



**Article Type:** Research Paper

# Moderation Role of Strategic Agility in the Relationship between Entrepreneurial Orientation and Competitive Advantage in SMEs

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## Abstract

**Research aims:** This study employed dynamic ability theory to test the relationship between entrepreneurial orientation and competitive advantage moderated by strategic agility, consisting of three dimensions (strategic sensitivity, collective commitment, and fluidity of resources) in the context of small and medium enterprises in the developing country.

**Design/Methodology/Approach:** This study applied a cross-sectional design, using bootstrapping analysis with the SmartPLS 3.0 program to test the indirect relationship between entrepreneurial orientation and competitive advantage. Strategic agility was the moderating variable to explain the relationship between entrepreneurial orientation and competitive advantage. The sample comprised 170 food and beverage small and medium enterprises (SMEs) in Sleman Regency, Yogyakarta.

**Research findings:** The results revealed that entrepreneurial orientation increased competitive advantage through strategic agility consisting of three dimensions, simultaneously carrying out exploration and exploitation innovations to encourage entrepreneurship of SMEs in increasing sustainable competitive advantage.

**Theoretical contribution/Originality:** The novelty of this research is the achievement of excellence and sustainable competitiveness of SMEs that can be done by increasing strategic agility.

**Practitioner/Policy implication:** This research is expected to be the reference and consideration for SMEs' businesspeople, owners, and managers, which can be in the form of utilizing resource capabilities to encourage the improvement of company knowledge management and produce superior performance from sustainable competitors in a volatile, uncertain, and ambiguous environment.

**Research limitation/Implication:** Future research may consider the mediating effects before the moderating variables and consider a stable environment that does not have turmoil, such as the COVID-19 pandemic, and whether strategic agility is still relevant to the research context. Further research can also prove and focus on only one scale of SMEs because they are small and medium and may have a different way of dealing with a tumultuous and uncertain environment. Finally, future researchers can also study and incorporate other entrepreneurial orientation constructs that potentially affect SMEs, such as autonomy, aggressiveness, and competitive energy.

**Keywords:** Entrepreneurial Orientation; Strategic Agility (Strategic Sensitivity, Commitment Collective, and Resource Fluidity); Competitive Advantage



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## Introduction

In the current economic context, small and medium enterprises (SMEs) dominate businesses worldwide. SMEs are essential contributors to job creation and play a vital role in economic development (Yap & Rasyid, 2011). SMEs also have more room for innovation in organizational practices. However, SMEs face unique challenges in an unstable environment, causing environmental and accelerated information about clients, competitors, suppliers, and technology, which creates uncertainty and hinders innovation (Garbellano & Da Veiga, 2019). The Statistics Indonesia (BPS) survey published in 2020 showed that around 64.88% of SMEs, or as many as 2.73 million businesses, experienced difficulties running their business during the COVID-19 pandemic. The COVID-19 pandemic has affected various aspects of life, so many businesses have gone out of business.

As a result of this phenomenon, the pandemic has given rise to new SMEs as an alternative source of public finance affected by layoffs. Significant growth was recorded in the field of the food and beverage business. Considering the phenomenon, the Sleman Regency Government has provided support by allocating budget empowerment as much as IDR 4.7 billion to improve the progress of cooperatives and SMEs. The decision was taken after considering that the priority of the spending consumption community during the COVID-19 pandemic was necessities, food, and drinks (Statistics Indonesia of Yogyakarta, 2021).

Based on the 2021 annual SME survey results at Yogyakarta Special Region, the total expenditure on SME businesses/companies was IDR 4.694 trillion. The business group with the proportion of the most significant expenditure was the food and beverage industry group, with 48.48%. Based on the distribution of areas in the Yogyakarta Special Region, SMEs' most major business/company expenses were in Sleman Regency, amounting to IDR 1.807 trillion (38.50%). The area with the minor proportion of expenditure was Yogyakarta City at IDR 243.37 billion (5.18%). Meanwhile, the highest number of SMEs by region was in Sleman Regency, consisting of 113.229 businesspeople, and the minor proportion was in Yogyakarta City, with as many as 32.440 businesspeople (Statistics Indonesia of Yogyakarta, 2021).

From the economic aspect mentioned above, there is competitive intensity, and the acceleration of the changing environment makes a company's innovation capacity critical to today's and future competitiveness to achieve competitive advantage (Soto-Acosta et al., 2018). Technological changes, deregulation, and globalization have also made the business environment "hypercompetitive" (Xing et al., 2020). Within these conditions, organizations must find innovative ways to differentiate themselves from competitors by being more collaborative, virtual, accurate, synchronous, adaptive, and agile.

Undeniably, entrepreneurial orientation influences the process in companies when there is competitive intensity and changes in the business environment. Entrepreneurial orientation is described as a key component to enhancing relevant enterprise-level results, such as business performance (Casillas & Moreno, 2010; Lechner & Gudmundsson, 2014) and corporate entrepreneurship (Dess & Lumpkin, 2005).

