Analysis of the Mediation Effect of Innovation Culture on the Effect ofEntrepreneurial Orientation on the Sustainable Competitive Advantage ofSMEs in Indonesia

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Abstract
One of the opportunities for an entrepreneur is to assess the market and expand the business tothe global market. Often, the domestic market experiences a downturn which has a negativeimpact on business operations and sales. When the business goes global, this minimizes the riskof a market downturn due to other options. There is always an opportunity to take advantage ofthe global position to protect the business and gain new market share. One alternative to protectand improve business performance is to increase sustainable competitive advantage. However, toachieve optimal sustainable competitive advantage, the role of entrepreneurial orientation andculture is needed to innovate sustainably. The main purpose of this study is to analyze the effectof entrepreneurial orientation and innovation culture on the sustainable competitive advantage ofSMEs. This study uses a causal quantitative research design. The number of samples used in thisstudy was 170 SME business actors. The data analysis method used is Partial Least Square(PLS). The data analysis test tool uses the statistical software Smartpls 3.0. The results of thisstudy conclude that entrepreneurial orientation and innovation culture have a positive andsignificant effect on sustainable competitive advantage. The results also confirm that theinnovation culture can mediate the relationship between entrepreneurial orientation and sustainablecompetitive advantage.

Keywords: Entrepreneurial Orientation, Innovation Culture, Sustainable Competitive Advantage

1. Introduction
Small and medium enterprises (SMEs) are recognized as one of the main contributors toeconomic development and employment growth. Entrepreneurship plays a very important role inthe economic development of a country, because with entrepreneurship, a country can realize superioreconomic development by organizing resources to create added value to achieve community welfare (Ayesha et al., 2021). Entrepreneurship also plays a big role in the national economy, because entrepreneurship is one way to overcome unemployment in a country, create various jobs, and utilize and combine natural resources (Inrawan, Silitonga, Halim, et al., 2021). Despite playing a major role in today's world economy, SMEs are notorious for having
restrictions on increasing competitive advantage and barriers to acceptance in adopting new technologies even though the internet and communication channels revolution has changed how people do business (Inrawn, Silitonga, Sianipar, et al., 2021). Competitive advantage refers to certain business attributes that help businesses to outperform their rivals (Purba et al., 2022). Access to resources or skills may be primarily a competitive advantage (Hasan et al., 2021). The company's business strategy manipulates various resources over which they have direct control to gain a competitive advantage, and these resources can generate a competitive advantage (Muniarty et al., 2021). A sustainable power advantage depends on the entrepreneurial orientation, and innovation strategies organizations use to better compete in the market (Sundulusi et al., 2022); (Sudirman et al., 2021). In addition to being the hallmark of successful companies, entrepreneurial orientation and innovation are also important for successful countries. For example, (Sherly et al., 2020) propose that innovation is essential for the country's economic development and industrial competitiveness. The study (Halim et al., 2021) also stated that the ability of entrepreneurial orientation is very important for companies that want to gain a sustainable competitive advantage. A number of studies have also found that the ability to create a culture of sustainable innovation positively affects sustainable competitive advantage (Julyanthry et al., 2021); (Halim et al., 2021).

One of the right steps to improve the competence of entrepreneurs is to develop and implement the concept of entrepreneurial orientation (Zeebaree & Siron, 2017). The entrepreneurial spirit is the soul of a person who moves independently to gain profit through business or create ideas and creativity (Mujahidah & Wiwoho, 2021). Building an entrepreneurial spirit is needed in entrepreneurship to achieve success, be oriented and consistent with the original goal, apply strengths, weaknesses, and differences in the right context, and dare to try new things even if you feel afraid. However, the main problem of entrepreneurial orientation, namely the culture of using old concepts in running its business, is still difficult to eliminate now, so this has implications for a sustainable business. Likewise, innovation is not only always associated with opening new markets, but innovation is driven by the ability to see and take advantage of information technology connections (Hult et al., 2004). Issues regarding the culture of innovation are a challenge for entrepreneurs in the national context. Cultural differences in innovation can be a particular barrier to business communication. Ignorance of cultural differences can lead to innovation resulting in weak market share, low or even negative returns on investment, lost opportunities, damage to reputation, legal challenges, lost productivity, failure of expatriates, and premature termination of partnership contracts (Volberda et al., 2014). Misunderstandings, tensions, and biases caused by different cultures of innovation can even lead to complete failure. Therefore, business managers and SME employees need to know the innovation culture in today's digital era. Based on the problem phenomena described above, this study aims to analyze and examine the effect of entrepreneurial orientation and innovation culture on the sustainable competitive advantage of SMEs in Indonesia.

