

The Effect of Entrepreneurial Orientation and Dynamic Capability on the Performance of Ledre MSMEs *Structural Equation Modeling (SEM) Approach*

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Abstract. This study aims to evaluate the influence of entrepreneurial orientation and dynamic capabilities on the performance of ledre MSMEs in Bojonegoro Regency. The sample consisted of 72 ledre MSME owners, sampling by simple random sampling with the slovin formula to determine the number. Data analysis techniques using Structural Equation Modeling (SEM). The results showed that entrepreneurial orientation positively and significantly affects dynamic capabilities. This is indicated by the path coefficient value of 0.928 and a P value of 0.000. Dynamic capability has no significant impact on performance; the results of field data processing show a path coefficient value of 0.344 and a P value of 0.116. Entrepreneurial orientation has a positive effect on performance. This is indicated by a path coefficient value of 0.420 and a P value of 0.045. Dynamic capability is not proven to mediate entrepreneurial orientation on performance, this is indicated by a path coefficient value of 0.319 and a P value of 0.117. Suggestions for further research can add other variables that can potentially affect the performance of MSMEs, such as innovation, marketing strategies, or business digitalization.

Keywords: dynamic capabilities; entrepreneurship; ledre MSMEs; performance

INTRODUCTION

The Covid-19 pandemic has had a major impact on international businesses, especially MSMEs. In the United States, 43% of MSMEs are expected to temporarily stop operating ([Bartik et al., 2020](#)), while in Indonesia, business productivity has decreased by 65%, forcing many businesses to stop their activities ([Kusumastuti, 2020](#)). Global economic growth declined by 6% due to market instability ([Nasution et al., 2020](#)). Environmental policies, such as energy tax adjustments, are suggested to mitigate the impact ([Jia et al., 2021](#)). Social distancing rules significantly affect the services sector and MSMEs, causing supply shortages and business disruptions ([Chowdhury et al., 2022](#)). Enterprises face increasing risks and complexities that threaten sustainability. Entrepreneurial orientation and dynamic capabilities are critical for MSME performance post-pandemic ([Arshad et al., 2014](#)); ([Kim, 2018](#)). Entrepreneurial orientation involves innovation, proactiveness, risk-taking, autonomy, and competitive aggressiveness ([Covin et al., 2006](#)); ([Lumpkin & Dess, 2001](#)), and is critical for business success ([Rashid &](#)

[Mahmood, 2016](#)); ([Zina et al., 2021](#)). Dynamic capabilities enable businesses to respond to market changes by sensing, capitalizing, and reconfiguring opportunities ([Teece, 2007](#)). These capabilities help companies maintain performance and competitiveness ([Helfat & Peteraf, 2009](#)). Post-pandemic, MSMEs need to adapt and improve their entrepreneurial orientation and dynamic capabilities in order to survive and thrive ([Sunarti, 2021](#)); ([Michael & Widjojo, 2021](#)). The relationship between these factors is positive and contributes to business performance ([Buttar & Kocak, 2011](#)); ([Wiklund & Shepherd, 2005](#)). Dynamic capabilities also serve as a mediator between entrepreneurial orientation and firm performance ([Jantunen et al., 2005](#)). This study evaluates how entrepreneurial orientation and dynamic capabilities affect the performance of ledre MSMEs in Bojonegoro. This study addresses research limited to MSMEs in the agro-processing sector, emphasizing their role in local economic growth. The findings enhance the understanding of improving the performance of MSMEs in developing countries.

This research focuses on the influence of entrepreneurial orientation and dynamic



capabilities on the performance of MSMEs, particularly in the traditional food industry such as ledre.

Previous research shows that entrepreneurial orientation, which includes innovation, proactivity and risk-taking, has a strong relationship with improved business performance (Covin & Lumpkin, 2011). Meanwhile, dynamic capabilities are considered a key factor in maintaining business competitiveness, especially in an era of high market uncertainty (Teece, 2018). However, there is still debate in various studies regarding the extent to which dynamic capabilities directly affect MSME performance, as some studies found that the impact is insignificant or dependent on specific business environment conditions (Barreto, 2010). Therefore, this study seeks to fill the gap by analyzing the relationship between entrepreneurial orientation, dynamic capabilities, and performance of ledre MSMEs using a Structural Equation Modeling (SEM) approach.

In addition, recent research highlights the importance of integration between entrepreneurial orientation and dynamic capabilities in improving the performance of small and medium-sized enterprises (SMEs) in various sectors (Wang & Ahmed, 2020). Some recent studies suggest that in the context of SMEs, dynamic capabilities may serve as a mediator or reinforcing factor in the relationship between entrepreneurial orientation and business performance, depending on external factors such as government support and digital technology adoption (Tödtling & Tripl, 2022). However, research on the role of dynamic capabilities in the traditional food industry, particularly in ledre MSMEs, is still very limited. Therefore, this study makes a new contribution by testing the relationship model between these variables in the context of local MSMEs, as well as exploring whether dynamic capabilities can really be a key factor in improving business performance in an industry that is still based on tradition and local wisdom.