Nevertheless, the theoretical mechanism of entrepreneurial orientation that impacts competitive advantage has not been determined clearly and consistently (Covin & Wales, 2019). As explained in Bibliometric research conducted by Wales et al. (2021), there were 62,499 citations from 822 publications on entrepreneurial orientation, relationships between entrepreneurial orientation towards performance, and research focused on developed countries. Entrepreneurial orientation also refers to decision-making processes, practices, and activities leading to new entries and measuring the construct of entrepreneurial orientation using three dimensions: innovative, proactive, and risk-taking (Miller & Friesen, 1982; Zulkifli & Rosli, 2013).

So that food and beverage SMEs can survive in a competitive, volatile, uncertain, complex, and ambiguous business environment, they must have strategic agility to sense and seize opportunities and quickly change their business model to improve their competitive advantage (Fourné et al., 2014). It is because previous research only focused on the direct relationship between entrepreneurial orientation and competitive advantage, and it has not been done much further research. Therefore, this study used strategic agility as a moderating variable because strategic agility supports an organization's entrepreneurial activities in three ways: strategic sensitivity, collective commitment, and resource fluidity capability.

Strategic sensitivity allows organizations to sense change and identify opportunities in changing market conditions. Collective commitment also allows the organization to gain commitment from stakeholders involved in creating new opportunities. Meanwhile, resource fluidity enables organizations to quickly reconfigure themselves to capture the new value created by new opportunities. Based on previous research, agility has been suggested to be a moderating variable for improving the business environment when facing a pandemic (Xing et al., 2020).

Hence, considering the conceptual and contextual aspects, this research focuses on the relationship between entrepreneurial orientation and sustainable competitive advantage, which is still quite limited. Second, to confirm an environment full of uncertainty, strategic agility was used as a moderation authorizing organizations to respond quickly to environmental shifts. Third, it emphasizes developing countries in the food and beverage SME sub-sector.

Based on those arguments, this study responds to the research questions. First, is there a relationship between entrepreneurial orientation and sustainable competitive advantage in an environment full of uncertainty? Second, is there a moderating role of strategic agility on the above variables? Thus, this study developed and tested a model linking entrepreneurial orientation with a competitive advantage and placing strategic agility as a moderating variable.

This study will also provide theoretical implications concerning the effect of entrepreneurial orientation on competitive advantage and is expected to provide an explanatory contribution to the research literature regarding the role of strategic agility as a moderating variable with three dimensions. Then, as the practical implications, this

research is expected to become one of the references and considerations for business actors, such as SME owners or managers, to utilize resource capabilities in encouraging company knowledge management so that they can produce moderately greatest performance from competitors. Further, the results of this research can be used as exploration and exploitation innovations to encourage SME entrepreneurship.

## Literature Review and Hypotheses Development

### Entrepreneurship Orientation

Mintzberg (1973) describes entrepreneurial orientation as a unidimensional construct, concentrating on managerial disposition based on decision-making. Mintzberg comprehends that entrepreneurial orientation has three dimensions: innovation, risk-taking, and proactive. These aspects must support each other so that entrepreneurial orientation manifests as a collection of organizational behaviors and positions widely accepted by academics in subsequent research (Covin & Slevin, 1989; Covin & Wales, 2012; Miller & Friesen, 1982).

Nevertheless, Lumpkin and Dess (1996) challenge this idea and explain entrepreneurial orientation as a multidimensional organizational-level phenomenon that involves critical judgments made by individuals on behalf of the organization. Wales (2015) also sets the importance of modeling multidimensional relationships to comprehend how entrepreneurial orientation manifests across organizations. Finally, Covin and Wales (2019) characterize entrepreneurial orientation as organizational features that reinforce and demonstrate patterns of sustainable entrepreneurial behavior and reflect new, proactive activities. Previous research has proven that entrepreneurial orientation toward competitive advantage has significant results (Sirivanh et al., 2014; Zebaaree, 2017). It aligns with dynamic capability theory, which can integrate, develop, and reconfigure internal and external resources to deal with a rapidly changing business environment (Teece et al., 1997).

In this case, SMEs need entrepreneurial orientation to prevail in competition. This argument is established in resource-based research. The resource-based view demonstrates that entrepreneurial orientation is an organizational resource that forms a sustainable competitive advantage. Sustainable competitive advantage will only occur if scarce, intangible, and specific assets are used (Kraaijenbrink et al., 2010). SMEs with good entrepreneurial behavior will use and mobilize all their potential to advance in entrepreneurship (Covin & Wales, 2019). Conversely, empirical evidence that entrepreneurial orientation had no significant effect is in line with research (Kraus et al., 2011; Lee et al., 2019), finding that entrepreneurial orientation from three dimensions, when faced with economic crisis environmental conditions, would have the potential to fail.