2. Literature Review
2.1. Entrepreneurial Orientation
Entrepreneurial orientation is a process, structuring, and corporate behavior by displaying innovative, proactive, and risk-taking activities (Lechner & Gudmundsson, 2014).
Entrepreneurial orientation is mostly related to new job ideas that can cause market changes (Sulistyo & Ayuni, 2020). The existence of a new business, when entering a new entry, will introduce a new product, service, technological innovation, or business by displaying an innovation model that was not previously available in the market (Zeebaree & Siron, 2017). An SME actor with an entrepreneurial orientation tends to emphasize an opportunity-driven mindset, enabling management to gain a competitively advantageous position for the company (Yi et al., 2021). Entrepreneurial orientation generally focuses on markets with product innovation and project risks and tends to be pioneers in innovation and advantage over competitors (Nawangsari et al., 2021). Research results from (Sirivanh et al., 2014) and (Sulistyo & Ayuni, 2020), confirms that there is a significant relationship between entrepreneurial orientation and sustainable competitive advantage. Therefore, based on several previous research results, this study is carried out in developing hypotheses:

**H1:** Entrepreneurial orientation affects the innovation culture

**H2:** Entrepreneurial orientation affects sustainable competitive advantage

### 2.2. Innovation Culture

The development of technology and the speed of access to information today have resulted in increasingly complex consumer demands and need to be updated from time to time. The increasing pressure to adopt a more sustainable approach to product manufacturing is one of the major challenges the industry has yet to face (Arsawan et al., 2020). New approaches and changing attitudes for designers and companies are still emerging as an evolving concepts that organizations must incorporate. Sustainable product development is one of the growing topics in the literature related to product development (Setyanti et al., 2013). Every company always strives to innovate to maintain and develop its business. Entrepreneurs running their businesses need innovation management to organize existing ideas so they can be realized according to the plan. These ideas must be systematically arranged through a structured, efficient and sustainable system (Lin et al., 2017). The ideas that exist by the innovation management will be managed to prevent these ideas from being too late to be marketed. Therefore, based on several previous research results, this study is carried out to develop hypotheses:

**H3:** Innovation Culture affects sustainable competitive advantage.

**H4:** Innovation Culture can mediate the relationship between entrepreneurial orientation and sustainable competitive advantage

### 2.3. Sustainable Competitive Advantage

The fundamental thing for a business to be categorized as having a sustainable competitive advantage is when potential competitors cannot duplicate, or it will cost a lot of money to imitate the products we market (Kuncoro & Suriani, 2017). Everything owned by the company, both in the form of resources and activities within the organization, can be used as a competitive advantage (Lestari et al., 2020). When following a strategic resource-based view, enterprise resources must take advantage of opportunities or neutralize threats. This is something that cannot be perfectly imitated to have a commensurate change for the sustainable development of human resources (Dirisu et al., 2013). Entrepreneurs are very responsible for managing SMEs
and try to get a better business scale from the performance generated through new procedures, plans, and strategies during the entrepreneurial life cycle (Rugraff & Hansen, 2011). In gaining long-term competitive advantage, every business gains a competitive advantage through its ability to develop a set of key competencies to serve its target customers better than its competitors (Kuncoro & Suriani, 2017). Competitive advantage relates to how a company selects and puts a general strategy into practice (Herman et al., 2018).