METHODS

This research uses a quantitative approach, choosing this method because the researcher describes, reveals and portrays the situation to be studied thoroughly in breadth and depth (Sugiyono, 2005). This research was conducted in Bojonegoro Regency, East Java Province. Researchers also made observations at the research location. Data collection was carried out in January - February 2024 (Church, 2002). The respondent determination technique used *Simple Random Sampling*. Key informants in this study include 72 ledre MSMEs in Bojonegoro Regency. The interview results were processed and analyzed using the Structural Equation Model (SEM) approach technique based on Partial Least Square (PLS) with SmartPLS 4.0 software. Structural Equation Modeling (SEM) is a statistical technique used in testing and estimating causal relationships between variables by integrating variable analysis and path analysis (Abdillah & Hartono, 2015). SEM-PLS consists of two sub models, namely the measurement model or commonly called the outer model and the structural model or commonly called the inner model (Ghozali & Latan, 2012). SEM-PLS can be used to determine the influence between variables (Puspitasari et al, 2024). In addition, this method can also be used as an analysis method and produce a more accurate analysis of an observation (Safitri et al, 2024).

RESULTS AND DISCUSSION

Overview of Research Variables

An overview of the variables in this study has been detailed and explained by the researcher as follows:

a. Entrepreneurial Orientation Variable

Entrepreneurial orientation variable (X1) involves indicators consisting of 24 indicators adopted from the dimensions of innovation, proactivity, risk taking, autonomy, and competitive aggressiveness

(Hughes & Morgan, 2007); (Covin et al., 2006). The results of the descriptive analysis of the Entrepreneurial Orientation variable are presented in table 1 below.

Table 1. Research results of entrepreneurial orientation variables

| Variables | Dimensions | Indicator/item | Average |
|---|---|---|--|
| Entrepreneurial Orientation (X1) | Innovation (X1.1) | Able to innovate from the aspects of production, packaging, and sales in business management (X1.1.1) | 3.68 |
| | | Able to make continuous improvements in the ledre production process (X1.1.2) | 3.98 |
| | | Able to pay high attention in business development efforts (X1.1.3) | 3.83 |
| Entrepreneurial Orientation (X1) | Proactive (X1.2) | Able to find new methods in production and marketing so that they are effective and right on target (X1.1.4) | 3.66 |
| | | Able to run a business creatively and competitively (X1.1.5) | 3.83 |
| | | Able to strive to be able to take preventive action against losses (X1.2.1) | 4.01 |
| | | Able to strengthen the business by continuously communicating with stakeholders both internal and external (X1.2.2) | 3.93 |
| | | Able to access information or new opportunity paths for ledre business development (X1.2.3) | 3.98 |
| | Proactive (X1.2) | Able to always try to take initiative in every situation (X1.2.4) | 3.62 |
| | | Able to always excel in identifying opportunities (X1.2.5) | 3.91 |
| | | Risk Taking (X1.3) | Have the courage to take risks (X1.3.1) |
| | Personally known as a <i>risk taker</i> (X1.3.2) | | 3.61 |
| | Entrepreneurial Orientation (X1) | Autonomy (X1.4) | Able to make decisions with clearly known risk opportunities in advance (X1.3.3) |
| Able to encourage people within the business to take calculated risks with new ideas (X1.3.4) | | | 3.37 |
| Able to explore and experiment to get opportunities (X1.3.5) | | | 3.56 |
| employees to be able to act and think the best for business continuity (X1.4.1) | | | 3.68 |
| employees' ability to do work that allows them to explore their abilities (X1.4.2) | | | 3.51 |
| Autonomy (X1.4) | | employees are given freedom and independence to decide how to do their work (X1.4.3) | 3.27 |
| | | employees are given the freedom to communicate (X1.4.4) | 3.23 |
| | | employees are given the authority and responsibility to act on their own if they consider it is in the best interest of the business (X1.4.5) | 3.26 |
| Competitive Aggressiveness (X1.5) | | employees have access to all important information (X1.4.6) | 3.27 |
| | | The business being run is a competitive business (X1.5.1) | 3.76 |
| | Able to excel in the competition as best as possible (X1.5.2) | 4.02 | |
| | | Able and brave to face competition (X1.5.3). | 3.81 |

Note: STS: Strongly disagree; TS: Disagree; N.: Neutral; S: Agree; SS: Strongly agree

[Table 1](#) shows that ledre entrepreneurs in Bojonegoro have a positive view of entrepreneurial orientation, valuing innovation, continuous improvement and creativity. They excel in generating new ideas (mean score 3.68), increasing production (3.98), focusing on business development (3.83), and using new production and marketing methods, especially through social media (3.66). Creativity is considered important for competitiveness (3.83). Proactively, these entrepreneurs take precautions against losses (4.01), manage plantain stocks effectively, and communicate with stakeholders (3.93). They recognize the importance of accessing new opportunities (3.98), although they need to improve their initiative-taking (3.62) and opportunity identification (3.91). Although they demonstrate high proactive awareness, improvements in these areas are needed for further business growth.

