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Entrepreneurial Orientation and SMEs Business Performance: The Role of Technology and Competitive Intensity as Mediating Variable

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Abstract. *The purpose of this study is to analyze the influence of entrepreneurial orientation including innovation, proactiveness and courage in taking risks in Pekanbaru City, Riau Province Indonesia. SMEs contributes largely to Indonesia's economy. However, these enterprises often struggle with limited resources leading to weaker performance. The research problem centers on identifying factors that can enhance the BP, mainly through Technology and CI. This study uses quantitative and descriptive research methods using SEM - AMOS 26. Data is collected using online survey. The research sample is a portion of the leaders or owners of SMEs in the songket business commodity using a non-probability delivery method, namely a purposive sampling. Sample of the study was 240 respondents. Conceptually, this study found interesting relationship between innovation, proactive, risk taking, technology, competitive intensity and business perfomance then called as entrepreneurial orientation. The empirical results reveal that technology and competitive intensity significantly mediate the relationship between EO and SME performance. Therefore, with new findings, the study extends the literature on serial mediation in the EO-performance of SMEs. This study has important implications for SMEs that are seeking to gain a competitive advantage. The findings offer an additional insight to managers on entrepreneurial orientation strategy to increase business performance.*

Keywords: *Business performance, entrepreneurial orientation, innovation, SMEs*

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Introduction

The performance of micro, small and medium scale enterprises (SMEs), generally has a significant contribution to the Indonesian economy at the national and regional levels (Susanto & Wardi, 2019). The role of SMEs in the national economy can be seen in several macroeconomic indicators such as gross domestic product (GDP) growth, job creation, growth and new income for business creativity (Nofirda & Ikram, 2023; Sopha et al., 2021; Wardi et al., 2018). Referring to the report of the Ministry of Cooperatives and SMEs, the number of SMEs has reached 20.76 million units in 2022. Although, SMEs are dominant in the Indonesian economy statistically, but have not described the overall performance of SMEs.

Based on studies that have been conducted by researchers on the condition of songket industry SMEs in Pekanbaru and in order to improve business performance, the urgency of this research is how the role of entrepreneurial orientation and technology-supported and market intensity is very important to be implemented in SMEs in Pekanbaru.

One of the main reasons is the entrepreneurial and technological orientation component that must be mastered by SME players in order to maximize and improve SME business performance in Pekanbaru. Empirically, the linkage between entrepreneurial orientation and business size has influenced more research on entrepreneurial orientation and SMEs (Wales et al., 2021; Sok et al., 2017; Tang, 2012). This leads researchers to investigate and understand entrepreneurial orientation in the context of SMEs (Nofirda & Ikram, 2023; Eshima & A3nderson, 2017).

Moreover, small and must have a competitive advantage. Many studies have explained the competitive advantages that businesses should to possess (Nuryakin et al., 2017). The competitive advantage can be having a strong market share compared to competitors. The competitive advantage can be achieved also through innovative products or services, price, cost, image, or transportation (Morgan 2012). A company's financial and market performance will be impacted if it has a competitive advantage (Nuryakin and Retnawati 2016).

This phenomenon of SME performance generally applies equally in all corners of Indonesia, including one of them in Pekanbaru - Riau. Although SMEs in Pekanbaru City have experienced rapid development in recent years, there are several classic problems or obstacles faced by SME actors, such as limited entrepreneurial orientation capabilities and SME performance as discussed by (Lestari & Susanto, 2021) in previous studies. Based on the results of preliminary observations specifically on the songket industry as a leading sector product for SMEs in Pekanbaru City, it is considered low and slow business development in terms of innovation, proactivity and courage to take risks. This is inseparable from the ability to innovate products in accordance with market desires, technological development capabilities and limitations in managing promotions through digital technology such as This makes the problems of songket industry SMEs quite complex.

With the intensity of business competition is very high, both the competition of local products within the region and those that come outside the region including imports, this has an impact on the work of SMEs in Pekanbaru City. Based on the problems faced by SME players in Pekanbaru City, a strategy is needed that can be a solution to be able to improve SME business performance and grow and develop in increasingly high competition.

The role of SMEs in the economy is reflected through their contribution to increasing gross domestic product (GDP), creating jobs, increasing community income, and establishing new businesses (Kotey and Meredith, 1997; Dar and Mishra, 2020; Omar et al., 2020; Sopha et al., 2021). However, in Pekanbaru, especially in the songket industry sector, SMEs face significant challenges, such

as pressure from technological developments and high levels of competition (Zhu & Matsuno, 2016). Based on the results of initial research, most SME products in the songket industry still rely on labor-intensive and basic technologies.

In addition, SME performance faces a lot of pressure from technology and the intensity of competition (Zhu & Matsuno, 2016). The majority of SME products in the songket industry sector rely on labor-intensive and basic technology, according to the findings of preliminary research. SME customers in other nations and regions, meanwhile, have relied on cutting-edge technology to manufacture high-quality goods through contemporary retail marketing networks, like supermarkets or shopping malls, in both domestic and foreign markets. The sector's actuality demonstrates that it is challenging to locate high-quality local products in Pekanbaru's many modern retail establishments. The growth of SME performance in the songket sector is believed to have been impacted by high market turbulence and technological pressures.