3. Method

The population in this study is the total number of SMEs in Pematangsiantar City. The sampling method used in this study is the convenience sampling method, where this technique was chosen because it is the fastest method due to time constraints, and anyone who accidentally meets the researcher can be used as a sample if the person is considered suitable as a data source. This study used 180 samples for analysis. The data analysis method used is Partial Least Square (PLS). The data analysis test tool uses the statistical software Smartpls 3.0. The analysis stage consists of testing the validity and reliability and evaluating the external model with convergent validity. The expected convergent validity criteria are > 0.7 (Hair, 2014). The internal evaluation model reviews the value of R Square (R2) with the criteria that the R2 value is in the range of 0.5-0.6, which means good, 0-0.33, which means moderate, and 0-0.19, which means weak. Next, reviewing the F-Square (f2) value with the assessment criteria of 0.02 which means weak, 0.15 which means moderate, and 0.35 which means large (Hair, 2014). Finally, testing the hypothesis which is the criteria for measuring significance and probability values <0.05.

4. Results

Outer Model Measurement

The results of the data obtained from the research questionnaire were processed using the SmartPLS version 3.2.9 application with processing guidelines by (Juliandi, 2018). In measuring the outer model, the validity and reliability tests were conducted. The loading factor and AVE determine a convergent validity testing with the condition that the loading factor is above 0.7 and the AVE value is 0.5 (Hair, 2014). The model reliability test, according to (Hair, 2014) is seen from the value of Cronbach's alpha and composite reliability (CR) which has a value higher than 0.7. The following will show an explanation of the measurement of the outer model, which is presented in Table 1 below:
Table 1. Outer Model Measurement Results

<table>
<thead>
<tr>
<th>Construct/item</th>
<th>Code</th>
<th>Outer Loadings</th>
<th>Cronbach's alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>EO1</td>
<td>0.736</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td>EO2</td>
<td>0.761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>EO3</td>
<td>0.816</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>EO4</td>
<td>0.802</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive Aggressiveness</td>
<td>EO5</td>
<td>0.794</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Culture</td>
<td></td>
<td></td>
<td>0.888</td>
<td>0.923</td>
<td>0.751</td>
</tr>
<tr>
<td>Innovation Intention</td>
<td>IC1</td>
<td>0.879</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Influence</td>
<td>IC2</td>
<td>0.942</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Implementation</td>
<td>IC3</td>
<td>0.780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Infrastructure</td>
<td>IC4</td>
<td>0.858</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Competitive Advantage</td>
<td></td>
<td></td>
<td>0.912</td>
<td>0.936</td>
<td>0.746</td>
</tr>
<tr>
<td>Differentiated Products</td>
<td>SCA1</td>
<td>0.767</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Sensing</td>
<td>SCA2</td>
<td>0.745</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Responsiveness</td>
<td>SCA3</td>
<td>0.932</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Systems</td>
<td>SCA4</td>
<td>0.919</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Capabilities</td>
<td>SCA5</td>
<td>0.934</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Data (2022)

The validity test presented in Table 1 above showed that the value of each loading factor on the indicators of entrepreneurial orientation, innovation culture, and sustainable competitive advantage was above 0.7 and 0.5 for the average variance extracted (AVE) values. Furthermore, for Cronbach's alpha value and composite reliability, the value for each variable was above 0.7, which showed that all research variables had good reliability values. With these good values, it can be used as an overview that the condition of the relationship between variables was also good so that further tests can be carried out.

**Inner Model Measurement**

Inner model measurement was carried out by bootstrapping research data using SmartPLS 3.2.9. There were two results obtained from bootstrapping, the first was the significance of the two related variables and also the R-square of the study. The value of the R-square is the value that shows the ability of exogenous variables to build endogenous variables. According to Chin et al.,
(2008), there are three categories of R-square values, in which if the R-square value is 0.19, the relationship between exogenous variables forming endogenous variables is weak, if it is 0.33, it means that the relationship is moderate, and if the value is 0.67, it means that the relationship is strong. Meanwhile, Sarwono (2016), stated that if the R-square value is more than 0.67, the relationship between endogenous and exogenous variables is very strong.