The measurement results of the risk-taking dimension (X1.3) show that ledre entrepreneurs in Bojonegoro are quite prepared to face risks, with an understanding of risks and coping strategies (average score 3.38) and good experience in dealing with business risks (3.61). Their decision-making based on risk anticipation is also quite good (3.59), but they are hesitant to take risks with new ideas (3.37). They value exploration and experimentation (3.56) but need to increase their courage to take measured risks to increase profits and productivity. Regarding autonomy (X1.4), these entrepreneurs have mixed attitudes towards employee autonomy. Employees are allowed to come up with new ideas (3.68), but freedom to explore skills (3.51) and autonomy in decision-making (3.27) need to be improved. While communication skills (3.23) and trust (3.26) are valued, there are concerns about misuse of information (3.27). There is potential to increase employee autonomy in this business. In terms of competitive aggressiveness (X1.5), ledre entrepreneurs are aware of high competition (3.76) due to product popularity

and tourism growth. They believe in their ability to excel (4.02) and are ready to face competition (3.81), although there are challenges in creating a unique product. Overall, there is a strong competitive spirit among Bojonegoro ledre entrepreneurs.

Research by [Sugeng Rianto et al. \(2024\)](#) shows that entrepreneurial orientation has a positive influence on the performance of Kalisari Tofu MSMEs. Business actors who are able to analyze market opportunities will tend to be more effective in improving their business performance. If marketers can understand and optimally utilize market opportunities, the marketing strategies implemented will be more targeted and have maximum impact. The higher the entrepreneurial orientation of an MSME, the greater the potential for improving its performance. Entrepreneurial orientation can be realized through increasing the ability to create and develop innovative and unique products or services. Thus, MSMEs can be more competitive and competitive, which in turn will improve overall business performance.

b. Dynamic Ability Variable

The dynamic capability variable (X2) involves indicators consisting of 17 indicators adopted from the dimensions of *sensing*, *seizing*, and *reconfiguring*, [Abbas et al, \(2019\)](#); [\(Dias et al, 2021\)](#); [\(Mikalef & Pateli, 2017\)](#); [\(Ozanne et al, 2022\)](#). The following is a table of research results regarding dynamic capability variables.

Based on [Table 2](#), ledre entrepreneurs in Bojonegoro show good dynamic capabilities in handling business dynamics. The sensing dimension (X2.1) shows that they maintain repeat customers (3.69) and understand market conditions (3.72). They are adept at conducting business profitably (3.75) and being proactive and reactive (4.09), although product development (3.38) needs improvement. In the seize dimension (X2.2), they excel at learning new methods (3.47), capitalizing on the current situation (3.51),

and seizing new opportunities (4.01). They also value technology for new products (3.63), strategic partnerships (3.86), and forecasting HR needs (3.87). The reconfiguration dimension (X2.3) reveals efforts to create differentiated products (3.79)

and communicate effectively (3.80). They adapt to changes in the business environment (3.76) and value having the right human resources (3.79). However, there is hesitation to change business methods and processes due to potential costs (3.56).

Table 2. Dynamic capability variable research results

| Variables | Dimensions | Indicator/item | Average | |
|--|----------------------|--|---|------|
| Dynamic Ability (X2) | Sensing (X2.1) | Having repeat customers (X2.1.1) | 3.69 | |
| | | Understanding market conditions (X2.1.2) | 3.72 | |
| | | Can conduct business in a more profitable way (X2.1.3) | 3.75 | |
| | | Able to maintain the best and appropriate business methods for the time being. (X2.1.4) | 3.75 | |
| | | Able to keep trying to develop ledre products according to customer desires (X2.1.5) | 3.38 | |
| | | Make proactive and reactive efforts to anticipate business losses (X2.1.6) | 4.09 | |
| | Scramble (X2.2) | Willing to learn new methods and technology (X2.2.1) | 3.47 | |
| | | Able to utilize the current situation to create a business strategy (X2.2.2) | 3.51 | |
| | | Able to capture new opportunities in the ledre business that are not known by competitors (X2.2.3) | 4.01 | |
| | | Able to utilize technology and knowledge to create and develop new products (X2.2.4) | 3.63 | |
| | Scramble (X2.2) | Able to cooperate with strategic partners (X2.2.5) | 3.86 | |
| | | Able to estimate the human resource requirements needed (X2.2.6) | 3.87 | |
| | Dynamic Ability (X2) | Reconfiguration (X2.3) | Able to create new products that are different from competitors (X2.3.1) | 3.79 |
| | | | Able to communicate well (X2.3.2) | 3.80 |
| | | | Able to adapt and respond to changes in the business environment (X2.3.3) | 3.76 |
| Having the right and knowledgeable human resources (X2.3.4) | | | 3.79 | |
| Able to change business methods and processes to get better profits (X2.3.5) | | | 3.56 | |

