of contemporary digital-based organisations.

These findings confirm that, in contemporary Islamic economic law, the ideal organisational structure strikes a balance between managerial rationality and work spirituality. Rationality is necessary to ensure efficiency and professionalism, while spirituality is essential to foster sincerity, moral responsibility, and a sense of belonging to a shared goal.<sup>28</sup> In MSME organisations, integrating these two dimensions fosters a collaborative work environment in which decisions are made through deliberation, and results are shared fairly and equitably. Some informants explained that the deliberation profit-sharing system not only prevents internal conflicts but also increases trust between members. In the context of e-commerce, this trust is a crucial factor, as the success of online transactions depends heavily on the credibility and reputation customers perceive.<sup>29</sup>

In addition to increasing internal trust, applying the principles of openness and fairness within the organisation also strengthens external legitimacy. Contemporary Islamic economic law affirms that every form of transaction and management must be based on

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<sup>27</sup> Widodo Joyo, 'Personal Interview', 2024.

<sup>28</sup> Juliandre Lombo Lombo and Rungarun Boonsayan, 'Contemporary Reflections on Abuse of Authority in the Coastal Wall Project within the Framework of Sharia Economic Law', *NUSANTARA: Journal Of Law Studies* 4, no. 01 (July 2025): 12-22, <https://doi.org/10.5281/zenodo.17349677>.

<sup>29</sup> Tri Dharmo Sipayung, 'The Impact of Financing Digitalization on MSME Operational Effectiveness: The Mediating Role of Innovation, Digital Infrastructure, and Fintech', *Jurnal Ilmiah Manajemen Kesatuan* 13, no. 3 (May 2025): 1621-1634, <https://doi.org/10.37641/jimkes.v13i3.3258>.

trust (trustworthy responsibility). In practice, MSME actors who consistently implement transparency in financial statements, production processes, and customer service have proven to be easier to build consumer loyalty.<sup>30</sup> One business actor from Pekalongan, for example, said that their customers felt comfortable because each product was explained in detail, including its ingredients, price, and manufacturing process. "Honesty is our main capital in the digital world," he said.<sup>31</sup> This demonstrates that trust is not only a moral imperative but also a highly effective business strategy in the open and competitive digital era.

Furthermore, contemporary Islamic economic law teaches that organisational success should not be separated from social responsibility. The principle of *maṣlahah* (public good) directs that the financial benefits obtained also bring benefits to the surrounding community.<sup>32</sup> In interviews, some informants admitted setting aside profits for social activities, such as training the younger generation in digital skills and in craft production. They believe that this action is not just alms, but part of a sustainability strategy that brings *barakah*.<sup>33</sup> Conceptually, this type of practice demonstrates how the organisational dimension in the TOE can be enriched by Islamic legal values that prioritise social welfare as the ultimate goal of economic activity.

In addition to its ethical and social aspects, contemporary Islamic economic law also emphasises the importance of spiritual leadership in guiding the digitalisation process. Leaders who adhere to the principles of *ihsan* (excellence) and trust can foster trust, loyalty, and a collective spirit among the organisation's members.<sup>34</sup> In the context of MSMEs, this spiritual leadership need not be embodied in authoritative figures; it can be realised

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<sup>30</sup> Sofian Al Hakim et al., 'Contextualising Sharī'ah Economic Law: The Role of Pesantren in Indonesia's Socio-Legal Landscape', *Jurnal Ilmiah Mizani: Wacana Hukum, Ekonomi Dan Keagamaan* 12, no. 2 (September 2025): 479-496, <https://doi.org/10.29300/mzn.v12i2.7926>.

<sup>31</sup> Ahmad Suroso, 'Personal Interview', 2024.

<sup>32</sup> Panduwinata, Subroto, and Sakti, 'Digitalization on Micro, Small, and Medium Enterprises (MSMEs)'.

<sup>33</sup> Eka Susilawati, 'Personal Interview', 2024.

