

ANALYZING THE ROLE OF SUSTAINABLE ENTREPRENEURIAL ORIENTATION ON INDONESIAN SMES' BUSINESS PERFORMANCE

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Abstract

The main objective of the current research is to analyze the role of sustainable entrepreneurial orientation toward Indonesian SMEs' business performance. Sustainable entrepreneurial innovation is a construct derived from the entrepreneurial orientation, which is adjusted to the current sustainable development issues that put businesses not only aim for profit but also the sustainability of society and the environment. To achieve the objective, we develop a conceptual framework that includes the sustainable innovation constructs to better understand the process of how sustainable entrepreneurial orientation would determine the overall business performance of a business. 187 Indonesian SME owners and managers were participating to become respondents and provide data needed for the Partial Least Square (PLS) analysis. The key finding from the current research is that sustainable entrepreneurial orientation is a key determinant that could improve all of the constructs of sustainable innovation, which consist of knowledge, product, and market innovation capabilities. In addition, sustainable entrepreneurial innovation also has a significant effect on overall business performance, thus strengthening the role of sustainable entrepreneurial orientation for a business should they would like to improve their overall business performance and innovation capabilities. The theoretical and practical implications for the current research result are discussed within the article.

Keywords: Sustainable entrepreneurial orientation; Sustainable innovation; Business Performance

1. INTRODUCTION

Small and medium enterprises (SMEs) have been considered to have a key strategic role in Indonesian economic development (Jingga & Limantara, 2015). As the fourth nation with the highest population on earth, the development of SMEs helps the nation to provide job opportunities that could improve the overall economic growth of the nation. In addition, SMEs are also considered to be resilient to the economic crisis since most SMEs use personal capital rather than using debt. Therefore, when the banking sector collapsed and the interest rate is rising, the condition did not affect SMEs' sustainability (Nuari et al., 2020). However, business development is not a simple task, and achieving sustainability requires good business performance.

Good business performance is determined by various factors from both the internal and external business environment. This variation adds a task for managers or business owners to identify the best approach to business strategy development and implementation. Addressing the current issue of the Sustainable Development Goals (SDGs), business is expected to give more attention to the Triple Bottom Line (TBL) pillars so the utilization of resources could meet the needs of current and future generation without damaging the environment (Elkington, 1998).





The TBL pillars consist of social, economic, and environmental sustainability, and businesses are expected to build a sustainable business model that could generate profit, give a contribution to social welfare, and also preserve the environment.

The issue challenges SME owners to find the best approach to determine their business strategy, given limited access to resources compared to big companies. Previous research found that the business's capability to develop innovation could significantly improve its business performance (Brettel et al., 2015; Fadda, 2018; Jeong et al., 2019). The finding supports the ideas proposed by the Resource-Advantage Theory (R-A Theory) which suggested that innovation should be considered as one of a business competitive advantage (Hunt & Morgan, 1996). Chen (2016) suggested that despite being the goals of most businesses, not all businesses are willing to develop innovation because of the risk of failure in the process of implementing the innovation.

Entrepreneurial Orientation (EO) is a construct that is developed to measure business owners or managers' perspectives toward challenges and opportunities (Iqbal & Malik, 2019). Business owners with EO are considered more proactive in capturing opportunities and willing to take a risk to overcome challenges (Alegre & Chiva, 2013; Guo et al., 2020; Li et al., 2017).

The purpose of the current research is to construct a model that could be used to examine the relationship between EO, innovation, and business performance of Indonesian SMEs. First, we review previous research on innovation capabilities to identify major innovation development that has been linked to supporting the sustainability of a business and significantly improving the business performance. Second, we review the previous research on EO and its role in business capabilities to develop innovation and business performance.

Third, we build the conceptual framework that links the relationship between EO and each of the major innovation capabilities. We use Partial Least Square (PLS) analysis to measure the suitability of the proposed conceptual framework for explaining the relationship between the construct within the model. Finally, we conduct hypothesis testing to investigate the role of EO and sustainable innovation toward SMEs' business performance.