Description: STS: Strongly disagree; TS: Disagree; N: Neutral; S: Agree; SS: Strongly agree

Research by [Anju Safitri et al. \(2024\)](#) also explained that the factors that influence dynamic capabilities on innovation at PT Indofood CBP Sukses Makmur Tbk show that dynamic capabilities have a crucial role in driving company innovation. Some of the main factors that contribute to this include strategic leadership, human resource development, investment in technology, external collaboration, innovation culture, information systems, and knowledge management. A good dynamic capability in

handling business dynamics will have a good impact on business sustainability, especially in ledre MSMEs in Bojonegoro.

c. MSME Performance Variables

Analysis of performance variables (Y) is built from four indicators including sales growth, profit growth, asset growth, and customer growth ([Dhamayantie & Fauzan, 2017](#)). Indicators of sales growth (Y1), profit growth (Y2), asset growth (Y3), and customer growth (Y4) have the same

question, namely whether each of these indicators has experienced growth or

increase. The following is a table of the results of the performance variable analysis.

Table 3. Average results of each performance variable

| Variables | Indicators | Average |
|-----------------|--|---------|
| Performance (Y) | Profit growth every month (Y1) | 3.59 |
| | Increased number of customers (Y2) | 3.02 |
| | Increased sales (Y3) | 3.37 |
| | There is an increase in assets every year (Y4) | 3.04 |

Source: Primary data processed, (2024)

Note: STS: Strongly disagree; TS: Disagree; N.: Neutral; S: Agree; SS: Strongly agree

[Table 3](#) explains that the performance variable indicated by Y1 (monthly profit growth), has an average value of 3.59, placing it in the high category. Indicator Y2, which measures the increase in the number of customers, has an average value of 3.02, falling into the medium category. Y3 which shows the increase in sales has an average value of 3.37, also in the medium category. Y4, which reflects the annual increase in assets, has an average value of 3.04, again in the medium category. Three of the four indicators fall into the medium category, indicating that respondents believe that there is still room for improvement to meet desired expectations. However, the increase in the number of customers (Y2) is considered high, with respondents noting that customers include regular buyers as well as visitors and tourists who buy ledre as souvenirs.

Previous research by [Anju Safitri et al. \(2024\)](#) discussed how dynamic capabilities can improve firm performance in inflationary situations. The findings in the study show that companies that are able to adapt quickly to environmental changes can experience profit growth and an increase in the number of customers on an ongoing basis. This is in accordance with the results of the above research that ledre MSMEs in terms of performance variables have a good value.

SEM Model

a. Evaluation of the Measurement Model (Outer Model)

The first thing to do is to evaluate the measurement model, this evaluation is carried out by testing the validity and reliability at two levels, namely the first level / *first order* which will test at the dimension level based on the indicators, then continued with the second stage / *second order* measurement model evaluation which will test at the variable level based on the results of testing or evaluating the dimension level of each variable.

Evaluation of the Dimension Level/First Level Measurement Model

Convergent Reliability and Validity Test

In the research at this stage, the measurement model evaluation is used to test the reliability and validity of the instrument for each dimension indicator. Reliability test results can be determined using the following criteria, including *Cronbach's alpha*, and *composite reliability*, both of which must show a value greater than 0.7 in order to be declared reliable ([Hair et al., 2014](#)). The convergent validity test is used to measure the suitability between the indicators of variable measurement results and the theoretical concepts that explain the existence of indicators of the variable being tested, this test can be seen by looking at the *outer loading* and *average variance extracted (AVE)*. Where the indicator is considered valid if the *outer loading is* greater than 0.7 and *the AVE* shows a value above 0.5 ([Hair et al., 2019](#)). The test results can be seen in [Table 4](#).