Table 2. Calculation results of the R-Square value

<table>
<thead>
<tr>
<th>Notes</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Culture</td>
<td>0.119</td>
<td>0.114</td>
</tr>
<tr>
<td>Sustainable Competitive Advantage</td>
<td>0.476</td>
<td>0.470</td>
</tr>
</tbody>
</table>

Source: Processed Data (2022)

Judging from the R-square value for the endogenous innovation culture variable, it obtained a value of 0.599, whose value ranges from 0.19-0.33, this shows that the overall ability of exogenous variables to explain endogenous variables is weak. Furthermore, the endogenous sustainable competitive advantage variable obtained a value of 0.476, whose value ranges from 0.33-0.67, this shows that the overall ability of the exogenous variable to explain the endogenous variable is moderate. Furthermore, to prove the hypothesis, a significance test was carried out to determine the relationship between exogenous and endogenous variables. The significant criterion is seen from the p-value. With a significance level of 5%, if the p-value between exogenous and endogenous variables is less than 0.05 means that the exogenous variable has a significant effect on the endogenous variable, on the contrary, if the value is greater than 0.05, it means that the exogenous variable has no significant effect on building the endogenous variable. The following presents the results of hypothesis testing, which are explained in table 3:

Table 3. Hypothesis Test Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>t-count</th>
<th>P-Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation&gt;&gt;Innovation Culture (H1)</td>
<td>0.345</td>
<td>5.393</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Entrepreneurial Orientation&gt;&gt;Sustainable Competitive Advantage (H2)</td>
<td>0.567</td>
<td>10.778</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Innovation Culture&gt;&gt;Sustainable Competitive Advantage (H3)</td>
<td>0.243</td>
<td>5.720</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Entrepreneurial Orientation&gt;&gt;Innovation Culture&gt;&gt;Sustainable Competitive Advantage (H4)</td>
<td>0.084</td>
<td>3.766</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Processed Data (2022)

Based on the results of the processed data presented in table 3, it is known that the effect of entrepreneurial orientation on innovation culture is positive and significant with a p-value of 0.000, which is below 0.05. Furthermore, the influence of entrepreneurial orientation on
sustainable competitive advantage obtained positive and significant results with the acquisition of a p-value of 0.000, below 0.05. Likewise, for the influence of innovation culture towards sustainable competitive advantage, positive and significant results were obtained with the acquisition of a p-value of 0.000, below 0.05. Then the mediating influence of innovation culture is proven to mediate the relationship between entrepreneurial orientation and sustainable competitive advantage.

5. Discussion

The research results, developed through the first hypothesis, show that entrepreneurial orientation has a positive and significant effect on innovation culture with the acquisition of a p-value of 0.000 below 0.05. These results prove that the higher the entrepreneurial orientation applied by business actors, this will have impact on increasing innovation in the aspect of business management, which is getting better.(Sudirman et al., 2020). The entrepreneurial spirit is also not something that can be easily taught or learned. The fact is that many entrepreneurs who start companies and make their own entrepreneurs, even dare to take risks, are people who have had an entrepreneurial spirit from birth and are not made. But in reality, if someone is successful in entrepreneurship, then the rate of return they get will be more than enough to offset the risks they face in realizing the business.(Hasan et al., 2021). Furthermore, business actors who have an entrepreneurial orientation tend to be willing to take risks, including failure in running a business. In this case, risk also means a consequence that must be accepted to achieve a goal in the hope of surviving in achieving a sustainable competitive advantage(Kiyabo & Isaga, 2020).

The results of the research developed through the second hypothesis, show that entrepreneurial orientation has a positive and significant effect on sustainable competitive advantage with the acquisition of a p-value of 0.000 which is below 0.05. These results prove that the higher the entrepreneurial orientation applied by business actors, the stronger the business resilience that is getting stronger to face all challenges from competitors and will also increase the competitive business advantage.(Kurniawan et al., 2022). If the entrepreneurial spirit increases, the independence of small business actors will also be stronger and tougher in running a business. However, even if the entrepreneurial spirit increases, it will not always lead to the formation of business independence for small business actors(Novrianda et al., 2005). So that the formation of business independence does not depend on the good or bad entrepreneurial spirit of small business actors. Being entrepreneurial means thinking differently in certain situations and certain environments, and entrepreneurship means having to make decisions frequently in highly uncertain environments, time pressure is enormous, and there is a lot of emotion in investing. The entrepreneurial spirit is related to the decision-making of an entrepreneur in acting, such as thinking structurally, engaging in the improvisation process, being effective, and adapting cognitively(Susanti et al., 2022).

