

Strengthening MSME Competitiveness through the IPO Model of the CreativeBiz Incubation Program in Palu within an Islamic Economic Framework

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ABSTRACT

This study analyzes how the Input–Process–Output (IPO) model within the CreativeBiz Incubation Program enhances the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Palu City through an Islamic economic perspective. Using a descriptive qualitative approach, data were collected via in-depth interviews, observations, and documentation involving incubator managers and MSME participants. The data analysis applied Miles and Huberman's interactive model, including data reduction, display, and conclusion drawing. Findings indicate that the IPO model is implemented systematically and effectively. At the input stage, success factors include competent human resources, supportive local government policies, cross-sector partnerships, and the integration of digital technology. In the process stage, MSME development is driven by empowerment, mentoring, and innovation, with a focus on managerial capacity, legal compliance, product branding, and digital transformation. The output stage shows increased performance, income, product quality, and market access among participants. From the Islamic economic lens, program success transcends financial outcomes, emphasizing values like *shiddiq* (honesty), *'adl* (justice), and *maslahah* (benefit). These principles have fostered ethical business practices and social responsibility, promoting a balance between material success and spiritual well-being. The study concludes that the IPO model serves as a practical evaluative tool for incubation programs and can be effectively aligned with Islamic economic principles to foster sustainable, inclusive MSME growth. These insights contribute to the development of value-based incubation models tailored to regional contexts.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in driving economic growth, creating employment opportunities, and improving community welfare. However, in the digital era and amid globalization, many MSMEs face challenges related to competitiveness, innovation, and access to technology and financing. (Aisya et al., 2023; Kharub & Sharma, 2016; Sofyan et al., 2023). Therefore, a systematic and sustainable development model is needed to strengthen MSME competitiveness. One relevant approach is the Input–Process–Output (IPO) model, which assesses the interconnection

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between the resources utilized (input), the activities carried out (process), and the results achieved (output). This model enables a comprehensive evaluation of the effectiveness of development programs. (Handayani & Mahendrawathi, 2019).

Various studies have shown that enhancing MSME competitiveness largely depends on optimizing these three IPO components. In terms of input, key factors include the adoption of digital technology and the readiness of human resources. (Agarwal & Ojha, 2023; Aisya & Syamsu, 2024; Syamsu et al., 2025; Triandini et al., 2022, 2023). At the process stage, the implementation of Business Process Management (BPM), industry collaboration, and green management contributes to improved efficiency and business sustainability. (Nadiger et al., 2023; Putri et al., 2020). As for the output, strengthening intellectual capital and embracing digital transformation have been shown to significantly impact the performance and growth of MSMEs. (Daryono et al., 2024).

Nevertheless, most IPO-related studies remain focused on economic and technological dimensions, often overlooking the moral and spiritual values that are central to Islamic economics. However, principles such as honesty (*shiddiq*), justice (*'adl*), and social benefit (*maslahah*) are essential for achieving equitable and sustainable competitiveness. Additionally, research on the application of the IPO model in digital-based incubation programs in Palu City remains limited.

In this context, the CreativeBiz Incubation Program, managed by the Digital-Based Business Incubator of Palu City (INBIS), presents a compelling case. This program applies an approach that combines empowerment, mentoring, and innovation to support MSMEs in developing their businesses through digitalization and integrated guidance.

Based on this background, the current study seeks to address the core research question: How does the Input–Process–Output (IPO) model in the CreativeBiz Incubation Program strengthen the competitiveness of MSMEs in Palu City from an Islamic economic perspective? This research aims to contribute to the development of an IPO model grounded in Islamic values and to reinforce sustainable MSME development strategies in the digital era.