Extensive research has also been conducted in developed countries, such as SMEs pursuing new opportunities and engaging in entrepreneurial activities that advance

sustainable competitive advantage. This concept refers to innovation, proactivity, and risk-taking (Covin & Wales, 2019). Likewise, when examining research conducted in developing countries which is rarely studied, the ideas and dimensions used are relatively identical to research in developed countries (Arifin & Sunaryo, 2018). Hence, research examining entrepreneurial orientation as an antecedent of competitive advantage in SMEs is still available. Therefore, this study used cost advantage differentiation indicators and focused on smaller markets to describe sustainable competitive advantage in food and beverage small and medium enterprises. Thus, research examining entrepreneurial orientation as an antecedent of competitive advantage in SMEs is still open for research. This study uses indicators of cost advantage, differentiation, and focus on smaller markets to describe sustainable competitive advantage in small and medium food and beverage businesses.

*H<sub>1</sub>: Entrepreneurial orientation has a positive effect on competitive advantage.*

### **Strategic Agility**

Roth (1996) conceptualized strategic agility as the capability to produce the right product in the right place, at the right time, and at the right price and characterized it as achievable only by competitive forces in a combined set of generic capabilities that involve quality, delivery, flexibility, and price leadership. Regardless, Doz and Kosonen (2008) challenge Roth's (1996) conceptualization and claim that the notion is precise to the context of the manufacturing industry.

Doz and Kosonen (2008) conceptualize strategic agility as an organization's ability to make solid strategic commitments and have the awareness, willingness, and flexibility to adjust commitments as required. In addition, Doz and Kosonen (2008) define strategic agility as an organization's strategic sensitivity, collective commitment, and resource fluidity capabilities, which will increase performance or competitive advantage when combined. Furthermore, strategic agility can also respond quickly to emerging market opportunities. Strategic agility within the organization can also be defined as the company's ability to quickly adapt to external and internal changes, such as meeting customer demands and expectations, leading change, and maintaining a sustainable competitive advantage (Ulrich & Yeung, 2019).

Doz (2020) refines this argument by stating that strategic agility is the ability to dynamically reinvent and review organizational strategy when the business environment changes. Furthermore, Doz emphasizes that the ability to detect and respond to opportunities and threats easily, quickly, and agilely positively affects company performance, especially in a volatile environment. Therefore, agility positively affects performance and competitive advantage (Kurniawan et al., 2020; Ofoegbu & Akanbi, 2012; Ravichandran et al., 2005). It aligns with dynamic capability theory, which can reconfigure resources and business routines according to plans and deemed appropriate by decision-makers.

The positive impact on excellence has been mentioned in the strategic and operational case of Shin et al. (2015) and Zhou et al. (2019) market agility. However, little empirical evidence indicates that in a volatile environment, agility positively moderates entrepreneurial orientation on performance (Benzidia & Makaoui, 2020; Shin et al., 2015). In addition, agility allows SMEs to utilize the knowledge that leads to increased performance and organizational excellence; the more agile SMEs respond to the business environment, the better the opportunities to survive and compete with competitors (Audretsch & Belitski, 2021). Thus, with strategic agility, SMEs can quickly recognize new opportunities by getting information on changing trends. At the same time, strategic agility can also increase competitive advantage.

In previous literature, empirical research has demonstrated that strategic agility supports organizational and entrepreneurial activities in three ways (Arbussa et al., 2017; Kurniawan et al., 2020; Xing et al., 2020; Nyamrunda & Freeman, 2021). First, strategic sensitivity enables organizations to sense change and identify opportunities in rapidly changing market conditions. Second, collective commitment allows the organization to obtain a collective commitment from stakeholders in pursuing new opportunities for the common good. Third, resource fluidity capabilities enable organizations to quickly reconfigure resources to seize new opportunities created from existing opportunities.

With strategic agility, SMEs can lessen failure by producing new products while expanding the range of existing products. Strategic agility also has an essential role for SMEs when encountering and responding to a business environment full of serendipity, so there is a need for optimal management of strategic formulation to boost competitiveness and remain sustainable (Xing et al., 2020). Thus, strategic agility moderates the relationship between entrepreneurial orientation and competitive advantage by combining strategic sensitivity, collective commitment, and resource fluidity. Hence, the following hypotheses were proposed.