Table 4 . Validity and reliability test results dimension level

| | Code | Loading Factor | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|----------------------------|------|----------------|------------------|-------------------------------|-------------------------------|----------------------------------|
| Innovative | In1 | 0.828 | 0.870 | 0.871 | 0.906 | 0.660 |
| | In2 | 0.797 | | | | |
| | In3 | 0.871 | | | | |
| | In4 | 0.817 | | | | |
| | In5 | 0.744 | | | | |
| Proactive | Pro1 | 0.791 | 0.842 | 0.842 | 0.888 | 0.613 |
| | Pro2 | 0.815 | | | | |
| | Pro3 | 0.754 | | | | |
| | Pro4 | 0.804 | | | | |
| | Pro5 | 0.749 | | | | |
| Risk Taking | PR1 | 0.869 | 0.872 | 0.873 | 0.907 | 0.662 |
| | PR2 | 0.837 | | | | |
| | PR3 | 0.798 | | | | |
| | PR4 | 0.752 | | | | |
| | PR5 | 0.808 | | | | |
| Autonomy | Ot1 | 0.753 | 0.903 | 0.904 | 0.926 | 0.676 |
| | Ot2 | 0.757 | | | | |
| | Ot3 | 0.860 | | | | |
| | Ot4 | 0.853 | | | | |
| | Ot5 | 0.862 | | | | |
| Competitive Aggressiveness | Ag1 | 0.801 | 0.760 | 0.760 | 0.862 | 0.676 |
| | Ag2 | 0.853 | | | | |
| | Ag3 | 0.811 | | | | |
| Sensing | Sen1 | 0.748 | 0.858 | 0.860 | 0.895 | 0.587 |
| | Sen2 | 0.795 | | | | |
| | Sen3 | 0.734 | | | | |
| | Sen4 | 0.814 | | | | |
| | Sen5 | 0.786 | | | | |
| | Sen6 | 0.714 | | | | |
| Catch | Sei1 | 0.793 | 0.870 | 0.871 | 0.903 | 0.607 |
| | Sei2 | 0.777 | | | | |
| | Sei3 | 0.793 | | | | |
| | Sei4 | 0.712 | | | | |
| | Sei5 | 0.820 | | | | |
| | Sei6 | 0.777 | | | | |
| Reconfiguring | Rec1 | 0.767 | 0.848 | 0.849 | 0.892 | 0.624 |
| | Rec2 | 0.835 | | | | |
| | Rec3 | 0.751 | | | | |
| | Rec4 | 0.827 | | | | |
| | Rec5 | 0.765 | | | | |

Source: Primary data processed, (2024)

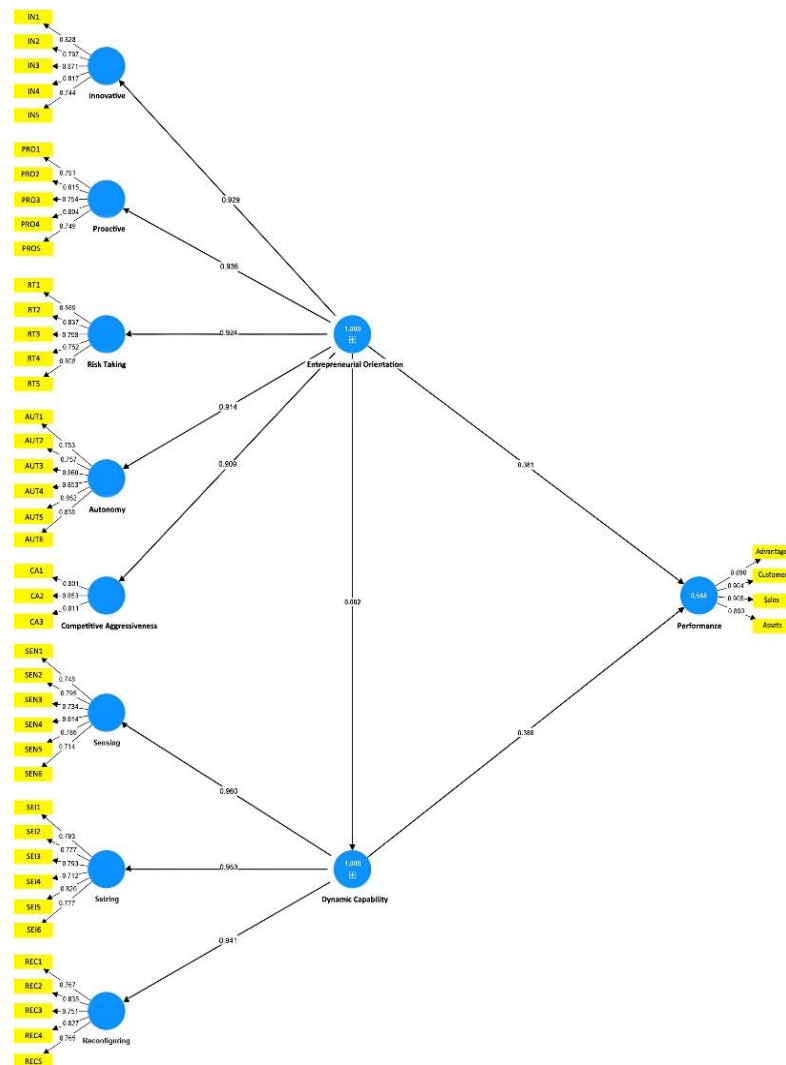


Figure 1. Phase-1 PLS-SEM algorithm results

Based on [table 4](#) above, it shows that all *outer loadings* are indicated by a *loading factor value* greater than 0.7, the smallest value is owned by *seizing* code 4 with a value of 0.712, the *Cronbach's alpha value* obtained is between 0.760-0.903, and the composite reliability of both ρ_a and ρ_c shows a *value* that is both greater than 0.7.7, while the *average variance extracted (AVE)* value is greater than 0.5 with the smallest value of 0.903, and the *composite reliability of both rho_a and rho_c* shows a value that is both greater than 0.7, while the *average variance extracted (AVE)* value is greater than 0.5 with the smallest value of 0.587 so it can be said that all indicators that explain the dimensions of latent variables have met the

requirements. 0.7, while the *average variance extracted (AVE)* value is greater than 0.5 with the smallest value of 0.587 so it can be said that all indicators that explain the dimensions of latent variables have met the requirements and can be said to be reliable and valid.

