The Effect of Business Model Innovation and Entrepreneurship Orientation on MSMESs Performance Through Business Agility Moderated Financial Literature

Dinda Riri Saraswati*, Pristiyono, & Aziddin Harahap
Faculty of Economics and Business, University of Labuhanbatu, Indonesia

Abstract
This study aims to examine the effect of business model innovation and entrepreneurial orientation towards MSMES performance through business agility moderated by financial literacy. The approach used in this research is quantitative. In this study, researchers used incidental sampling which obtained 100 respondents. The analysis used in this study is a structural approach to the Equation Model (SEM) assisted by the smart PLS. Based on the research findings, it can be concluded that entrepreneurial orientation, business model innovation, and business agility affect the performance of MSMESs, business model innovation and entrepreneurial orientation are known to affect business agility. Meanwhile, financial literacy has not been able to moderate the relationship between business agility and MSMES performance. Business agility is able to mediate the relationship between business model innovation and Entrepreneurial Orientation on the performance of MSMESs.

Keywords: Innovation, Business Model, Agility, Financial Literature

1. Introduction
Micro, Small and Medium Enterprises (MSMESs) are one of the sectors that support the national economy as a whole significant in the Indonesian economy. This can happen because the number of micro-entrepreneurs dominates and is estimated to be mostly engaged in the informal sector. In 2017, there were 59.2 million MSMES actors in Indonesia (Ministry of Communication and Information Technology, 2017). MSMESs also have a significant contribution to economic growth. However, in its development, MSMESs often face problems including: limited capital, low capacity of human resources (Human Resources), and relatively minimal mastery of science and technology (Tjahjadi et al., 2020), (Ghozali & Latan, 2015) Moreover, the development and competition of product quality is getting tougher. These problems will certainly hamper the performance and development of the related MSMESs.

In order to prevent and minimize these problems, one way that can be done is to innovate a business model (IMB). (Visnjic et al., 2017). Application of business model innovation. The right approach is important for the development of the company. IMBs enable innovative companies to commercialize new ideas and technologies. Companies can also view IMB as a source of innovation in itself, and a source of competitive advantage, (Visnjic et al., 2017) so they can compete in the market. In addition, MSMES actors also establish an entrepreneurial orientation to direct their efforts and integrate their members in order to achieve common goals.

Before that, MSMESs must have agility, namely the ability of an organization to carry out its business activities. This ability includes the ability to manage internal factors such as structural adjustments, utilization of information systems, company logistics management and create a more agile mindset of membersin the face of dynamics in the market (Ameen Ishaq & Prakash, 2020; Felipe et al., 2016); Qosas et al., 2019). Another ability that needs to be

* Corresponding author.
E-mail address: riridinda256@gmail.com

Quantitative Economics and Management Studies (QEMS) is licensed under an Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)
possessed is related to financial literacy. This ability includes knowledge and skills related to financial management. With this capability, business actors can understand the conditions and various financial concepts and their practical application, which includes management, information acquisition, financial evaluation and risk consideration in making decisions.

2. Literature Review

2.1. Performance of MSMEs

Performance is output generated by the functions or indicators of a job or a profession in a certain time. Pollanen et al., (2016) states that performance is the result of work that has a strong relationship with organizational strategic objectives, customer satisfaction and contributes to the economy. To improve the performance of an MSME, there are two things that need to be considered, including market orientation and entrepreneurial orientation. By understanding these two things, MSME actors can develop the right strategy to improve their performance. Measuring business performance is not always seen from only financial improvement, but also stable non-financial improvement so that it can survive against its competitors. (Hakkak & Ghodsi, 2015). Besides being beneficial for MSME actors, improving MSME performance can also have a broad impact on the welfare of the community.

