

The Role of Innovation Orientation on MSME Performance Moderated by Competition Intensity

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ABSTRACT. The purpose of this study is to determine whether Innovation Orientation (IO) has an impact on the performance of micro, small, and medium enterprises (MSMEs) moderated by Competition Intensity (CI) in the food and beverage sector in Indonesia. The research sample consisted of 100 MSME actors. Sample collection was conducted through an online questionnaire. The analysis used in this study employed Smart PLS 3.0. The results showed that IO had a direct positive impact on MSME performance, but CI did not have a direct positive impact and did not moderate MSME performance. These findings provide applicable guidance for MSME owners and policymakers that encouraging innovation through internal support systems and market responsiveness can yield tangible performance benefits, even in highly competitive environments.

Keyword: Innovation Orientation; MSMEs Performance; Competition Intensity

JEL Classification: O31;L25;L11

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INTRODUCTION

Innovation orientation has emerged in Micro, Small, and Medium Enterprises (MSMEs) business operations as a strategic compass that guides companies toward sustainable performance. Mamun & Nasir (2017) state that innovation can flourish when market orientation and active interaction are developed, enabling MSMEs to adapt and differentiate themselves in a competitive environment. Guimaraes et al. (2020) found that competitive forces in both the health sector and MSMEs can either trigger or hinder quality outcomes, depending on the extent to which internal orientation is aligned. Yuwono, Tajudin, et al. (2024) highlight the importance of innovation readiness for MSMEs facing saturated markets and regulatory complexities.

Although interest in innovation orientation as a driver of MSME performance continues to increase, there are still differences in empirical findings that highlight a critical research gap. Mohedano-Suanes et al. (2021) found that innovation orientation does not significantly affect long-term financial performance. Rhee & Stephens (2020) showed that innovation-oriented technology assimilation strategies significantly improve MSMEs' competitive advantage and performance. These conflicting research results highlight the need to re-examine the role of innovation orientation in MSME performance. Furthermore, the moderating effect of competition intensity also shows conflicting research results.

Foroughi et al. (2015) show that competition intensity strengthens the relationship between open service innovation and business performance in the tourism sector. Tian et al. (2021) find that competition intensity weakens the relationship between engagement and business model innovation. This inconsistency suggests that competition intensity may not uniformly moderate innovation-related performance outcomes across different sectors or types of innovation. Therefore, this study researches innovation orientation on MSME performance and the moderating role of competition intensity to address theoretical and contextual gaps in the existing literature.

LITERATURE REVIEW AND HYPOTHESIS

Innovation orientation is consistently associated with improved organizational performance across various sectors. Hughes et al. (2019) found that dynamic decision-making capabilities enhance innovation orientation, positively influencing exporters' performance. Klassen et al. (2020) showed that innovation orientation significantly contributes to performance outcomes even in the nonprofit sector, demonstrating its cross-sector relevance. Hapsari et al. (2025) emphasize that digital marketing capabilities often support the adoption of innovation orientation in improving performance. Rachmawati et al. (2022) further reinforce this by showing that financial and digital literacy, which are the foundations of innovation readiness, positively influence the performance of MSMEs. Additionally, Wulansari et al. (2023) also highlight that innovative branding strategies, such as halal labeling, can increase MSME revenue, highlighting the practical impact of innovation orientation. These findings collectively support the proposition that innovation orientation is a strategic asset for MSMEs seeking performance improvement.

H1. Innovation orientation has a positive impact on MSME performance.

Although innovation orientation can improve SME performance, its effectiveness may vary depending on external competitive pressures. Ahmed & Afza (2019) reveal that competitive intensity significantly affects company performance, suggesting that innovation strategies must be responsive to context. Anning-Dorson (2016) found that interactive innovation produces better performance under high customer demand and competitive intensity. Yuwono et al. (2025) argue

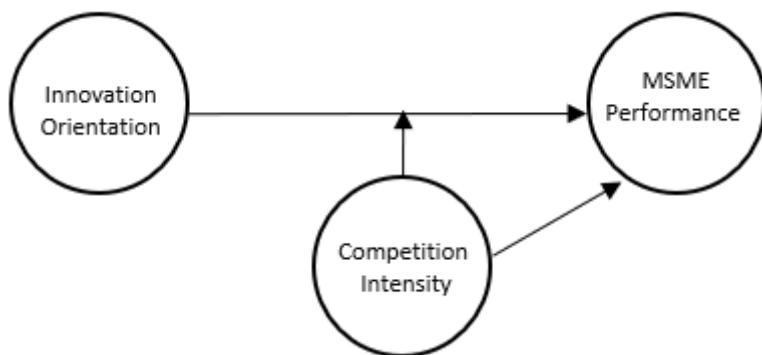
that adopting Information and Communication Technology (ICT) can improve SME performance when SMEs have unique competencies, suggesting that innovation must be tailored to competitive capabilities. Based on the above literature, this study concludes that competition intensity can strengthen or dampen the benefits of innovation orientation, depending on how SMEs adjust their strategies. Therefore, understanding the moderating role of competition intensity is crucial for optimizing innovation-driven SME performance.