Discriminant Validity Test

Validity testing is also done through discriminant validity, which assesses the diversity of indicators in the construct of the measuring instrument. The cross loading method is used to evaluate the relationship between indicators and their dimensions. The correlation between latent variables or dimensions with new indicators must be

higher than the correlation with other latent variables or dimensions (F. Hair Jr et al., 2014).

Based on the data obtained, as shown in Figure 1, the cross loading value of each indicator in its dimension is greater than that of other dimensions. The cross loading value of the indicator of the innovative dimension is 0.744-0.871 greater than the value of other indicators which only get a value between 0.537-0.711. The proactive dimension of the indicator cross loading value is 0.754-0.815 greater than the value of other indicators which only get a value between 0.565-0.745. In the risk-taking dimension, the cross loading value of the indicator is 0.759-0.869, greater than the value of other indicators which only get a value between 0.543-0.752. The autonomy dimension shows a value of 0.757-0.862 where the value is higher than the value in other indicators which shows a maximum value of 0.742. The last dimension of the entrepreneurial orientation variable is competitive aggressiveness, its value between 0.801-0.853 is greater than the value in other dimensions with a value between 0.579-0.757. The dynamic capability variable

has a sensing dimension showing a cross loading value of 0.748-0.814 greater than other dimensions, with a maximum value of 0.740. The seizing dimension shows a value with a range between 0.744-0.820, has a value greater than the other dimensions with a value between 0.595-0.735. Furthermore, the reconfiguring dimension shows a cross loading value between 0.763-0.835, indicating that the value is greater than the value of other dimensions with a maximum value of 0.751 which is indicated by the competitive aggressiveness indicator 2. The performance variable has a cross loading value between 0.880-0.905, indicating a value greater than the other values which have a maximum value of only 0.777. It can be concluded that the measurement on the first-order has met the validity requirements on all indicators

Variable Level Measurement Model Evaluation / Second Order

Convergent Validity Test and Reliability Test

Evaluation of testing the *outer model* in *second order* can be seen through the *outer loadings* results presented in the Table 5.

Table 5. External content evaluation results

| | Entrepreneurship Orientation | Dynamic Capability | Performance |
|----------------------------|------------------------------|--------------------|-------------|
| Innovative | 0.929 | | |
| Proactive | 0.936 | | |
| Risk Taking | 0.924 | | |
| Autonomy | 0.914 | | |
| Competitive Aggressiveness | 0.909 | | |
| Sensing | | 0.960 | |
| Catch | | 0.953 | |
| Reconfiguring | | 0.941 | |
| Advantages | | | 0.890 |
| Customer | | | 0.905 |
| Sales | | | 0.905 |
| Assets | | | 0.879 |

Source: Primary data processed, (2024)

The measurement results in table 5 show that the *loading factor value* of all dimensions shows a value greater than 0.7, on the entrepreneurial orientation variable shows a value with a range between 0.909-0.936, the dynamic capability variable is 0.941-0.960, and the performance variable of each

dimension shows a value between 0.879-0.905, where indicators are considered valid if the *loading factor* is greater than 0.7 (Hair et al., 2019) so that it can be determined that the measurement model is appropriate and meets the validity requirements. After evaluating *the loading factor*, the next step is

to conduct a validity test by looking at the *average variance extracted (AVE)* value and reliability test by looking at the *Cronbach's*

alpha and *composite reliability* values for all dimensions. The test results can be seen in the Table 6.