Performance refers to the achievements or achievements of the company within a certain time. The variables in this study were developed from the performance that has been studied by Minuzu (2010). The dimensions and indicators used to measure performance are

1. Quality of work, in the dimension of work quality, there are several indicators, namely, work tidiness, work ability, cleanliness of the workplace, office facilities.
2. Quantity of work, in the quantity dimension of performance there are indicators, namely, the speed of completing work, the target of completing the work.
3. Cooperation, in the dimension of cooperation there are indicators of cooperation and cohesiveness of work.
4. Responsibility, in the dimension of responsibility there are indicators of job satisfaction, work results, facilities and infrastructure.

2.2. Business Model Innovation

The notion of innovation comes from the Latin nova which means new. Generally, innovation is understood as the introduction of something new. Innovation is the embodiment, combination, or synthesis of knowledge about new products, processes, or services that are original, relevant, and valued (Allahar, 2019). While the product according to Kotler & Keller, (2016) is anything that can be offered in the market to satisfy the needs and wants of consumers. Innovation can be in the form of product design, components and architecture. Product innovation is an important way for companies to stay adaptable to markets, technology, and competition. Innovation has been valued by the market as the creator and continuation of a company or organization. According to OECD/Eurostat, (2005). Business model innovation can be determined by the following indicators.

1. New Ideas is a mindset in observing a phenomenon that often occurs, including in the field of education, this new idea can be in the form of the discovery of an idea of thought, idea, system to the possibility of crystallized ideas.
2. Products and services are the result of further steps from new ideas which are followed up with various activities, studies, research, and experiments so as to give birth to more concrete concepts in the form of products and services that are ready to be developed and implemented, including the results of innovations in the field of education.
3. Improvement Efforts, namely systematic efforts to make improvements and make continuous improvements so that the benefits of innovation can be felt.

2.3. Entrepreneurship Orientation

There are four definitions of entrepreneurship, namely first, people who have become entrepreneurs, on average have a higher level of need for success when compared to other people in general, second, that people with a high need for success also have a tendency to take moderate risks. (Schmitt-Rodermund, 2004; Renko et al., 2012; Falck et al., nd). This means they choose risk situations whose outcomes they can later control. This is in contrast to the betting situation where the outcome depends only on the available opportunities. Third, research shows that many successful entrepreneurs are self-confident people, who admit there are problems in launching a new company, but believe in
their ability to overcome them. (Del Baldo, 2014). Fourth, many entrepreneurs pay attention to a level of curiosity called a strong desire to do business with any purpose, create fortitude, and a willingness to work hard. (Del Baldo, 2014). According to Wijetunge & Pushpakumari, (2014) entrepreneurial orientation indicators are as follows

(1) Innovative Attitude
Innovative attitude is defined as the behavior of a company that always wants to develop its production results, as well as the operational capabilities and technologies of the company. The power to think in a new way by going through several stages and conditions that have been determined.

(2) Dare to Take Risks
Bold and aggressive behavior in pursuing opportunities and daring to choose high-risk projects with a high chance of success compared to choosing projects with lower risks and more predictable results. Risk can be interpreted as an uncertainty in the future and can also be interpreted as a consequence that has an adverse impact. Risk for entrepreneurs is not an obstacle to success but is used as a challenge.

(3) Proactive
An act of someone who has many actions that lead to positive things. Proactive people always have stimulation, self-awareness, imagination, conscience, free will and have a response, but they have a choice to do something positive. Proactivity can also be interpreted as a company's attitude that always takes advantage of opportunities to create a more competitive market by influencing trends, creating market demand, and being the first mover in a more competitive market.