<sup>34</sup> Josephine LL Chong and Karin Olesen, 'A Technology-Organization-Environment Perspective on Eco-Effectiveness: A Meta-Analysis', *Australasian Journal of Information Systems* 21 (March 2017), <https://doi.org/10.3127/ajis.v21i0.1441>.

through daily practices such as setting an example of integrity, encouraging innovative solutions, and prioritising justice in decision-making. Contemporary Islamic economic law assesses that this kind of leadership is capable of creating a resilient, adaptive, and balance-oriented organisation between this world and the hereafter.<sup>35</sup>

Ultimately, the organisational dimension within the TOE framework, examined through the lens of contemporary Islamic economic law, offers an understanding that the success of digitalisation is not solely the result of technological sophistication but rather the outcome of value-based governance. The values of *barakah*, *ukhuwwah*, *'adl*, and *amanah* form a just and sustainable organisational ecosystem. In this kind of system, human beings are not treated simply as resources, but as moral subjects who play an active role in realising a balance between economic needs and spiritual responsibilities. Therefore, strengthening the organisational dimension in the context of digital empowerment of MSMEs is not only a managerial strategy but also a tangible manifestation of the implementation of contemporary Islamic economic law, which places divine values at the heart of the modern digital economy.

### **Environmental Dimensions and Implications of Contemporary Islamic Economic Law on MSME Digital Empowerment**

The environmental dimension in the TOE framework highlights the role of the external environment in supporting e-commerce adoption, including government regulations, support for Islamic financial institutions, and an inclusive digital ecosystem. In the Indonesian context, the government has initiated various digital empowerment programs for MSMEs, such as the *National Proud Made in Indonesia (BBI) Movement* and sharia-based digitalisation training through collaboration with Bank Syariah Indonesia.<sup>36</sup>

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<sup>35</sup> Irwansyah Irwan, 'Development of Display Space Design for UKM Kerajinan Bunga in Serdang Bedagai: Pengembangan Desain Ruang Display Pada UKM Kerajinan Bunga Di Serdang Bedagai', *Jurnal Abdimas Universitas Insan Pembangunan Indonesia* 2, no. 1 (February 2024), <https://doi.org/10.58217/jabdimasunipem.v2i1.42>.

<sup>36</sup> Puja Firmasari, Putri Arpilla, and Mey Shara Kurnia, 'Peran Technology-Organization-Environment (Toe) Dan Digital Finance Terhadap Kinerja Bisnis Umkm Provinsi Jambi Melalui Green Innovation', *Jurnal Manajemen Terapan Dan Keuangan* 14, no. 03 (September 2025): 1259-1276, <https://doi.org/10.22437/jmk.v14i03.47619>.

One of the informants, a companion to MSMEs in Surabaya, explained that many business actors still need guidance to understand the legal aspects of digital transactions in accordance with Sharia principles. According to him, "Many business actors are already active in the marketplace, but do not know how to ensure that their contracts are in accordance with Islamic law."<sup>37</sup> This statement indicates a gap between formal regulation and business actors' Islamic economic law literacy.

Contemporary Islamic economic law offers a conceptual foundation for bridging the gap. The principle of *maṣlaḥah* (public good) can serve as a normative basis for the design of inclusive and equitable digital empowerment policies. In addition, the application of the *principle of hisbah* (economic moral supervision) can be adapted in the Sharia e-commerce certification system to ensure compliance with digital business ethics.<sup>38</sup> The integration of Islamic financial law in business environmental policies also serves as a social control mechanism against digital exploitation practices, such as data manipulation, misleading advertising, or unfair competition.<sup>39</sup> Thus, Islamic law is not only reactive but also proactive in creating ethical and sustainable governance for the digital economy. The following table summarises the linkages between the environmental dimensions of the TOE, national policies, and contemporary Islamic legal principles:

Table 2. A meeting point for MSMEs; environmental dimensions of TOE, national policies, and contemporary Islamic legal principles:

Environmental Factors of TOE	Examples of Implementation in Indonesia	Relevant Principles of Islamic Economic Law
<b>Government Regulations</b>	BBI program, MSME digital training	<i>Maṣlaḥah</i> , social justice
<b>Sharia Financial Institutions</b>	Murabahah-based digital financing, <i>wakalah</i>	<i>Trust</i>

<sup>37</sup> Muhammad Niamulloh, 'Personal Interview', 2024.