2. Literature Review

The Input–Process–Output (IPO) model is used to assess the effectiveness of a program based on the relationship between resources (*input*), activity implementation (*process*), and the outcomes achieved (*output*) (Handayani & Mahendrawathi, 2019; Kou et al., 2023; Zhang et al., 2023). In the context of MSMEs, inputs include technology, human resources, capital, and institutional support (Agarwal & Ojha, 2023). The process involves training, mentoring, and business innovation (Martiningsih et al., 2024; Mota et al., 2023; Putri et al., 2020). While the output refers to improvements in performance, revenue, and business competitiveness (Awladthani et al., 2023; Daryono et al., 2024; Pereira et al., 2023; Rizkita et al., 2023).

MSME competitiveness itself is shaped by innovation capability, cost efficiency, and product quality (Kharub & Sharma, 2016). Numerous studies indicate that digitalization and collaboration among business actors strengthen MSMEs' positions in the global market. (Maiti & Ghosh, 2023; Nanda & Kumar, 2023; Nur Azizah et al., 2025; Triandini et al., 2022). Moreover, adopting green management and business process management has been shown to enhance both efficiency and business sustainability. (Putri et al., 2020).

From the Islamic economic perspective, business success is not solely measured by material profit but also by the application of core values such as honesty (*shiddiq*), justice (*'adl*), and social benefit (*maslahah*) (Jamaluddin et al., 2022). These principles underscore the importance of balancing economic performance with social responsibility. However, research that integrates the IPO model with Islamic values in MSME incubation programs remains limited.

3. Methodology

This study employs a descriptive qualitative approach to gain an in-depth understanding of how the Input–Process–Output (IPO) model within the CreativeBiz Incubation Program in Palu City enhances MSME competitiveness from an Islamic economic perspective. The research was conducted at the Digital-Based Business Incubator of Palu City (INBIS) between March and June 2025. Data were collected through in-depth interviews, observations, and document analysis, involving the incubator's head and team members, as well as supported MSME participants. Data analysis followed the interactive model by Miles and Huberman, which includes data reduction, data display, and conclusion drawing—each stage aligned with the IPO components: input, process, and output.

To ensure the validity of the findings, data credibility was assessed through the triangulation of sources and methods. The IPO model was used to evaluate the program's effectiveness by examining the resources used, the mentoring processes

undertaken, and the results achieved. Meanwhile, the Islamic economic perspective served as a framework to assess the extent to which the values of *shiddiq* (honesty), *’adl* (justice), and *maslahah* (benefit) were integrated into the incubation activities and business practices of the MSMEs.

4. Results and Discussion

The research findings reveal that the CreativeBiz Incubation Program, managed by the Digital-Based Business Incubator of Palu City (INBIS), plays a crucial role in strengthening the competitiveness of MSME actors through the Input–Process–Output (IPO) approach. Field observations indicate that all IPO components are systematically interconnected, and the program's success is primarily determined by the synergy among resource support (input), implementation processes (process), and outcomes (*output*). This aligns with (Aisya & Syamsu, 2024; Handayani & Mahendrawathi, 2019; Syamsu et al., 2025) View that the IPO model is effective for comprehensively assessing business development programs from planning to results.

At the input stage, CreativeBiz is supported by three key factors: competent human resources, digital technology infrastructure, and policy support through cross-sector partnerships. The incubator team consists of managers, mentors, and specialists with expertise in finance, marketing, and digital business development. Technological support—such as co-working spaces, digital marketing assistance, and access to e-commerce platforms (Shopee, TikTok, Instagram)—has been instrumental in expanding MSMEs' market reach. These findings are consistent with (Agarwal & Ojha, 2023), who emphasized the role of Industry 4.0 adoption as a key determinant of MSME competitiveness, and with (Triandini et al., 2023), who highlighted the importance of technological readiness and skilled human resources. Furthermore, policy support from the Palu City Government, including regulations and funding, strengthens the program's position as a collaborative model for local economic development.