2.4. Business Agility Setting
Agility is an organization's ability to carry out its business activities which include the ability to manage internal factors such as structural adjustments, utilization of information systems, company logistics management and create a mindset of members to be more agile in dealing with dynamics in the market. (Ameen Ishaq & Prakash, 2020; Felipe et al., 2016; Qosasi et al., 2019). Business Agility is a relatively new paradigm to be used as a solution in maintaining competitive advantage during times of uncertainty and turbulence in the environment business (Pratono, 2021). Agility is defined by Janssen & van der Voort, (2020) something that includes being fast, resourceful, and adaptable so as to be able to adapt to their environment. If organizations don't apply methods with agility, then they can lose their prominence and relevance. Agility itself is the ability to think and understand situations quickly (Holbeche, 2015). In the business world, agility is a method that puts projects on a smaller scale and engages team members through consistent collaboration and ongoing literacy (Denning, 2019). This method offers an iterative and incremental approach, so it doesn't work sequentially and creates a product at the end of the project. According to Li et al., (2021) Business agility can be measured using the following indicators:

(1) Strategic sensitivity
(2) Immediate identification of changes
(3) Selecting strategic goals
(4) Resource fluidity
(5) Process integration and Network Synchronization
(6) Flourishing network due to strong partners
(7) Customer knowledge
(8) Competitors knowledge

2.5. Financial Literacy
Garg & Singh, (2018) defines financial literacy as a practical ability that includes management, information acquisition, financial evaluation and risk consideration in making decisions. Based on data from a survey conducted by OJK in 2016 it was found that the level of financial literacy in Indonesia reached 29.7% of the population. It is estimated that there are 30 people who have adequate financial skills out of every 100 people. (Muliyanti & Kaukab, 2020). By having good financial literacy skills, a person can distinguish financial choices, conduct discussions related to financial issues, and make financial plans and cope with risks that can influence decisions in daily finances (Wati, 2020). In addition, financial literacy can also avoid the difficulties that arise when there is an error in financial management such as lack of planning, lack of financial knowledge, and consumptive actions, thus financial literacy is needed to make it easier for someone when preparing financial planning and get greater profits. By maximizing the value of money to improve the standard of living (Rosa & Listiadi, 2020). According to Mabula & Ping, 2018 financial literacy can be measured by the following indicators:

(1) Mathematical knowledge and standard knowledge such as basic numbers and comprehension ability.
(2) Financial understanding of the nature and form of money, how money is used and the consequences of consumption decisions.

(3) Financial competencies such as understanding the main characteristics of basic financial services, attitudes in using money and savings, understanding financial records and realizing the importance of reading and maintaining them.

(4) Be aware of the risks associated with financial products, and understand the relationship between risk and return.

(5) Financial responsibility, namely the ability to make sound decisions on financial issues, knowing the rights and responsibilities of consumers, the ability and trust to seek help when something goes wrong.

3. Research Methods

The approach used in this research is quantitative (Sugiyono, 2017). Quantitative method can be defined as a research method based on the philosophy of positivism, used to examine a population or a certain sample. This method is in the form of numbers derived from measurements using a questionnaire on the variables that exist in the study. The population in this study is not known for certain SMEs. In this study, researchers used incidental sampling which obtained 100 respondents. The analysis used in this study is a structural approach to the Equation Model (SEM) assisted by the smart PLS application (Ghozali & Latan, 2015). Validity and reliability tests are carried out to ensure that the measurement used is feasible to be used as a measurement (valid and reliable). Testing the validity and reliability can be seen from:

First, Convergent Validity is an indicator that is assessed based on the correlation between the item score/component score and the construct score, which can be seen from the standardized loading factor which describes the magnitude of the correlation between each measurement item (indicator) and its construct. Individual reflective measures are said to be high if the correlation is > 0.7. In the initial stage of research, the development of a measurement scale for the loading value of 0.5 to 0.6 is considered sufficient.

Second, Discriminant Validity is a measurement model with reflective indicators assessed based on cross-loading of measurements with constructs discriminant validity, namely comparing the value of the squareroot of average variance extracted (AVE), the instrument is declared valid if it has an AVE score > 0.5

Third, Composite reliability is an indicator to measure a construct that can be seen in the view of latent variable coefficients. In this measurement, if the value achieved is > 0.70, it can be said that the construct has high reliability.