The proposed conceptual framework from the current research could be used by the government to develop policies that could encourage SMEs to develop innovations that could not benefit their organization, but also the people and the planet. With that as consideration, the current research finding could also be used in academic discussions in entrepreneurial classes to encourage future entrepreneurs on developing an innovative and sustainable business model.

2. LITERATURE REVIEW

Sustainable Innovation

Hunt & Morgan (1996) in their Resource-Advantage Theory (R-A Theory) suggested that innovation is one of the competitive advantages of a business. However, developing innovation as a competitive advantage requires resources as a comparative advantage compared to







competitors. Therefore, limitation in resources also led to a limitation of innovation that could be developed by a business since there is a risk of failure that the innovation could not be implemented well (Chen, 2016). This puts pressure on Small and Medium Enterprises (SMEs) to develop innovation with limited access to resources compared to big companies. To overcome the challenge, SMEs should identify key innovations that have the most significant impact on their business performance, thus the allocation of available resources becomes more efficient.

Previous research found various forms of innovation that could help them improve their business performance and sustainability, such as technological innovation (Singhal et al., 2020), product and process innovation (Lee et al., 2017), or management innovation (Walker et al., 2015). Given the limited resources owned by SMEs, Chen (2016) suggested they should develop three capabilities for developing innovation.

These capabilities are knowledge innovation capabilities, product innovation capabilities, and market innovation capabilities. Knowledge innovation capabilities measure business capability to capture, store and manage internal and external information to support the development of future innovation (Mitchell, 2006). Product innovation capabilities measure business capability to build innovation to create a new product or improve the efficiency of the production process (Chen, 2016). Finally, the market innovation capabilities measure business capability to find a creative way to sell their product and services to increase the number of sales and profit (Seidler-de Alwis & Hartmann, 2008).

Sustainable Entrepreneurial Orientation

Entrepreneurial orientation is a construct that was developed to measure entrepreneurial firm attitudes (Fadda, 2018). A firm attitude is considered one of the key determinants of business performance toward its goals (Miles et al., 1978). A firm with entrepreneurial attitudes has the following capability and traits: proactiveness, innovativeness, and risk-taking (Andersén, 2010). Proactiveness is the business's ability to foresee changes within the market, trends among the customers, and other external environments and proactively react to these changes to capture the available opportunities before their competitors (Dess & Lumpkin, 2005). Innovativeness is the business's attitude toward innovation development to discover new products, services, or ways to improve the efficiency of business operations (Tajeddini, 2010). Finally, risk-taking is the business's perception of uncertainty that might impact its operations (Lumpkin & Dess, 1996).

The recent issues on Sustainable Development Goals (SDGs), put pressure on companies to adjust their business strategy so that their business operations could benefit the pillars of Triple Bottom Line (Elkington, 1998). Business operations are expected not only to provide profit to their internal stakeholder but also could give benefits for social welfare and the sustainability of the environment. Kraus et al. (2018) suggested that this pressure leads to a new construct of entrepreneurial orientation. Previous research on entrepreneurial orientation proved that proactiveness, innovativeness, and risk-taking attitude could improve overall business performance (Brettel et al., 2015; Fadda, 2018; Jeong et al., 2019). However, the construct did





not address the issues of sustainability, which limit the level of proactiveness, innovativeness, and risk-taking attitude due to that businesses should consider if their entrepreneurial strategy is still in line to achieve social and environmental sustainability. Therefore, the construct of sustainable entrepreneurial orientation is developed to capture the business's entrepreneurial orientation that also addresses sustainable issues (Kraus et al., 2018).