*H<sub>2</sub>: Strategic agility ability moderates entrepreneurial orientation towards competitive advantage.*

*H<sub>3</sub>: The ability of strategic sensitivity moderates the effect of entrepreneurial orientation on competitive advantage.*

*H<sub>4</sub>: The ability of collective commitment moderates the effect of entrepreneurial orientation on competitive advantage.*

*H<sub>5</sub>: The ability of resource fluidity to moderate the effect of entrepreneurial orientation on competitive advantage.*

### **Competitive Advantage**

Mahdi et al. (2019) state that a company's success in using organizational resources to meet customer demands compared to its competitors is a way to reckon with a competitive advantage. Strategic management has focused on comprehending

sustainable competitive resources (Barney et al., 2001). Numerous factors have also been shown to affect an organization's ability to gain a sustainable competitive advantage, including capability development and the company's ability to generate differentiated value.

For organizations and companies, competitive advantage is companies' ability to generate higher economic value than its competitors. Overall, a company is said to have a competitive advantage when its profit level is higher than the industry average and has a sustainable competitive advantage when it can maintain that profit level for several years (Mao et al., 2016 & Pavic et al., 2007).

This study's model was put forward as follows:

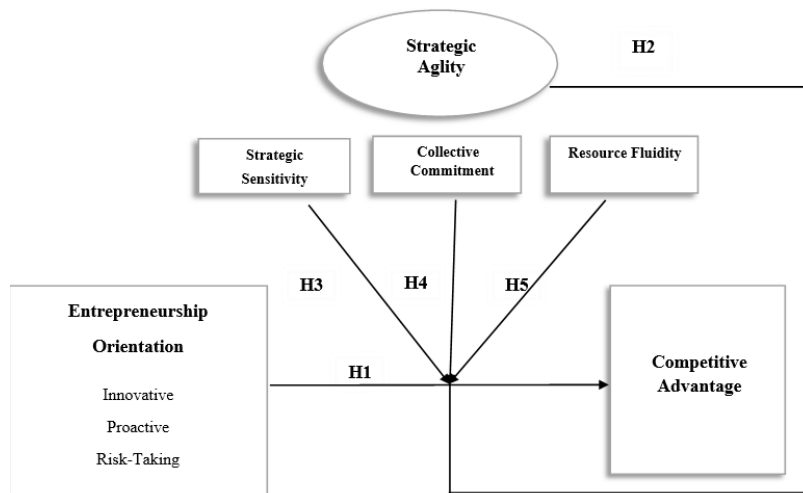


Figure 1 Research Framework

## Research Methods

This study employed a quantitative approach, using structural equation modeling (SEM) based on variance, which involved partial least squares (PLS), to evaluate the measurement and structural model by observing the variance in the dependent variable. For the research design, the researcher selected SEM-PLS for several reasons. First, SEM-PLS will work better when the number of samples is smaller, as used in this study, compared to covariance-based SEM techniques (Wang et al., 2015). Second, SEM-PLS was used because the research objective focused on predicting and explaining the variance of the main target construction, i.e., competitive advantage. Third, SEM-PLS does not have assumptions regarding data distribution, allowing analysis of non-normally distributed data (Hair & Alamer, 2022).

The unit of analysis employed in this study was at the SME level, especially in Sleman Regency, Yogyakarta Special Region Province. At the SME level, the owner or manager is the leading actor accountable for the growth and routine of the business. Thus, obtaining

the owner's or manager's perception is the same as obtaining information regarding the company (Indarti, 2010). Then, a non-probability technique was applied with purposive sampling (Sekaran & Bougie, 2016).

Moreover, since this study used primary data, a 5-point scale from the questionnaire was employed to collect data and information from respondents. Respondents should complete the form by selecting a scale from one to five (one=strongly disagree, two=disagree, three=neutral, four=agree, and five=strongly agree). For the criteria, the selected food and beverage SMEs had been operating for at least two years for sample selection. The selection of samples with a minimum age of two years was because they were entering an age of growth, causing companies to respond faster to opportunities and be more adaptive. Offline questionnaires were distributed directly. As a result, there were 170 responses, 56 from owners, 42 from managers, and 72 responses from owners and managers.

The estimation of the measurement model happened in two steps. First, the outer model had validity and reliability tests. Second, the inner model predicted causality between latent variables. A bootstrap procedure was used for moderation testing with two stages. The first stage aimed to see the primary model estimated to obtain the value of the latent variable. Then, in the second stage, the results of the exogenous and moderator latent variable values from the first stage were multiplied to create a single-item measure used to measure the interaction. The application utilized as an analytical tool was SmartPLS 3.0.

Generally, testing the research hypothesis can be determined by referring to the significance value between the t-statistical construct and the p-value. This research used p-value significance. Measurement estimates and standard errors were no longer calculated using statistical assumptions but based on empirical bootstrapping method observations. Therefore, the hypothesis is declared supported if the significance value of the p-value is  $<0.05$ , and if the significance value of the p-value is above 0.05, the hypothesis is declared not supported (Hair et al., 2022).