Fourth, Cronbach's Alpha is a reliability test conducted to strengthen the results of composite reliability. A variable can be declared reliable if it has Cronbach's alpha value > 0.7.

4. Result and Discussions

Based on the results of descriptive analysis, it is known that food and beverage MSMESs in Labuhan Batu Selatan tend to be new, dominated by MSMESs that were established in the 1-3 year range as many as 72 MSMESs, MSMESs that were established <1 year as many as 20 MSMESs, MSMESs which were established 4-6 years. 6 as many as 6 MSMESs and MSMESs that have been established for >6 years 2 MSMESs (Figure 1).

3.1. Outer Model Analysis

3.1.1. Validity Test

Validity test is used to measure the validity or validity of a questionnaire. In this research, validity testing is carried out using convergent validity and AVE. The instrument is declared valid if the AVE value > 0.5 and the outer loading value (> 0.6) (Figure 2).

3.1.2. Reliability Test

Researchers used 2 types of reliability tests, namely the Cronbach Alpha test and the Composite Reliability test. Cronbach Alpha measures the lowest value (lowerbound) reliability. The data is declared good if the data has a Cronbach alpha value> 0.7. Meanwhile, composite reliability measures the actual reliability value of a variable. The data is declared to have high reliability if it has a composite reliability score >0.7 (Table 1).
3.1.3. **Square Test**

Test R-Square Coefficient determination (R-Square) is used in the measurement to measure how much the endogenous variables are influenced by other variables. Based on the data analysis carried out through the use of the smartPLS program, the R-Square value is obtained as shown in the table 2.

![Figure 1. Description of MSMES Statistics based on length of establishment](image1.png)

![Figure 2. Validity Test](image2.png)
Table 1. Reliability Test Result

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Agility (M)</td>
<td>0.893</td>
<td>0.915</td>
</tr>
<tr>
<td>Business Model Innovation (X1)</td>
<td>0.843</td>
<td>0.884</td>
</tr>
<tr>
<td>Entrepreneurial Orientation (X2)</td>
<td>0.893</td>
<td>0.912</td>
</tr>
<tr>
<td>Financial Literacy (Z)</td>
<td>0.800</td>
<td>0.869</td>
</tr>
<tr>
<td>Business Agility (M) * Financial Literacy (Z)</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>MSMESs Performance (Y)</td>
<td>0.924</td>
<td>0.935</td>
</tr>
</tbody>
</table>

Source: primary data processed by researchers (2022).

Table 2. Determinant Test

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Agility (M)</td>
<td>0.759</td>
<td>0.754</td>
</tr>
<tr>
<td>MSMESs Performance (Y)</td>
<td>0.875</td>
<td>0.869</td>
</tr>
</tbody>
</table>

Source: primary data processed by researchers (2022).

Based on the test results, the r-square score for Business Agility is 0.759, which means that Business Agility is influenced by Business Model Innovation and Entrepreneurship Orientation by 75.9% and 24.1% is influenced by variables that have not been explained in this study. The r-square score for MSMES performance is 0.875, which means that business model innovation, business agility, entrepreneurial orientation, financial literacy effect MSMES performance by 87.5% and the other 12.5% is influenced by variables that have not been explained in this study.

3.1.4. Discussion

- **H1 Entrepreneurship Orientation (X2) Affects MSMES Performance (Y)**

  The results of testing the entrepreneurial orientation hypothesis on MSMES performance get a score (p = 0.420) with p values of 0.000 (p <0.05) and t statistics of 4.377 (p> 1.96) indicating that there is a significant positive relationship between the entrepreneurial orientation variable and MSMES performance. The better the entrepreneurial orientation, the better the performance of MSMESs. Entrepreneurial orientation is a network of organizations including suppliers, distributors, customers, competitors, government agencies, and so on that are involved in delivering a particular product or service through competition and cooperation. Having a good relationship with work partners will improve MSMES performance (Sari, 2019). Entrepreneurship orientation is one of the strengths of the organization to improve the course of entrepreneurship in MSMESs and can foster entrepreneurial behavior patterns that are applied to maintain MSMESs. In addition, entrepreneurship understands behavior which includes the dimensions of being innovative, proactive, and willing to take risks (Herijanto & Rahadi, 2020).