H2. Competition intensity has a positive impact on MSME performance..

H3. Competition intensity moderates the relationship between innovation orientation and MSME performance.

METHODS

Data was collected from Food and Beverage MSMEs in Central Java, Indonesia through an online questionnaire. Of the 110 questionnaires sent, only 100 were returned. The data was analyzed using the Smart PLS version 3.0 program. Innovation orientation was measured using indicators of creativity support, market orientation, and continuous improvement of products or services (Farooq et al., 2021). MSME performance was measured using indicators of sales growth, customer growth, customer satisfaction, and loyalty (Wang et al., 2022). Competition intensity was measured using indicators of number of competitors, similarity of products, frequency of strategic adjustments (Tian et al., 2021).



Source: Authors' own creation

Figure 1. Analytical framework

The questionnaire used a Likert scale with the following answer options: (1) strongly disagree, (2) disagree, (3) somewhat agree, (4) agree, and (5) strongly agree (Yuwono et al., 2023). Furthermore, the concept was tested using the structural model proposed by Figure 1 explains the analytical framework for this study. This framework hypothesizes that the intensity of competition moderates the orientation of innovation towards the performance of MSMEs.

RESULT AND DISCUSSION

Validity and discriminant validity were evaluated using factor loadings, while discriminant validity was evaluated based on the mean extracted variance. After conducting validity tests for Innovation Orientation (IO), MSME Performance, and Competition Intensity (CI), the results showed that several indicators were eliminated because they had factor loadings below 0.70, namely IO1 (0.697), IO2 (0.673), IO5 (0.685), and IO6 (0.673). After two invalid indicators were eliminated, the average variance of each variable was calculated. The extracted findings had Average Variance Extracted (AVE) values of 0.735, 0.735, and 0.788, which indicate that all these values are above

0.50. This research tool is reliable. The reliability test assessed the composite reliability (CR) value. This study's CR values for the IO, CI, and MSME performance variables were 0.850, 0.917, and 0.937, respectively. These values indicate that each variable is reliable, as they exceed the threshold of 0.70. Based on the data shown in Table 1, it can be concluded that this instrument is reliable.

Table 1. Convergent Validity

Variable	Item	Loading Factor	Result	CR	AVE	Result
Innovation	IO3	0.897		0.850	0.735	
Orientation	IO4	0.822				
	CI1	0.797				
Competition	CI2	0.829		0.917	0.735	
Intensity	CI3	0.926	Valid			Reliable
	CI4	0.872				
	MP11	0.877				
MSME	MP2	0.888		0.937	0.788	
Performance	MP3	0.885				
	MP4	0.901				

Source: Authors' own work

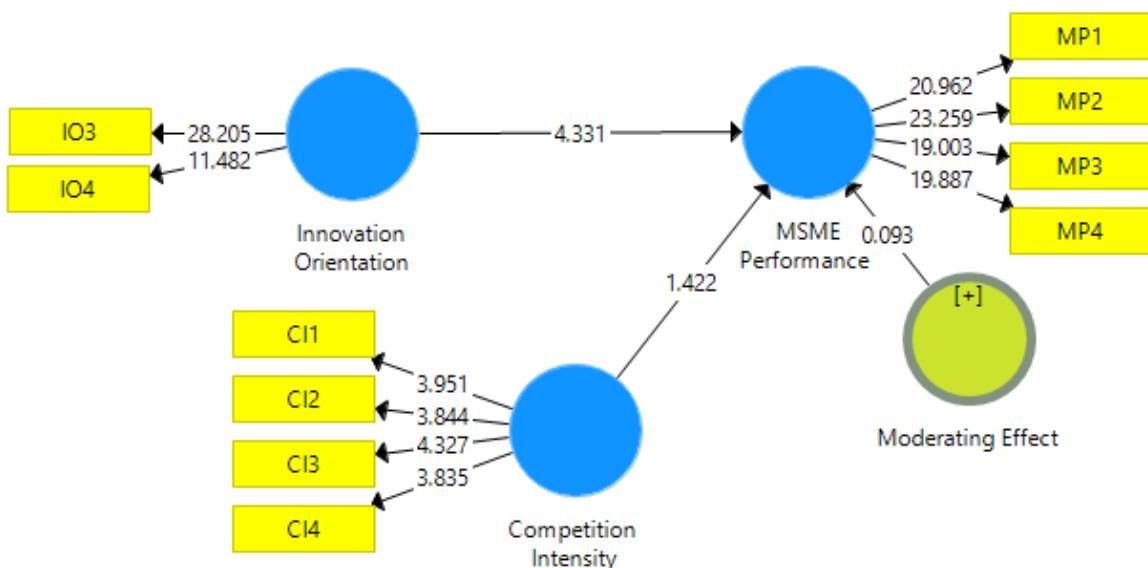
The process of hypothesis testing using structural model testing is illustrated in Figure 2. The figure is the result of bootstrapping testing, involving 500 resamplings performed using the Smartpls 3.0 application. Figure 2 illustrates that this study covers several hypotheses to be tested using empirical data collected from the field. Innovation orientation directly impact the performance of MSMEs. The effect of innovation orientation on MSME performance is moderated by competition intensity.

