

# **The Impact of Mentoring on MSME Performance: The Mediating Role of Entrepreneurial Orientation, Participant Satisfaction, Digital Competence, and Product Innovation**

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## **ABSTRACT**

*This study investigates the impact of mentoring on the performance of MSMEs, with entrepreneurial orientation, participant satisfaction, digital competence, and product innovation as mediating variables. Utilizing the JakPreneur mentoring framework, data were collected via online questionnaires from 128 MSME actors in Jakarta. The analysis employed Structural Equation Modeling using the Partial Least Squares (PLS-SEM) approach through SmartPLS software.*

*The results reveal that mentoring has a significant positive impact on entrepreneurial orientation and MSME performance. Moreover, entrepreneurial orientation and digital competence also significantly enhance business performance. The findings highlight the critical role of mentoring programs in improving MSME capabilities through structured support, technological empowerment, and innovation encouragement.*

*This study contributes to the theoretical enrichment of entrepreneurial development and offers practical insights for policymakers and stakeholders aiming to improve MSME sustainability and competitiveness in emerging economies.*

**Keywords:** *Digital Competence, Entrepreneurial Orientation, Mentoring, MSME Performance, , Participant Satisfaction, Product Innovation.*

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## **I. Introduction**

Micro, Small, and Medium Enterprises (MSMEs) serve as the backbone of many emerging economies, including Indonesia. Beyond their contribution to national employment and economic growth, MSMEs play a vital role in enhancing social welfare and resilience, particularly in informal sectors that absorb labor excluded from formal employment systems (Tambunan, 2019). However, these enterprises often encounter structural challenges such as limited access to finance, low managerial capacity, and delayed adoption of digital technologies (Bustam, 2016; Setiawan, 2015).

In response to these challenges, structured mentoring programs have gained prominence as a strategic tool for capacity building among MSMEs. Through knowledge transfer, skill development, and network access, mentoring has been shown to significantly improve entrepreneurial behaviors and innovation capabilities (Nuringsih & Nuryasman, 2020). Moreover, the effectiveness of such interventions heavily depends on participant satisfaction, which reflects both the relevance and responsiveness of the support provided (Kusumawardhani et al., 2021).

JakPreneur, a flagship program initiated by the Jakarta Provincial Government, exemplifies a localized mentoring framework aimed at empowering MSME actors in the capital. It incorporates training, consultation, and digital facilitation to boost entrepreneurial potential. This study adopts JakPreneur as a contextual case to examine the broader influence of mentoring on MSME performance through four critical mediators: entrepreneurial orientation, participant satisfaction, digital competence, and product innovation.

By focusing on these mediating variables, the study aims to bridge theoretical understanding and practical insights into MSME development within the context of an emerging digital economy. It contributes not only to the entrepreneurial literature but also offers valuable implications for policy makers and development agencies seeking to enhance MSME competitiveness and sustainability in urban Southeast Asia.

## **II. Literature Review and Hypothesis Development**

### **2.1 Mentoring and MSME Performance**

Mentoring has emerged as a strategic mechanism to empower MSMEs by providing knowledge transfer, emotional support, and access to networks. According to Gunday et al. (2022), mentoring plays a catalytic role in fostering innovation by bridging experience gaps and enhancing entrepreneurs' decision-making capabilities. In the Indonesian context, structured mentoring, such as the JakPreneur program, has shown to elevate entrepreneurial competencies (Kristaung & Ivonne, 2018).

Furthermore, Corbett and Kennedy emphasized that effective coaching restructures neural patterns, fostering behavioral shifts toward sustained business growth. This aligns with the four-stage coaching process articulated by Constable (2020): Awareness, Clarity, Choice, and Action—each crucial in transforming MSME capacity.

### **2.2 Entrepreneurial Orientation**

Entrepreneurial orientation (EO) reflects the strategic posture of a firm in embracing innovation, risk-taking, and proactiveness (Voss et al., 2005; Mohammadi & Karimi, 2022). EO enables businesses to remain adaptive in dynamic markets. Kristaung et al. (2021) note that a proactive mindset and measured risk-taking enhance the sustainability of small enterprises in emerging economies.

EO consists of five core dimensions: autonomy, innovativeness, proactiveness, competitive aggressiveness, and risk-taking (Gupta & Wales, 2017). These elements are especially relevant for MSMEs navigating uncertainty in rapidly shifting consumer environments.

### **2.3 Digital Competence**

Digital competence is defined as the set of knowledge, skills, and attitudes that enable effective use of digital technologies (Voogt & Pelgrum, 2023). The European Commission identifies five domains: information literacy, communication, digital content creation, safety, and problem-solving (Ferrari, 2023). For MSMEs, digital competence is key in adopting digital business models, utilizing CRM systems, and expanding to e-commerce platforms (Bruning et al., 2022).

Kristaung (2022) underlined that digital readiness and skill adaptability among MSME actors significantly correlate with enhanced service innovation and market responsiveness.