## Results and Discussion

The respondents of this study were 170 SME owners who met the sample criteria. Some of the respondents in the study were men, as much as 72.9%, and women, 27.1%. In addition, most respondents were bachelor's degree graduates (S1) to ensure the maturity level of respondents in making decisions. Moreover, this study was tested twice, and there were two models according to the research framework and hypotheses. In this regard, SmartPLS 3.0 analysis requires two types of model evaluation: the outer model and the inner model (Hair et al., 2022). The outer model was oriented to three criteria: convergent validity, discriminant validity, and composite reliability.

The test results shown in Table 1 included the value of each loading factor of each statement item. Table 1 displays that the entrepreneurial orientation variable statement items (IN1, IN3, IN4, IN5, P2, P3, P4, P5, PR1, PR2, PR3, and PR5) had a loading factor value



of more than 0.50. Three of the fifteen statement items on the entrepreneurial orientation variable had to be discarded because they did not meet the standard loading factor value. Besides, items with a smaller loading factor value indicated that the item was not actual data from the measured variable or construct (Hair & Alamer, 2022). Hence, these indicators should be excluded from the analysis.

Then, the resource fluidity variable (FSD1, FSD2, FSD3, and FSD4) had a loading factor value of more than 0.50. Of the five statement items on the resource fluidity variable, one statement item should be discarded because it did not meet the standard loading factor value. The removal of indicators was expected to increase the AVE and composite reliability values (Hair et al., 2022) so that it can be interpreted that the loading factor value of all statement items met the standard loading factor of more than 0.50, and the AVE value, which was above 0.50. Thus, the statement items in this study can be declared valid, and it can be concluded that the construct had good convergent validity, so it was suitable for use in the following research stage.

**Table 1** Results of model 1 validity and reliability (convergent validity)

Construct	Item Total	After Improvement	Item	FL	$\alpha$	CR	AVE
Entrepreneurship Orientation (EO)	15	11	IN1	0.6685	0.916	0.928	0.518
			IN3	0.7218			
			IN4	0.6903			
			IN5	0.7320			
			P2	0.7119			
			P3	0.7870			
			P4	0.7568			
			P5	0.7387			
			PR1	0.7739			
			PR2	0.6827			
Strategic Agility (SA)	15	14	SS1	0.7421	0.946	0.952	0.589
			SS2	0.7873			
			SS3	0.7928			
			SS4	0.7483			
			SS5	0.7644			
			CC1	0.8272			
			CC2	0.8126			
			CC3	0.7647			
			CC4	0.7958			
			CC5	0.6798			
Competitive Advantage (CA)	15	14	FSD1	0.6648	0.897	0.928	0.763
			FSD2	0.7479			
			FSD3	0.7995			
			FSD4	0.8007			
			KK1	0.8743			
			KK2	0.8841			
			KK3	0.8555			
			KK4	0.8809			

In the measurement model, in addition to validity testing, reliability testing is also required for testing a construct. The reliability test was conducted to prove the instrument's accuracy and consistency in measuring the construct. A construct is reliable if it has composite reliability and Cronbach's alpha values greater than 0.70 (Chin, 1998).

Table 1 shows that Cronbach's alpha and composite reliability values of all constructs were excellent, more than 0.70. It proves that the variables tested were valid and reliable. Hence, model 1 could be continued to the next stage, testing the structural model (inner model).

**Table 2** Results of model 2 validity and reliability (convergent validity)

Construct	Item Total	After Improvement	Item	Loading Factor	$\alpha$	CR	AVE
Entrepreneurial Orientation (EO)	15	9	IN3	0.715	0.901	0.918	0.555
			IN4	0.690			
			IN5	0.763			
			P2	0.731			
			P3	0.768			
			P5	0.778			
			PR1	0.805			
			PR3	0.749			
			PR5	0.697			
Strategic Sensitivity (SS)	5	5	SS1	0.768	0.883	0.915	0.683
			SS2	0.858			
			SS3	0.851			
			SS4	0.808			
			SS5	0.842			
Collective Commitment (CC)	5	4	CC1	0.875	0.886	0.921	0.744
			CC2	0.853			
			CC3	0.862			
			CC4	0.860			
Resource Fluidity (RF)	5	3	FSD2	0.858	0.859	0.914	0.779
			FSD3	0.903			
			FSD4	0.886			
Competitive Advantage (CA)	4	4	KK1	0.872	0.898	0.929	0.765
			KK2	0.885			
			KK3	0.858			
			KK4	0.884			

Likewise, Table 2 includes the value of each loading factor of each statement item. The table shows that the statement items of the entrepreneurial orientation variable (IN3, IN4, IN5, P2, P3, P5, PR1, PR3, and PR5) had a loading factor value of more than 0.50. Six of the fifteen statement items on the entrepreneurial orientation variable had to be discarded because they did not meet the standard loading factor value. Therefore, these indicators should be excluded or removed from the analysis. Then, the collective commitment variable (CC1, CC2, CC3, and CC4) had a loading factor value of more than 0.50. One of the five statement items on the collective commitment variable should be discarded because it does not meet the standard loading factor value. Finally, the

resource fluidity variable (FSD2, FSD3, and FSD4) had a loading factor value of more than 0.50. Two of the five statement items on the resource fluidity variable had to be discarded because they did not meet the standard loading factor value. Eliminating indicator values will increase the AVE and composite reliability (Hair & Alamer, 2022).