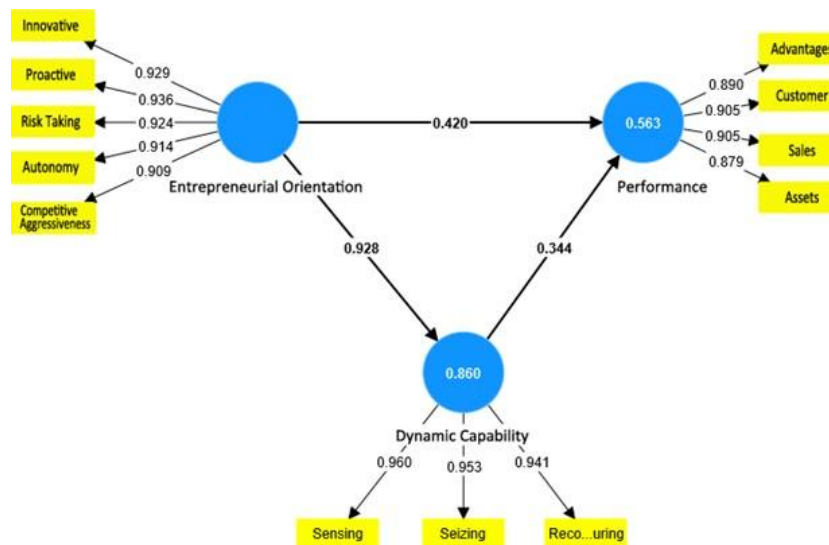


Figure 2 . PLS-SEM Stage-2 algorithm results

Table 6 . Validity and reliability test results on the *second order*

| | <i>Cronbach's alpha</i> | <i>Composite reliability (rho_a)</i> | <i>Composite reliability (rho_c)</i> | <i>Average variance extracted (AVE)</i> |
|------------------------------|-------------------------|--------------------------------------|--------------------------------------|---|
| Dynamic Capability | 0.947 | 0.947 | 0.966 | 0.904 |
| Performance | 0.917 | 0.917 | 0.942 | 0.801 |
| Entrepreneurship Orientation | 0.956 | 0.957 | 0.966 | 0.851 |

Source: Primary data processed, (2024)

Based on [table 6](#) above, it shows that the *AVE* value is greater than 0.5, then the *Cronbach's alpha* value, and *composite reliability* is greater than 0.7 so that it can be said that all dimensions that explain latent variables have met the requirements and can be said to be valid and reliable, in line with the statement ([Hair et al., 2019](#)) so that it has a strong basis for being able to evaluate the structural model (*inner model*).

Discriminant Validity Test

As in the *first order* evaluation, to test *discriminant validity* in the *second order* this study uses *cross loading*, which shows the relationship or correlation between dimensions to latent variables. The resulting correlation between dimensions and latent

variables must produce a higher value than the correlation between other dimensions ([F. Hair Jr et al., 2014](#)). The following *cross loading* data in this study can be seen in [Table 7](#).

Based on the data in [Table 7](#), the cross loading value for each dimension of the entrepreneurial orientation variable ranges from 0.909 to 0.936, higher than the value of other dimensions which range from 0.641 to 0.889. Similarly, for the dynamic capability variable, the dimension values range between 0.941 and 0.960, while the values for the other dimensions range between 0.627 and 0.881. The performance variable also shows higher dimensional values between 0.879 and 0.905, compared to the other dimensions which range between 0.632 and 0.738. Thus,

evaluation of the measurement model at the *second order* level confirms that all dimensions tested are reliable and valid.

b. Structural Model Evaluation (Inner Model)

Multicollinearity Analysis

The feasibility of the structural model was evaluated by *variance inflation factor*

(VIF) analysis to determine collinearity. The VIF value must be less than 5 (F. Hair Jr et al., 2014). Based on table 8, after the analysis, there are several VIF values that are in the less than ideal category but are still safe, which is below five so that it is acceptable and there is no multicollinearity problem in the model built in this study.

Table 7 . Second-order cross-loading data

| | Entrepreneurship Orientation | Dynamic Capability | Performance |
|----------------------------|------------------------------|--------------------|--------------|
| Innovative | 0.929 | 0.856 | 0.632 |
| Proactive | 0.936 | 0.881 | 0.667 |
| Risk Taking | 0.924 | 0.830 | 0.632 |
| Autonomy | 0.914 | 0.837 | 0.738 |
| Competitive Aggressiveness | 0.909 | 0.872 | 0.733 |
| Sensing | 0.889 | 0.960 | 0.680 |
| Catch | 0.875 | 0.953 | 0.721 |
| Reconfiguring | 0.882 | 0.941 | 0.693 |
| Advantages | 0.641 | 0.692 | 0.890 |
| Customer | 0.663 | 0.627 | 0.905 |
| Sales | 0.669 | 0.626 | 0.905 |
| Assets | 0.673 | 0.679 | 0.879 |

Table 8 . Multicollinearity analysis values

| | VIF |
|----------------------------|-------|
| Innovative | 4.206 |
| Proactive | 4.683 |
| Risk Taking | 4.615 |
| Autonomy | 3.970 |
| Competitive Aggressiveness | 3.754 |
| Sensing | 4.801 |
| Catch | 4.133 |
| Reconfiguring | 4.065 |
| Advantages | 2.801 |
| Customer | 3.345 |
| Sales | 3.314 |
| Assets | 2.564 |

Hypothesis Testing

This test is used to determine whether the hypothesis is accepted or rejected. If the P value <0.05 then H1 is accepted, meaning there is an influence. Conversely, if the P value > 0.05 then H1 is rejected, meaning there is no influence (Hair et al., 2019). The following are the results of the structural model evaluation hypothesis test conducted with the PLS technique obtained from the SmartPLS bootstrap report.