- **H2 Business Model Innovation (X1) Affects MSMES Performance (Y)**

  The results of the hypothesis testing of the business model innovation variable on the performance of MSMESs got a score (p=0.285) with p values of 0.001 (p<0.05) and a t statistic of 3.406 (p> 1.96), indicating that there is a significant positive relationship between the business model innovation variable and MSMES performance. The better the innovation of the chosen business model, the better the performance of MSMESs will be. Innovation refers to the development and introduction of new or developed products that are successful in the market (Pohan, 2022). The existence of rapid innovation and in line with marketing developments will improve the performance of MSMESs in competing more superiorly. Businesses that recognize the need for transformation will benefit from internal flexibility and agility in achieving goals (Dühring & Zerfass, 2021).

- **H3 Business Agility (M) Affects MSMES Performance (Y)**

  The results of testing the business agility hypothesis on the performance of MSMESs get a score (p = 0.491) with p values of 0.000 (p <0.05) and t statistics of 5.482 (p> 1.96) indicating that there is a significant positive effect between the variables of business agility and MSMES performance, so that the better the business agility you have, the better the performance of MSMESs will be. Performance is the result of work that has a strong relationship with the
strategic objectives of a company, customer satisfaction, and contributes to the economy (Afriyie et al., 2019). A business needs to dedicate different resources to maintain flexibility and high speed in order to excel in the face of unexpected changes (Malca et al., 2020; Doz, 2020). This principle is considered not owned by MSMESs in Indonesia so that the business agility factor is believed to be a need that must be met in an effort to increase the level of business resilience owned.

- **H4 Business Model Innovation (X1) Affects Business Agility (M)**

  The results of testing the hypothesis of business model innovation on business agility get a score (p=0.399) with p values of 0.000 (p<0.05) and t-statistics of 5.141 (p>1.96) indicating that there is a significant positive relationship between the variables of business model innovation and business agility. The better the business model innovation carried out by MSMESs, the better their business agility will be. The courage of a business to innovate its business model is considered to play an important role in having adequate business agility capabilities (Claus, 2017). Innovating business models is an option for MSMESs to develop a strategic posture (Hussain et al., 2018). There is a need for rapid innovation in accordance with market demands. Companies need to be able to align and adapt to environmental changes, this action is reflected in the concept of business agility (Parente et al., 2020).

- **H5 Entrepreneurship Orientation (X2) Affects Business Agility (M)**

  The results of testing the hypothesis of entrepreneurial orientation on business agility get a score (p = 0.515) with p values of 0.000 (p < 0.05) and t statistics of 6.945 (p > 1.96) indicating that there is a significant positive relationship between the variables of entrepreneurial orientation and business agility. The better the entrepreneurial orientation carried out by MSMESs, the better their business agility will be. These results are in line with research conducted by Mohilu, (2021). Entrepreneurial orientation represents the company’s response to future or potential market needs. The concept of Entrepreneurial Orientation and agility is the basis of the company’s success in dealing with changing situations and its management, it seems logical to think of it as a related concept in the organization. An entrepreneurial orientation enables companies to manage processes in an efficient, agile and fast manner in reaction to changing market conditions (Dühring & Zerfass, 2021).