### **2.4 Participant Satisfaction**

Participant satisfaction in mentoring programs reflects perceived service quality and effectiveness. Parasuraman et al. (1985) propose ten service quality dimensions, including reliability, responsiveness, competence, and tangibles. Satisfaction fosters motivation and loyalty, enhancing performance outcomes (Kotler & Armstrong, 2017). Kristaung (2020) further demonstrated that satisfaction in participatory training models strengthens entrepreneurial resilience among urban micro-enterprises.

H6: Mentoring positively influences participant satisfaction.

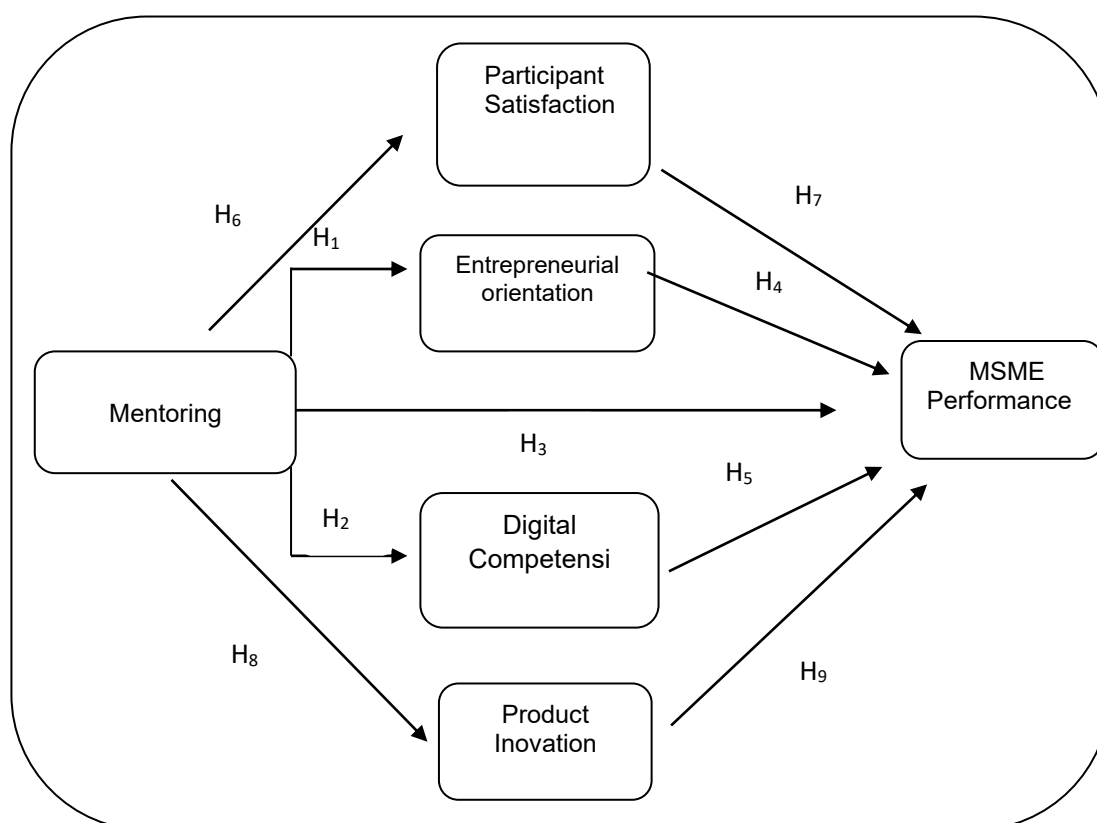
### **2.5 Product Innovation**

Product innovation refers to the development of new or improved products that fulfill evolving market demands (Moreau et al., 2021). Innovation enhances competitiveness, drives customer satisfaction, and supports financial growth (Tjiptono, 2008). According to Kristaung (2023), innovation capacity among Jakarta-based MSMEs is often constrained by access to knowledge and support, underscoring the relevance of mentoring in unlocking product development.

Based on previous empirical studies and relevant theoretical foundations, this research constructs a comprehensive conceptual framework to explore how mentoring influences MSME performance through several mediating variables. As illustrated in Figure 1, the model posits that mentoring (exogenous variable) directly affects MSME performance (endogenous variable), and also exerts indirect effects through four mediating constructs: entrepreneurial orientation, digital competence, participant satisfaction, and product innovation.

This framework is grounded in the Resource-Based View (RBV) and Dynamic Capabilities Theory, suggesting that competitive advantage and business performance are driven not only by tangible resources but also by strategic capabilities such as innovation, adaptability, and learning—capacities which can be developed through mentoring interventions.

**Figure 1.** Conceptual Framework



Each mediating variable was selected based on its strategic relevance: (1). Entrepreneurial Orientation reflects a proactive, innovative, and risk-taking mindset that enhances decision-making under uncertainty; (2). Digital Competence represents the MSMEs' ability to leverage technology for operational and market effectiveness; (3). Participant Satisfaction captures perceived value from mentoring, which influences motivation and learning outcomes; dan (4). Product Innovation refers to the ability to develop new or improved offerings aligned with evolving customer needs.

This conceptual framework serves as the foundation for the research hypotheses and provides a structured approach to analyze the causal and mediating effects of mentoring on MSME performance.