Table 9 shows that entrepreneurial orientation shows a *statistical T* value of

48.793 > 1.96 has a positive and significant effect on dynamic capabilities and a *P value* of 0.000 < 0.05 (H1) is accepted. While dynamic capabilities on performance do not have a significant effect as indicated by a *statistical T* value of 1.573 < 1.96 and a *P value* of 0.116 > 0.05 (H2) is rejected. Entrepreneurial orientation on performance has a significant positive effect with a *statistical T* value of 2.007 > 1.96 and a *P value* of 0.045 < 0.05 which means (H3) is accepted. Dynamic capability mediates entrepreneurial orientation and performance

which shows a *statistical T* value of $1.566 < 1.96$ and a *P value* of $0.117 > 0.05$ (H4) is rejected.

Coefficient of Determination (R-Square/R²)

The structural model is evaluated by path analysis between latent variables by

evaluating the coefficient of determination (R²) which represents the amount of variance in the independent variables that all dependent variables can explain, provided that values of 0.25, 0.5, and 0.75 are categorized as low, medium, and high respectively (Hair et al., 2019).

Table 9 . Path coefficient analysis results

| | <i>Original sample (O)</i> | <i>Sample average (M)</i> | <i>Standard deviation (STDEV)</i> | <i>T statistic (O/STDEV)</i> | <i>P-value</i> |
|--|----------------------------|---------------------------|-----------------------------------|--------------------------------|----------------|
| Entrepreneurial Orientation -> Dynamic Capability | 0.928 | 0.926 | 0.019 | 48.793 | 0.000 |
| Dynamic Capability -> Performance | 0.344 | 0.327 | 0.219 | 1.573 | 0.116 |
| Entrepreneurial Orientation -> Performance | 0.42 | 0.436 | 0.209 | 2.007 | 0.045 |
| Entrepreneurial Orientation -> Dynamic Capability -> Performance | 0.319 | 0.303 | 0.204 | 1.566 | 0.117 |

Table 10 . R-square (R²) value

| | R-square | Adjusted R-square |
|--------------------|----------|-------------------|
| Dynamic Capability | 0.86 | 0.858 |
| Performance | 0.563 | 0.551 |

Table 10 explains that the magnitude of the influence of entrepreneurial orientation on dynamic capabilities of 0.86 is included in the high influence. That is, 86% of changes in dynamic capabilities can be explained by entrepreneurial orientation. Meanwhile, the effect of entrepreneurial orientation and dynamic capabilities on performance is moderate because it shows a value of 0.563. As much as 56.3% of performance changes can be explained by entrepreneurial orientation and dynamic capabilities, the remaining 43.7% is influenced by other variables outside this research model.

Effect Size Analysis (f-square/f²)

Effect size (*f-square*) provides an assessment of the contribution of the independent variable to the R² value of the dependent variable. According to (F. Hair Jr et al., 2014), an *f-square* value of 0.02, 0.15,

or 0.35 has a small, medium, or large influence respectively. Based on table 5.17, the effect of dynamic capabilities on performance tends to be small at 0.038. Entrepreneurial orientation on dynamic capabilities has a large influence with an *f-square* value above 0.35, namely 6.165, while entrepreneurial orientation on performance has a small influence as indicated by a value of 0.056. This is in accordance with Table 11.

The resulting model shows that this study is considered qualified with an SRMR value of 0.044. According to (Fueki et al., 2011) the *model-fit* is considered qualified if the SRMR value is less than 0.10. Meanwhile, according to (Hair et al., 2013) a good NFI value must be between 0 and 1, the closer to the value 1, the better. The NFI value obtained by this model is 0.887 according to Table 12.

Table 11 . *f-square* (f^2) values

| | Dynamic Capability | Performance | Entrepreneurship Orientation |
|------------------------------|--------------------|-------------|------------------------------|
| Dynamic Capability | | 0.038 | |
| Performance | | | |
| Entrepreneurship Orientation | 6.165 | 0.056 | |

Model-Fit

Table 12 : *Model-Fit*

| | <i>Saturated model</i> | <i>Model estimation</i> |
|-------------|------------------------|-------------------------|
| SRMR | 0.044 | 0.044 |
| d_ULS | 0.149 | 0.149 |
| d_G | 0.3 | 0.3 |
| Chi-squared | 120.657 | 120.657 |
| NFI | 0.887 | 0.887 |

CONCLUSION

Based on the research results, it can be concluded that entrepreneurial orientation has a positive and significant influence on the dynamic capabilities and performance of leaders MSMEs. However, dynamic capability does not act as a mediator in the relationship between entrepreneurial orientation and performance. This finding confirms that entrepreneurial orientation is important in improving MSME performance by encouraging innovation, proactiveness and risk-taking, which are reinforced by autonomy and aggressiveness in competition. On the other hand, although dynamic capabilities contribute to managing change, the results show that this factor does not directly influence the performance of ledre MSMEs. The absence of a mediating effect suggests that, while important, dynamic capabilities are insufficient to ensure competitive advantage and improved performance without support from a strong entrepreneurial strategy. Thus, for ledre MSMEs, strengthening entrepreneurial orientation is key to achieving sustainable growth and competitiveness.

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