Sustainable entrepreneurial orientation practices include green entrepreneur, social entrepreneur, and sustainable entrepreneur (Melay & Kraus, 2012). These practices can be found within the business that could develop innovation that is not only improving their business performance but also providing social and environmental benefits. The current research hypothesized that sustainable entrepreneurial orientation could improve the business's sustainable innovation capabilities. We examine the relationship between sustainable entrepreneurial orientations toward the key innovation capabilities that have been identified by Chen (2016), thus the first to third hypotheses for the current research are as follows:

- **H1:** Sustainable entrepreneurial orientation has a significant effect on knowledge innovation capabilities
- **H2:** Sustainable entrepreneurial orientation has a significant effect on product innovation capabilities
- **H3:** Sustainable entrepreneurial orientation has a significant effect on market innovation capabilities

Business Performance

Business performance is measured to determine if the development and implementation of a business strategy, could help the business to achieve its goals and objective. The construct of business performance is developed to help businesses identify key performances that could help the business gain more profit and help the business to grow and be sustainable (Tuan et al., 2016). There are two approaches to business performance measurement, the unidimensional construct, and the multidimensional construct. The multidimensional construct could consist of three indicators: production performance, marketing performance, and financial performance (Sohn et al., 2007), or could be measured by two main indicators: the growth indicators and profit (Wolff & Pett, 2006).

Entrepreneurial orientation has been proven to be a key determinant in improving overall business performance (Alegre & Chiva, 2013; Guo et al., 2020; Li et al., 2017). In addition, business capabilities to develop innovation are also found to have a significant effect on business performance (Lee et al., 2017; Singhal et al., 2020; Walker et al., 2015). Following the finding from previous research, we hypothesized that sustainable entrepreneurial orientation should also have a significant effect on business performance. We also believe that each construct of sustainable innovation capabilities should be able to improve the overall business performance of SMEs.





Therefore, the fourth to seventh hypotheses proposed for the current research are as follows:

- **H4:** Sustainable entrepreneurial orientation has a significant effect on business performance
- **H5:** Knowledge innovation capabilities have a significant effect on business performance
- **H6:** Product innovation capabilities have a significant effect on business performance
- **H7:** Market innovation capabilities have a significant effect on business performance

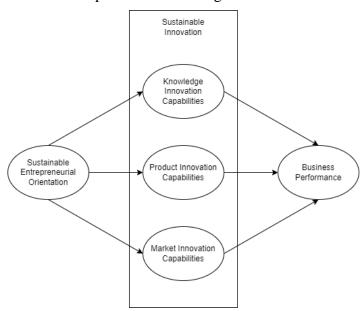


Figure 1: Proposed Conceptual Framework

3. RESEARCH METHODS

Before testing the proposed hypotheses for the current research, we develop a conceptual framework that would make it easier to identify every relationship between variables from the proposed hypotheses. First, we analyze the explanatory power of the proposed conceptual framework by utilizing the Partial Least Square (PLS) analysis. The analysis consists of two measurements, the outer model measurement, and the inner model measurement. The outer model measurement was conducted to analyze if the measurement items assigned for each variable fit. Meanwhile, the inner model measurement was conducted to analyze the strength and robustness of the model to explain the relationship between each variable. Finally, if the model is considered fit to explain the relationship, the hypotheses test could be conducted. Data that will be used for the current research collected from Small and Medium Enterprises (SMEs) in Indonesia. A total of 200 self-administered questionnaires were sent to SME managers and owners. The collected data is analyzed using the SmartPLS 3.2 software.





4. RESULTS AND DISCUSSION

A total of 187 questionnaires were returned with the complete set of data that could be used in the analysis phase of the current research, yielding a 93.5% response rate from the respondents. The outer model measurement is conducted with three analyses: convergent validity, discriminant validity, and composite reliability. Each of the items assigned to variables within the conceptual framework should have more than 0.7 outer loading scores to meet the convergent validity criteria. However, for the PLS analysis, the value could be lower but not below 0.5 as long as the Average Variance Extracted (AVE) score for the variables they assigned to is not below 0.5 (Hair Jr et al., 2021). Following this suggestion, all of the items on the proposed conceptual framework meet the convergent validity criteria. In addition, the AVE score also meets the criteria for the composite reliability analysis. The final analysis for the outer model measurement is the discriminant validity which is decided by cross-checking the outer loading score from each item toward every variable on the proposed framework. Each item should not have more outer loading scores on other variables than they were assigned to. The outer loading score cross-check is shown in Table 1.