### III. Research Methodology

This study adopts a quantitative explanatory research design grounded in the positivist paradigm, aiming to test the causal relationships between mentoring and MSME performance mediated by four constructs: entrepreneurial orientation, participant satisfaction, digital competence, and product innovation. Mentoring is treated as the exogenous latent variable, while MSME performance is the endogenous latent outcome.

Data were collected using an online survey questionnaire targeted at MSME actors registered in the JakPreneur program under the Jakarta Provincial Government. The sample consists of 128 respondents who meet the following criteria: (1). Business located in Jakarta; (3). Registered with a Business Identification Number (NIB); (3). Possessing certifications such as PIRT, BPOM, halal, or NPWP; (4). Monthly turnover between IDR 30–50 million; (5). Operating for less than 5 years; and (6). Employing fewer than five workers

A five-point Likert scale was used to measure responses, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0 to examine both direct and indirect effects among the constructs.

This methodological approach is suitable for modeling complex relationships and small to medium sample sizes (Hair et al., 2019). It also allows for the simultaneous analysis of measurement and structural models, making it ideal for theory development and validation.

#### IV. Results and Analysis

The results were analyzed using bootstrapping with 5,000 resamples in SmartPLS to test the statistical significance of each path. The hypotheses tested include both direct and mediated effects.

**Table 1.** Hypotheses Result

Hypothesis	Path Coefficient	T-Statistic	P-Value
H1 Mentoring → Entrepreneurial Orientation	0.897	42.625	0.000
H2 Mentoring → Digital Competence	0.906	48.535	0.000
H3 Mentoring → MSME Performance	0.259	1.965	0.049
H4 Entrepreneurial Orientation → MSME Performance	0.312	2.022	0.043
H5 Digital Competence → MSME Performance	0.380	2.186	0.029
H6 Mentoring → Participant Satisfaction	0.934	66.874	0.000
H7 Participant Satisfaction → MSME Performance	0.838	32.814	0.000
H8 Mentoring → Product Innovation	0.945	62.506	0.000
H9 Product Innovation → MSME Performance	0.237	1.980	0.048

These findings confirm that mentoring exerts both direct and indirect positive effects on MSME performance. Among mediators, participant satisfaction shows the strongest impact, followed by digital competence and entrepreneurial orientation, consistent with the multidimensional performance theory (Zhu & Nakata, 2007; Lumpkin & Dess, 2001).

The findings of this study affirm the significant role of mentoring in enhancing MSME performance, both directly and indirectly through mediating variables. The strong influence of mentoring on entrepreneurial orientation (H1) and digital competence (H2) aligns with prior research emphasizing the transformative capacity of structured mentoring programs (Kristaung & Ivonne, 2018; Gunday et al., 2022). This reinforces the view that mentoring not only delivers technical assistance but also cultivates a growth mindset and strategic adaptability.

Entrepreneurial orientation (H4) and digital competence (H5) were found to significantly contribute to performance outcomes, consistent with the dynamic capabilities perspective (Teece, 2007). Entrepreneurs with proactive attitudes and high digital literacy are better positioned to respond to market volatility and customer needs, thereby driving business resilience and innovation (Mohammadi & Karimi, 2022).

Participant satisfaction (H6 & H7) emerged as a dominant mediating variable, showing that when MSMEs perceive mentoring programs as relevant and impactful, their engagement and motivation increase—leading to enhanced business outcomes. This finding resonates with service quality theories (Parasuraman et al., 1985) and confirms that satisfaction is not merely an outcome but a performance enabler.

Mentoring also positively affects product innovation (H8), which in turn impacts MSME performance (H9). These results support prior work highlighting that innovation serves as a key driver for competitiveness and survival in the MSME sector (Tjiptono et al., 2008; Moreau et al., 2021). As Kristaung (2023) noted, innovation among MSMEs can be catalyzed by external support that mitigates capability constraints.

Overall, the results underscore the importance of a comprehensive and personalized mentoring approach that goes beyond technical training, integrating aspects of digital transformation, entrepreneurial capability, and user experience to foster sustainable performance improvements.

#### V. Conclusion and Recommendations

This study concludes that mentoring plays a vital role in improving MSME performance through multiple pathways. Structured mentoring significantly enhances entrepreneurial orientation, digital competence, participant satisfaction, and product innovation—all of which contribute to business success.

The findings validate the integration of the resource-based view and dynamic capabilities theory, demonstrating that performance is shaped not only by tangible resources but also by intangible capabilities fostered through mentoring.

Practical recommendations include: (1). Designing customized mentoring programs that account for business age, industry type, and digital maturity; (2). Prioritizing digital literacy and innovation modules in training; (3). Enhancing pre-assessment and participatory planning to align support with MSME needs; (4). Incorporating monitoring and evaluation frameworks to track impact and adapt mentoring content dynamically.

for further research, it can address the factors that hinder MSMEs in improving and maintaining digital competence, such as limited internet infrastructure, costs, motivation or lack of initial digital literacy. It can examine the sustainability of improving MSME performance triggered by digital competence and other supporting ecosystems.

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