Table 2. Total Effect

Direct Effect		Sample Mean	T-Statistic	T-Critical	Result
H1	IO -> MSMEs Performance	0.345	4.331	1.984	Accepted
H2	CI -> MSMEs Performance	0.157	1.422		Rejected
H3	IO -> CI -> MSMEs Performance	-0.005	0.093		

Source: Authors' own work

The results of this study are presented in Table 2. In summary, the impact of IO on MSME performance is statistically significant ($t = 4.331 > 1.984$). In addition, the effect of CI on MSME performance is not statistically significant ($t = 1.422 < 1.984$). Furthermore, the moderating effect of CI on MSME performance is also not statistically significant ($t = 0.093 < 1.984$). Based on these results, it can be concluded that H2 and H3 are rejected, and only H1 is accepted.



Source: Authors' own creation

Figure 2. Structural equation modeling results

DISCUSSION

and interaction encourage innovation, improving company performance. MSMEs that actively interact with customer preferences and support internal creativity are better able to achieve sales growth, customer satisfaction, and loyalty. Klassen et al. (2020) also emphasize that innovation orientation drives performance even in sectors with limited resources, demonstrating its relevance across various organizations. Central Java MSMEs still face capital constraints and fluctuating demand, making innovation a strategic lever for maintaining competitiveness and expanding market reach. Interestingly, this study found that the intensity of competition, as measured by the number of competitors, product similarity, and frequency of strategic adjustments, does not significantly moderate the relationship between innovation orientation and MSME performance.

This supports the findings of ian et al. (2021), who concluded that competition intensity does not continually strengthen innovation outcomes, especially when business model innovation or network involvement plays a stronger mediating role. For SMEs in Central Java, internal innovation capabilities may be more critical than external competitive pressures. Even in saturated food and beverage markets, companies prioritizing continuous improvement and customer-oriented innovation can outperform competitors without relying on reactive competitive strategies.

However, these findings contradict the studies by Foroughi et al. (2015) and Guimaraes & Paranjape (2019), which argue that competitive intensity can enhance the effectiveness of innovation strategies. According to them, high competition forces companies to innovate more aggressively, improving performance. MSMEs in Central Java often operate in fragmented markets with a local customer base, where internal orientation drives innovation more than external competition. Therefore, although competition can stimulate innovation in some sectors, its moderating role is less prominent in regional MSMEs. This highlights the need for tailored innovation strategies prioritizing internal capability development over reactive market responses.

CONCLUSION

This study concludes that innovation orientation has a positive effect on the performance of MSMEs in the food and beverage sector in Central Java. However, the intensity of competition does not significantly moderate this relationship, suggesting that internal strategic capabilities may be more dominant than external market pressures. The limitations of this study are the geographical coverage of respondents and the focus on the food and beverage sector only.

Practically, these findings provide applicable guidance for SME owners and policymakers that encouraging innovation through internal support systems and market responsiveness can yield tangible performance benefits, even in highly competitive environments. Theoretically, this study contributes to the literature by challenging the assumption that competition intensity universally strengthens innovation outcomes. This reinforces the view that innovation orientation functions as a stand-alone strategic asset in specific SME contexts, particularly where market fragmentation and customer proximity dominate. The study also fills an empirical gap by integrating innovation and competition constructs within a local SME framework, offering a more nuanced understanding of their interaction.

Future research should explore longitudinal designs to assess how innovation orientation and competition intensity interact, particularly during market disruptions or technological shifts. Expanding studies to include SMEs from diverse sectors and regions would enhance generalization and reveal sector-specific dynamics. Furthermore, incorporating mediating variables such as digital capabilities, organizational culture, or customer collaboration could reveal deeper mechanisms through which innovation orientation translates into performance. A mixed-methods approach combining quantitative surveys with qualitative interviews could also enrich contextual understanding of SME innovation behavior in Indonesia and abroad.

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