Additionally, Table 1 indicates that the loading factor value of all statement items met the loading factor standard of more than 0.50 and the AVE value above 0.50. Thus, the statement items in this study could be declared valid to conclude that the construct had good convergent validity and was suitable for use at the following research stage. Table 2 also shows that Cronbach's alpha and composite reliability values of all constructs were excellent, more than 0.70. It denotes that the variables tested were valid and reliable so that model 2 could proceed to the next stage, i.e., testing the structural model (inner model).

**Table 3** Correlation values between model 1 variables

Variable	CA	SA	EO
CA	0.873*		
SA	0.747	0.767*	
EO	0.697	0.684	0.720*

Description: CA (Competitive advantage), SA (Strategic agility), and EO (Entrepreneurial orientation) \* = Root AVE

**Table 4** Correlation values between model 2 variables

Variable	CC	RF	CA	EO	SS
CC	0.862*				
RF	0.788	0.883*			
CA	0.630	0.686	0.875*		
EO	0.699	0.672	0.635	0.745*	
SS	0.800	0.719	0.725	0.730	0.826*

Description: CC (Collective commitment), RF (Resource fluidity), and SS (Strategic sensitivity) \* = Root AVE

Table 4 exhibits that the square root value of AVE in each construct was greater than the correlation between each construct. Based on Tables 3 and 4, it can be concluded that all measurement items had good convergent and discriminant validity values according to the determined conditions (Hair & Alamer, 2022).

Furthermore, the structural model can be seen through the R-square value to assess how much influence the independent variable has on the dependent variable and path coefficients (Hair & Alamer, 2022). The R-square values used in this study are 0.67 categories (strong), 0.33 categories (moderate), and 0.19 categories (weak) (Chin, 1998).

In Table 5, it is concluded that the entrepreneurial orientation model (EO) towards competitive advantage (CA) moderated by strategic agility (SA) provided a strong R-Square value. It signifies that while entrepreneurial orientation and strategic agility affected the competitive advantage with greater than 0.33, classified in the strong category, variables outside this study influenced the rest.

**Table 5** Results of inner model analysis

	Hypothesis	Original Sample (O)	T-Statistic	R <sup>2</sup>	Information
H <sub>1</sub>	Entrepreneurial orientation → Competitive advantage	(+) 0.146*	1.172	0.483	Unsupported
H <sub>2</sub>	Strategic agility → Competitive advantage	(+) 0.558***	4.676	0.551	Supported
H <sub>3</sub>	Strategic sensitivity → Competitive advantage	(+) 0.252***	2.628	0.523	Supported
H <sub>4</sub>	Collective commitment → Competitive advantage	(+) 0.240***	2.721	0.409	Supported
H <sub>5</sub>	Resource fluidity → Competitive advantage	(+) 0.569***	3.272	0.484	Supported

**Table 6** Results of moderation analysis

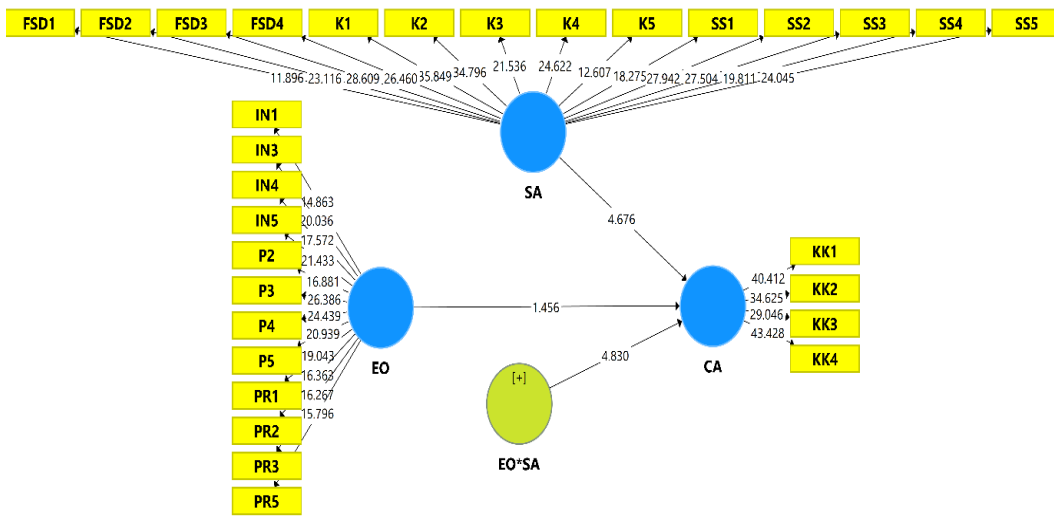
Hypothesis	Original Sample (O)	T-Statistic	P-Value	Information
Entrepreneurial orientation → Strategic agility → Competitive advantage	(+) 0.344	4.830	0.000	Supported
Entrepreneurial orientation → Strategic sensitivity → Competitive advantage	(+) 0.246	2.662	0.005	Supported
Entrepreneurial orientation → Collective commitment → Competitive advantage	(+) 0.268	2.074	0.003	Supported
Entrepreneurial orientation → Resource fluidity → Competitive advantage	(+) 0.346	2.848	0.002	Supported