The process stage reflects an integrated implementation framework built on three main pillars: empowering, mentoring, and innovation. The empowering phase focuses on building the foundational capacity of MSMEs through training in business management, product legality, Islamic finance, and branding. These activities equip participants with knowledge on cost structures, pricing strategies, and effective digital marketing techniques. Mentoring is conducted intensively over a three-month incubation period through both group sessions and one-on-one coaching at the business sites. This approach allows participants to apply theory to practice, such as in obtaining business licenses (NIB), halal certification, packaging design, and social media optimization. The innovation stage encourages MSMEs to develop new ideas and adapt to digital market trends. This mentoring process reflects the principles of Business Process Management (BPM), as outlined by (Handayani & Mahendrawathi, 2019), wherein business success depends on practical training, technological adaptation, and continuous innovation.

Observational data also show that most business owners experienced significant transformation after completing the incubation program. They gained a better understanding of financial recordkeeping, production planning, and digital branding for market expansion. These capacity improvements align with (Putri et al., 2020), who emphasized that adopting green business management enhances operational efficiency and sustainability. Additionally, collaboration among participants and with partner institutions has strengthened business networks and consumer trust. This confirms the findings of (Nadiger et al., 2023), who demonstrated that industry alliances are vital for boosting innovation and competitiveness in small enterprises.

The program's output stage shows tangible improvements in business performance. Several participants, including food processors and handicraft producers, reported a two- to threefold increase in revenue post-incubation. Improvements were also noted in product quality, packaging aesthetics, and market penetration through digital platforms. Furthermore, MSMEs have begun setting selling prices based on calculated production costs and reasonable profit margins. These outcomes align with Kharub and Sharma's assertion that MSME competitiveness is influenced by cost efficiency, product quality, and innovation capability. Similarly, the results support Daryono et al. (), who found that digital transformation and green intellectual capital management directly contribute to improved performance and sustainability of MSMEs.

From the Islamic economic perspective, the success of the CreativeBiz Program is not only measured in financial terms, but also by how well *maqashid sharia* (objectives of Islamic law) are implemented in the incubation activities and business practices of participants. The value of *shiddiq* (honesty) is reflected in the tenant selection process, conducted objectively and

free of nepotism, as well as in transparent business transactions. The principle of *'adl* (justice) is manifested in providing equal access to mentoring for all entrepreneurs, regardless of their social or economic backgrounds. The value of *maslahah* (benefit) is evident in the social contributions of MSMEs, such as empowering local labor and using environmentally friendly raw materials. This, who emphasized that Islamic economics seeks a balance between material gain and social responsibility as a foundation for sustainable and blessed business practices.

The synthesis of research findings and literature indicates that the IPO model in the CreativeBiz Incubation Program effectively integrates modern management practices with Islamic spiritual values. Substantial input from skilled human resources, technology, and institutional support fosters a well-structured process of mentoring and innovation, leading to outcomes that not only enhance business performance and sustainability but are also ethically grounded. This approach demonstrates that integrating managerial theory with Islamic values can enrich our understanding of MSME competitiveness—not only in economic terms but also through moral and social dimensions. Thus, the CreativeBiz Incubation Program presents a viable model for MSME development, oriented toward competitive excellence and public benefit, demonstrating that economic success can go hand in hand with justice and blessings within the framework of Islamic economics.

5. Conclusion

This study concludes that the Input–Process–Output (IPO) model in the CreativeBiz Incubation Program effectively enhances MSME competitiveness in Palu City by integrating resource readiness, mentoring, and innovation within an Islamic economic framework. Strong inputs—such as skilled human resources, digital infrastructure, and supportive policies—enable effective processes of empowerment, guidance, and innovation that lead to improved performance, revenue, and market access. From the Islamic perspective, the program embodies the values of *shiddiq* (honesty), *'adl* (justice), and *maslahah* (social benefit), illustrating that true competitiveness must balance economic achievement with ethical and spiritual dimensions. These findings imply that policymakers and incubators should develop value-based incubation models that integrate Islamic principles to achieve sustainable and inclusive MSME growth.

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Conflicts of Interest: The researcher declares that there are **no conflicts of interest** in the conduct of this study. All processes of research, data analysis, and manuscript writing were carried out independently, without any influence from funding institutions, external parties, or personal interests.

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