The results of the research developed through the third hypothesis, show that the innovation culture has a positive and significant effect on sustainable competitive advantage with the acquisition of a p-value of 0.000 which is below 0.05. These results prove that the higher the innovation culture business actors apply to their business management, the more sustainable their business competitive advantage will be. Applying innovation in marketing strategies will create breakthroughs in identity business brands, so the implication is that consumers will be more
interested in the products offered by themselves than those offered by competitors (Sok et al., 2013). This condition is crucial to maintain business growth in the long term while building and enhancing a sustainable competitive advantage. For example, culinary businesses ranging from micro, small, medium, and macro culinary businesses take advantage of technological innovations in marketing their products, which is wrong the other is by using social media platforms that have a broad impact and benefit. With innovative work, product designs that were previously done manually can now be done based on better, more effective, and more efficient technology (Bandera et al., 2018).

The results of the research developed through the fourth hypothesis, show that the innovation culture is able to mediate the relationship between entrepreneurial orientation and sustainable competitive advantage with the acquisition of a p-value of 0.000, which is below 0.05. These results prove that the higher culture of innovation plays an important role in encouraging entrepreneurial orientation toward competitive business advantage. In the marketing strategy of SME products, the essence of innovation in a marketing strategy oriented to the desires of consumers will encourage sales growth. If marketing innovation is carried out optimally, this will directly impact business competitiveness in the long term (Guleş et al., 2015). In the business world, especially in the SME sector, innovation needs to be done to achieve more positive results. Innovation itself means making changes that are more efficient, superior to competitors, and provide advantages in business. Business-related innovations are diverse and broad. Innovation in various aspects of life concerning needs and desires is certainly an opportunity for innovation. This opportunity has also been captured and realized in the form of an innovative need and desire fulfillment tool (Anning-Dorson, 2018).

6. Conclusion

The results of this study concluded that all the hypotheses that were built were well received. The first hypothesis shows that entrepreneurial orientation positively and significantly affects innovation culture. A successful entrepreneur must have a strong entrepreneurial orientation. Thus, an entrepreneur must persevere and work hard to succeed in his business. The success of his business cannot be separated from the characteristics of a successful entrepreneur, and he has to encourage a culture of sustainable innovation. The second hypothesis shows that entrepreneurial orientation positively and significantly affects sustainable competitive advantage. In order to be able to get business opportunities, a business actor must have a strong entrepreneurial orientation in terms of looking for business opportunities in a certain way. The entrepreneurial orientation referred to here is the ability to find, improve and develop new ideas to find new strategies, methods, or strategies in seeking business opportunities to excel sustainably. The third hypothesis shows that the innovation culture positively and significantly affects sustainable competitiveness. A culture of innovation is very important to support the success of business actors in obtaining a sustainable competitive advantage. A brilliant culture of innovation does not appear immediately but must go through the efforts of business people to seek, find and evaluate existing opportunities. A brilliant culture of innovation is the basis for developing the creativity of business people in seeking and finding business opportunities in the future. The fourth hypothesis shows that innovation culture can mediate the relationship between entrepreneurial orientation and sustainable competitive advantage. This proves that creativity
shows a person's ability to create something new or new ideas following the entrepreneurial orientation that is carried out. If the innovation culture runs following the entrepreneurial orientation, this will directly impact sustainable competitive advantage.

Acknowledgments
On this occasion, the writing team would like to express their deepest gratitude to DRTPM for the funding budget for the National Competitive Research Scheme for Beginner Lecturer Research in 2022. The writing team would also like to express their deepest gratitude to all parties involved in the research completion process. and writing articles, and the entire academic community of the Sekolah Tinggi Ilmu Ekonomi Sultan Agung, who always provide constructive input to improve this article.

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