Description: Significant estimation \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, R<sup>2</sup> =R-square Value

Obtaining the results, whether the hypothesis was supported or not, could be done by paying attention to the significant value of the p-value. Thus, measurement estimates and standard errors were no longer calculated with statistical assumptions but were based on empirical observations in the bootstrapping method. This study supports the hypothesis if the significance value shows a p-value below 0.05; vice versa, the hypothesis is unsupported if the significance value shows a p-value above 0.05 (Hair et al., 2022).

This study tested five hypotheses that had been formulated previously and used the bootstrap technique with the help of the statistical tool SmartPLS 3.0 to prove the effectiveness of the independent variable on the dependent and the role of the moderating variable. Tables 5 and 6 and Figures 2 and 3 summarize the significant test results for each proposed hypothesis.

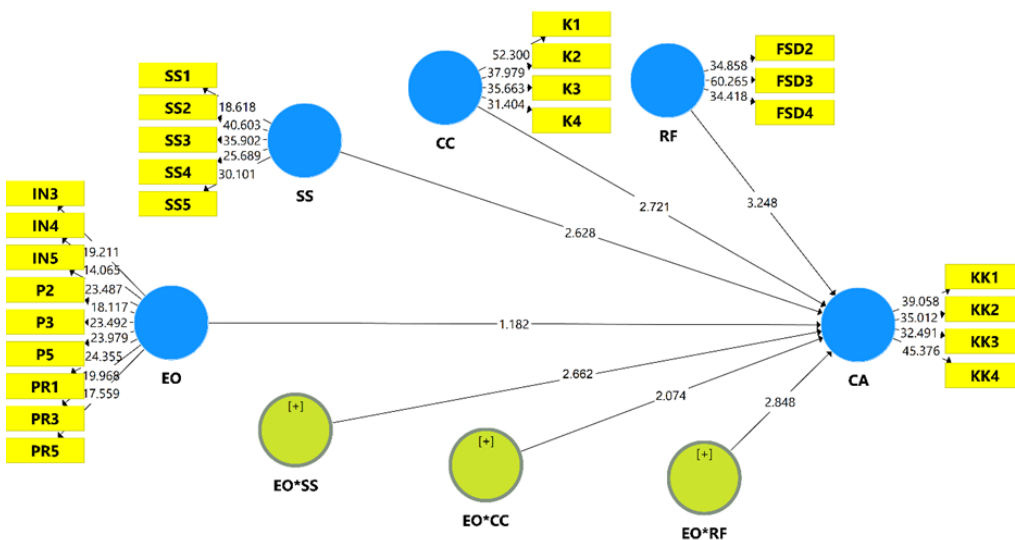
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**Figure 2** Test Results Model 1

Description: EO (Entrepreneurship orientation), SA (Strategic agility), and CA (Competitive advantage)

Based on the hypothesis testing results in Tables 5, 6, and Figure 2, there were three hypothesized relationships in measuring the effect of entrepreneurial orientation on competitive advantage moderated by the strategic agility variable. The results of testing the second hypothesis, stating that the strategic agility variable moderated the value, proved the relationship between entrepreneurial orientation and competitive advantage ( $O = 0.334$ ,  $p\text{-value} = 0.000 < 0.05$ , and the  $t\text{-statistic value} = 4.830$ ). Therefore, the second hypothesis in this study was supported.



**Figure 3** Test Results Model 2

Description: EO (Entrepreneurship orientation), SS (Strategic sensitivity), CC (Collective commitment), RF (Resource fluidity), and CA (Competitive advantage)

The hypothesis testing results in Tables 5 and 6 and Figure 3 are interpreted by looking at the original sample values to determine the relationship between the variables studied. Furthermore, to determine the significant level of the influence of the relationship between variables, it can be seen from the p-value. In this study, the p-value used a significance level of 5% (one-tailed) with an accurate conviction level of 95% (Hair & Alamer, 2022).