Knowledge **Product** Sustainable Market **Business** Innovation AVE **Entrepreneurial** Innovation Innovation **Performance** Orientation Capabilities Capabilities Capabilities BP1 0.684 0.345 0.432 0.429 0.447 BP2 0.636 0.328 0.308 0.337 0.296 BP3 0.369 0.336 0.445 0.336 0.735 0.504 BP4 0.780 0.346 0.377 0.373 0.367 0.293 BP5 0.708 0.349 0.301 0.320 SEO1 0.361 0.730 0.533 0.316 0.459 SEO2 0.397 0.729 0.361 0.412 0.212 0.552 SEO3 0.339 0.769 0.443 0.430 0.373 KIC1 0.446 0.512 0.781 0.359 0.454 KIC2 0.432 0.505 0.406 0.819 0.515 0.561 KIC3 0.313 0.422 0.725 0.355 0.559 KIC4 0.274 0.352 0.661 0.382 0.487 0.293 MIC1 0.461 0.419 0.410 0.812 MIC2 0.789 0.410 0.394 0.332 0.269 0.561 MIC3 0.339 0.342 0.377 0.632 0.410 PIC1 0.433 0.385 0.5240.303 0.803 PIC2 0.418 0.275 0.741 0.568 0.317 0.454 PIC3 0.256 0.387 0.529 0.393 0.715

Table 1: Outer Model Measurement

Following the outer model measurement results shown in Table 1, the criteria of discriminant validity are met, since there are no measurement items that have more loading scores on other variables than the one they assigned to. The results conclude that every measurement item on the proposed conceptual framework could define the variable well. The data collected by using the measurement items also have a good internal consistency. The second measurement is the inner model measurement, which also consists of three analyses: coefficient determinant (R²)





analysis, predictive relevance (Q^2) analysis, and model fit analysis. Both the R^2 and the Q^2 scores for every dependent variable should be distributed between zero (0) and one (1). Meanwhile, the goodness of fit (GoF) score calculation is shown in Table 2.

 \mathbb{R}^2 **Dependent Variables** Q^2 **Knowledge Innovation Capabilities** 0.365 0.199 **Product Innovation Capabilities** 0.262 0.137 Market Innovation Capabilities 0.226 0.129 **Business Performance** 0.398 0.192 $GoF = \sqrt{\overline{R^2} \times \overline{AVE}} = 0.4144$

Table 2. Inner Model Measurement

The R^2 scores for every dependent variable suggested that the independent variable within the proposed model has a determinant effect on each dependent variable. In addition, the Q^2 scores interpreted that every independent variable has a predictive power toward their dependent variable. Finally, the GoF calculation results showed that the proposed conceptual framework has a good fit to explain the relationship between variables within it. The results of the inner model measurement showed that the proposed conceptual framework met the strength and robustness criteria to explain the relationship between each variable, thus the test for the proposed hypotheses could be conducted. The result of the hypotheses test for the current research is shown in Table 3.

Hypotheses	Path	t-statistics	t-table	Decision
H1	SEO → KIC	13.916	1.972	Accepted
H2	SEO → PIC	8.376	1.972	Accepted
Н3	SEO → MIC	8.086	1.972	Accepted
H4	SEO → BP	2.287	1.972	Accepted
H5	KIC → BP	1.033	1.972	Declined
Н6	PIC → BP	3.641	1.972	Accepted
H7	MIC → BP	2.462	1.972	Accepted

Table 3: Hypotheses Test Results

Following the results of the hypotheses test, six out of seven proposed hypotheses are accepted. The analyzed data from the sample of Indonesian SMEs provide enough evidence that sustainable entrepreneurial orientation is a strong determinant business' capabilities to develop sustainable innovation. The finding supported previous research that suggested there is a strong relationship between entrepreneurial orientation and business capabilities in developing innovation, especially innovation that is related to knowledge innovation, product innovation, and market innovation (Chen, 2016; Melay & Kraus, 2012). The results also supported the idea that businesses' entrepreneurial orientation could be adjusted to address sustainability issues and still provide benefits to the company in form of improvement in their capabilities to build innovation.