- **H6 Financial Literacy (Z) Unable to Moderate the Relationship between Business Agility and MSMES Performance (Y)**

  The results of hypothesis testing of financial literacy variables that moderate the relationship between business agility and MSMES performance get a value of (p=0.009) with p values of 0.711 (p>0.07) with t statistic of 0.037 (p<1.96) indicating that financial literacy is not able to moderate the relationship between business agility and MSMES performance. In general, MSMESs in Labuhan Batu Selatan are still relatively new, this is evidenced by the results of a descriptive analysis where MSMESs with a long standing of 1-3 years dominate so that knowledge about finance is also still minimal. So that in this condition business agility in terms of the involvement of the team to jointly develop MSMESs is more taken into account. The results of this study reject the findings Herijanto & Rahadi, (2020) (Achi et al., 2022) where financial literacy has not been able to moderate the relationship between business agility and MSMES performance.

**Indirect Influence**

- **H7 Business Agility is able to mediate the relationship between Business Model Innovation and MSMES Performance (Y)**

  The Boston Consulting Group (2009) shows that business model innovation generates an average of four times greater revenue than product or process innovation. Business model innovation has also been able to provide sustainable returns over the last 10 years. The competitive advantage of MSMESs can be seen from the ability of MSMESs to innovate in their business models, although quality products and processes cannot be separated from being a component that has an important influence on the company's success. Business model innovation followed by business agility makes MSMESs more adaptable to all situations. Agile business to adapt to unforeseen situations, which come from force majeure conditions or changing demands from key company stakeholders (regulations, consumers, competitors, employees, and so on). Agility is an important aspect that encourages individuals to be able to quickly adapt to changes and existing situations. This capability enables MSMESs to obtain performance targets and maintain their existence. The results of this study are in accordance with the findings (Waty et al., 2021) where business agility is able to mediate the relationship of business model innovation to the performance of MSMESs.
- **H8 Business Agility is able to mediate the relationship between Entrepreneurial Orientation (X2) on MSMES performance (Y)**

There are 3 elements in EO that play an important role, namely open innovation, risk, and autonomy. An important element in the process of developing a product that explains how a company can achieve competitiveness is more participatory, more distributed, and innovation that is more centralized in various types is the element of Open Innovation. (Pratono, 2018). The relationship between elements in the MSMES environment, influencing the tendency to innovate, verifies that innovation leads to a stronger competitive advantage when the macro-environmental elements of the company's activities are well articulated in the form of a system rather than partially. (Sivam et al., 2019). Entrepreneurial Orientation helps companies see the market developments that continue to advance rapidly, as well as increase the company's sensitivity to market/community needs. Then the entrepreneurial orientation helps companies to make product innovations, as well as being able and daring to make decisions. This relationship is stronger when MSMES have good business agility. Agility is able to be a driving force for the vision for the future of the MSMES business, making strong steps, forming a firm commitment, relentlessly transferring resources for strategy implementation towards strategy achievement. The existence of the ability to synergize the MSMES component supported by the agility that is owned makes the MSMES performance even stronger. The results of this study support the findings (Pratono, 2018; Sugiyarti, 2018) where business agility is able to mediate the relationship between Entrepreneurial orientation to the performance of MSMES.

4. **Conclusion**

Based on the research findings, it can be concluded that entrepreneurial orientation, business model innovation, and business agility affect the performance of MSMESs, business model innovation and entrepreneurial orientation are known to affect business agility. Meanwhile, financial literacy has not been able to moderate the relationship between business agility and MSMES performance. Business agility is able to mediate the relationship between business model innovation and Entrepreneurial Orientation on the performance of MSMESs. This research still has limitations, among others, the number of samples taken is only 100 MSMES actors, besides that this study only knows the effect of 3 variables to determine the performance of MSMESs, so it is hoped that further research can involve respondents with a more varied number of variables and a larger sample in order to obtain better research results. MSMESs in South Labuhan Batu are expected to be able to learn financial literacy for MSMES management so that they not only focus on innovation and involvement of MSMES components but also increase knowledge of financial management so that MSMES actors are wiser and smarter in managing their assets so that they can provide reciprocity which is useful in supporting MSMES finances both in the short and long term.

**References**