In the first hypothesis, entrepreneurial orientation positively affected competitive advantage but was insignificant, as evidenced by the p-value ( $0.119 > 0.05$  or t-statistic value  $1.182 < 1.96$ ). Thus, the first hypothesis in this study was rejected. In line with the research of Kraus et al. (2011), entrepreneurial orientation, which has three dimensions, including innovation, proactiveness, and risk-taking in an economic crisis, would have the potential to fail.

Testing the third hypothesis, strategic sensitivity positively affected competitive advantage and moderated the relationship between entrepreneurial orientation and competitive advantage, as evidenced by the value ( $O = 0.246$ , p-value =  $0.005 < 0.05$  and t-statistic value =  $2.662$ ). In Table 5, the direct effect of strategic sensitivity positively affected competitive advantage as evidenced by the value ( $O = 0.252$ , p-value =  $0.004 < 0.05$ , and the t-statistic value =  $2.628$ ). Therefore, the third hypothesis in this study was accepted. In line with the research of Arbussa et al. (2017); Kurniawan et al. (2020); Nyamrunda and Freeman (2021); Ofoegbu and Akanbi (2012), the higher the level of strategic sensitivity in SMEs, the higher the level of company innovation will be.

Likewise, in the fourth hypothesis, collective commitment positively affected competitive advantage and moderated the relationship between entrepreneurial orientation and competitive advantage, as evidenced by the value ( $O = 0.268$  p-value =  $0.003 < 0.05$  and t-statistic value =  $2.074$ ). In Table 5, the direct effect of collective commitment positively affected competitive advantage as evidenced by the value ( $O = 0.240$ , p-value =  $0.000 < 0.005$ , and the t-statistic value =  $2.721$ ). Therefore, the fourth hypothesis in this study was accepted. In line with Arbussa et al. (2017); Kurniawan et al. (2020); Nyamrunda and Freeman (2021); and Ofoegbu and Akanbi (2012), collective commitment could encourage companies to build a good working environment between stakeholders and their members.

Furthermore, testing the fifth hypothesis, resource fluidity positively affected competitive advantage and moderated the relationship between entrepreneurial orientation and competitive advantage, as evidenced by the value ( $O = 0.346$  p-value =  $0.002 < 0.05$  and t-statistic value =  $2.848$ ). In Table 5, the direct influence of resource fluidity positively affected competitive advantage with a value ( $O = 0.569$ , p-value =  $0.001 < 0.005$ , and t-statistic value =  $3.272$ ). Therefore, the fifth hypothesis in this study was accepted. In line with Arbussa et al. (2017); Kurniawan et al. (2020); Nyamrunda and Freeman (2021); Ofoegbu and Akanbi (2012), resource fluidity could encourage organizations to build a good working climate among all organizations members.

The findings in this study imply that entrepreneurial orientation activities have three dimensions: innovation, proactivity, and risk-taking. When encountered with a state of economic crisis, they would have the possibility to fail, as evidenced by the t-statistic value of  $1.172 < 1.96$ , so it would impact competitive advantage. However, a strategic agility moderating variable would encourage SMEs to see innovation opportunities and respond quickly to business opportunities, as evidenced by the t-statistic value  $> 1.96$  and the p-value  $< 0.05$ . There would be moderation, such as quickly meeting the demands and expectations of forthcoming customers to preserve a competitive advantage.

This finding also has implications for advancing entrepreneurial orientation activities and strategic agility from each dimension described above to remain competitive in a competitive business environment. In addition, SME owners or managers are motivated to innovate in creating and supporting the improvement of SME knowledge management to produce superior performance from competitors.

## **Conclusion**

This study investigated the effect of entrepreneurial orientation on competitive advantage with the moderating role of strategic agility in three dimensions: strategic sensitivity, collective commitment, and resource fluidity. The research used questionnaires for 170 SME owners and managers who met the criteria. Empirical findings showed a positive but insignificant relationship between entrepreneurial orientation and competitive advantage. Meanwhile, there was a positive and significant relationship between the role of strategic agility as a moderator strengthening the relationship between entrepreneurial orientation and competitive advantage.

Another conclusion from this study is that SME owners or managers could expand strategic sensitivity oriented towards being open to information and innovation as much as possible, thus showing various new business opportunities. Also, collective commitment and resource fluidity could encourage SMEs to build a good working climate between owners or managers toward members. Hence, strategic agility in SMEs could boost competitive advantage and how these SMEs deal with the rapidly changing business environment.

Future research can consider mediating effects before a moderating variable. Furthermore, future research should consider a stable environment that does not have turmoil like the COVID-19 pandemic and whether strategic agility is still relevant in the research context. Likewise, future research can verify and focus only on one scale in SMEs because small and medium enterprises may have different methods of dealing with a turbulent and uncertain environment. Lastly, future researchers can study and incorporate other entrepreneurial orientation constructs that potentially affect SMEs, such as autonomy, aggressiveness, and competitive energy.

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