Sustainable entrepreneurial orientation is also found to be an important determinant of business performance, according to the result of the fourth hypothesis test. The results showed there is







enough supporting evidence from the Indonesian SMEs that their business sustainable entrepreneurial orientation could improve their marketing, production, and financial performance, while also supporting the growth and sustainability of profit of their business (Alegre & Chiva, 2013; Guo et al., 2020; Li et al., 2017). This finding should encourage more business managers and owners to develop entrepreneurial attitudes in their businesses, so they could become more proactive, innovative, and also willing to take risks, whenever there are business opportunities or challenges. However, the development of entrepreneurial attitudes should also be accompanied by a sustainability approach, so that in addition to generating profit, they also provide benefits to the society and environment. Thus, achieving a sustainable entrepreneurial orientation and practice. Among the construct of sustainable innovation, only knowledge innovation capability that is not supported by the analyzed data is considered as the determinant of Indonesian SMEs performance, thus the fifth hypothesis is declined. According to the data collected from the sample population and the hypothesis test result, we interpret that Indonesian SMEs currently have not yet utilized their knowledge innovation capabilities to help them improve their overall business performance. Following the results from previous research, we highly suggested Indonesian SMEs owners and manager's start utilizing these capabilities since it is one of the key competitive advantages that could help improve their overall business performance (Lee et al., 2017; Singhal et al., 2020; Walker et al., 2015). The two final hypotheses from the current research are accepted. Therefore we could conclude there is enough evidence from the collected data that the product innovation capabilities and market innovation capabilities, could help Indonesian SMEs to improve their overall business performance. Indonesian SMEs could develop innovation toward a new product or business process and also find a way to improve the number of sales of their product, thus these capabilities could be considered as a key determinant toward their excellent business performance. The findings should encourage more SMEs to start building on their capabilities to create innovations that would significantly improve their business performance and sustainability in the market and industry.

5. CONCLUSION

Sustainable entrepreneurial orientation is a derived concept of entrepreneurial orientation construct, which examine and measure a business entrepreneurial attitude. A business entrepreneurial attitude is measured by the business proactiveness, innovativeness, and willingness to take a risk toward opportunities and challenges. The current challenge for businesses to take proactive or innovative strategies is they also have to consider the social and environmental benefits, in addition to business profit so they could meet the sustainable development issues according to the triple bottom line concept. The current research investigates the role of sustainable entrepreneurial orientation among Indonesian SMEs toward their business performance, by developing a conceptual framework. To better explain the relationship, the framework also includes the sustainable innovation construct to examine the effect of sustainable entrepreneurial orientation on business capabilities to develop innovation as a competitive advantage, which is also considered a key determinant of business performance.





According to the Partial Least Square (PLS) analysis to examine the suitability of the proposed conceptual framework to explain the relationship between variables, the model could fit to explain the determination power of sustainable entrepreneurial orientation toward sustainable innovation and business performance. The results strongly support previous research and also could be used as a reference for future studies that would examine the relationship between the construct within our conceptual framework. In addition, the hypotheses test results showed that sustainable entrepreneurial orientation has a significant effect on improving businesses' innovation capabilities and performance. The results should encourage other SME owners and managers to improve their attitude to be more proactive, innovative, and willing to take risks given the opportunities and challenges in the market or industry. However, they also have to consider the issue of sustainability, thus proactive and innovative decisions they will make not only aimed at the profit of the business, but also the benefits for society and the environment.

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