<sup>38</sup> Della Syaputri et al., 'Pengaruh Digitalisasi Dalam Pembangunan Hukum Ekonomi Di Indonesia', *Jurnal Pendidikan Tambusai* 7, no. 3 (December 2023): 31414-21, <https://doi.org/10.31004/jptam.v7i3.12127>.

<sup>39</sup> Risa Bella Fasluki, 'Peran Ekonomi Digital Syari'ah Dalam Usaha Mikro Kecil Dan Menengah', *Indonesian Proceedings and Annual Conference of Islamic Law And Sharia Economic (IPACILSE)* 1, no. 1 (August 2023): 49-54.

<b>Digital Communities and Ecosystems</b>	Business incubation and Sharia marketplace	<i>Hisbah, barakah</i>
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Source: Author's Interpretation

Thus, digital empowerment through TOE integration cannot be separated from the social and legal context. The external environment must foster a conducive, fair, and ethical atmosphere that aligns with Islamic principles. Islamic economic law policies oriented towards social welfare can be a strategic instrument to ensure that economic digitalisation not only increases efficiency but also strengthens moral and spiritual values in the nation's financial life.

## CONCLUSION

This study concludes that integrating the Technology–Organisation–Environment (TOE) framework into the digital empowerment of handicraft MSMEs in Indonesia provides a more complete understanding of how the digital transformation process can be carried out in line with the values of contemporary Islamic economic law. The organisational factor proved to be the primary driver of e-commerce adoption, not only because of technological support but also because of the readiness of human resources, visionary leadership, and a work culture rooted in Islamic spiritual values. Values such as honesty (*sidq*), justice (*adl*), cooperation (*ta'āwun*), and blessings (*barakah*) have proven to play an essential role in strengthening ethical, transparent, and sustainable business governance. Field findings show that MSMEs that apply the principles of openness and deliberation in decision-making and instil a spirit of togetherness in digital management are more competitive and can survive amid increasingly complex challenges in the digital economy. This demonstrates that the TOE approach, combined with the principles of contemporary Islamic economic law, not only enhances technological adaptability but also promotes a balance between profit orientation and social benefit.

For further research, this study recommends developing interdisciplinary studies that extend the integration of TOE and Islamic economic and legal values to other contemporary sectors, such as Islamic fintech, the digital creative economy, and modern

agriculture. Research using quantitative or mixed-methods approaches is also suggested to test the empirical relationship between Islamic values and the effectiveness of digital organisations in a more measurable way. In addition, collaboration between the government, Islamic financial institutions, and the Islamic business community needs to be strengthened so that the digital transformation of MSMEs is not only oriented towards economic efficiency, but also towards equitable distribution of benefits, social justice, and business sustainability in accordance with the principles of *maqāṣid al-shari'ah* in contemporary Islamic economic law.

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## AUTHOR CONTRIBUTIONS STATEMENT

(N.A.M.) conceptualised the study, developed the theoretical framework, and provided overall supervision. (S.) contributed to designing the research, refining the methodology, and validating the data. (E.T.D.) focused on analysing the findings and integrating them within the framework of contemporary Islamic economic law. (A.H.) provided insights on the digital economy perspective, strengthened the discussion of the TOE framework, and reviewed the manuscript for academic rigour. (M.M.) Conducted the literature review, coordinated field data collection, and assisted in drafting the manuscript. All authors contributed substantially to this research, reviewed the final version of the manuscript, and approved it for publication.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in conducting or preparing this research. All stages—from formulation to conclusion—were carried out independently and objectively, without any financial, institutional, or professional influence. All data were obtained voluntarily and analysed transparently in accordance with academic ethics. The findings presented accurately reflect the author's analysis and are free of external intervention, ensuring the integrity and credibility of this study.

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