This study focuses on assessing and mapping the components of entrepreneurial orientation in SMEs in the songket industry in Pekanbaru. First, this study was to identify what the main criteria of the three components of entrepreneurial orientation are (innovation, risk-taking courage and proactivity). Rapid technological changes must be responded by SME players to find alternatives to improve business performance. Technology can play an important role in this. In this case, technology has a close relationship with the improvement of production processes. Previous research has revealed that lack of outdated equipment and technology is one of the obstacles to SME development (Nofirda & Kinasih, 2021; Swierczek & Ha, 2003). Based on the description above, an in-depth study of entrepreneurial orientation actions includes three dimensions of entrepreneurial orientation (innovation, proactivity, and risky courage) as well as the ability to manage and improve SME business performance in Pekanbaru City.

Literature Review

Entrepreneurial orientation

The concept of entrepreneurial orientation has attracted the attention of researchers over the past decade because it is considered an important tool to achieve innovation and sustainable competitive advantage (Nofirda & Ikram, 2023; Covin et al., 2006). EO is primarily composed of three key elements: innovation, risk-taking, and proactiveness. This study adopts the concept and measurement of entrepreneurial orientation proposed by Miller, 1983; Covin and Slevin, 1989; Kreiser et al., 2002, because it is relevant to the context of the research to be conducted in SMEs.

In its development, three dimensions of EO from Miller (1983) were added with two new dimensions from Covin and Slevin (1989) Lumpkin and Dess (1996) namely autonomy and competitive aggressiveness. The definition of autonomy is the ability to make decisions and continue with independent action without the constraints of the organisation.

Thus, it can be said that entrepreneurially oriented SMEs are SMEs that are willing to innovate, are proactive in seeking new opportunities, and have the courage to take business risks.

Entrepreneurial orientation is important to apply to a business. The performance of a business that applies Entrepreneur Orientation will be better than a business that does not apply it. A business actor must be able to innovate. Innovation is something new that cannot yet be found in general. Some studies have found that risk-taking is a risk-taking predisposition that can be defined as a personality trait that involves a willingness to pursue decisions or actions that involve uncertainty regarding the success or failure of outcomes. Risk if not managed properly can cause losses to the business (Kinasih & Nofirda, 2022). Companies with an entrepreneurial orientation are defined as companies engaged in technological innovation, risk-taking work, and proactively pursuing opportunities.

Innovation is an attitude that reflects the tendency to provide support and engagement in generating new ideas, creative processes, and changes in existing practices and technologies (Lumpkin & Dess, 1996). The scope of innovation resources concerns the support of new enterprise ideas, experiments, and creative processes in creating new products or new technologies. Business owners must have a tendency to create new ideas and dare to experiment with new products, services, techniques, or technologies.

Proactive means the tendency of a person or company to be active in seeking opportunities, showing initiative, taking action, and trying to make change happen. An individual who is looking for opportunities will show a pattern of behavior that includes efforts to examine a problem, superior thinking and determining path strategies and have the ability to direct targets. Miller & Friesen (1982) argues that an opportunity-seeking attitude means companies are aggressive in pursuing priorities and goals to exceed their competitors. Research conducted Lumpkin & Dess (1996) considering these opportunities attitudes is carried out to anticipate future market needs and demands and to create business profits in advance.

Business Performance

According to Colquitt & Wesson (2014) performance is the value of a combination of behaviors that contribute positively or negatively to the achievement of company goals. Performance is the level of success or results of a person and overall over a specified period in carrying out all tasks and work with various mutually agreed possibilities, as well as standards of work results.

In general, researchers agree that entrepreneurial orientation has three dimensions: innovation, proactiveness and risk-taking courage that can affect company performance (Rauch et al., 2009; Clovin & Slevin, 1989; Miller, 1983). Several previous studies have shown the same thing, that entrepreneurship-oriented companies perform better than not adopting an entrepreneurial orientation (Rauch et al., 2009; Li et al., 2008; Wiklund & Shepherd, 2003; Clovin & Slevin, 1989). Meanwhile, the findings that show the weak relationship between entrepreneurial orientation and company performance are (Dimitratos et al., 2004). In the context of SMEs, entrepreneurial orientation shows a strong relationship on SME performance (Li et al., 2008). This is because SMEs have the ability to respond quickly to business threats and opportunities. This ability is the basis for SMEs to continue to survive and improve their performance. In addition, SMEs are also very creative in finding existing market opportunities so that SMEs can survive in various conditions.

Confirmation Expectation Theory

The concept of confirmation expectation theory explains that the consumer's intention to buy back a product or service is significantly influenced by the experience when using the product or service. If consumers are satisfied with the experience, then consumers will have a higher tendency to make a repurchase. This is in accordance with the concept of Expectation-Confirmation Model (ECM) where this concept explains the intention of sustainable use of information technology (IT) after adoption of use to support the improvement of MSME business performance (Bhattacherjee, 2001).

Research conducted by Susanto et al., (2023) concluded that entrepreneurial orientation has a significant effect on SME business performance. Studies conducted Susanto et al., (2023) concluded that entrepreneurial orientation affects business performance. Studies Susanto et al., (2023) also conclude that entrepreneurial orientation affects business performance. The study Sulistyo (2016) concluded that entrepreneurial orientation is very important for the Troso weaving industry in improving performance and competitive advantage.

Research conducted Susanto et al., (2023) and Sok et al., (2004) on improving SME

performance concluded that there is a significant influence between entrepreneurial orientation on SME business performance. Research conducted Susanto et al., (2023) concluded that business performance affects orientation development.

H1a: Innovation affects competitive intensity
H1b: Proactive affects competitive intensity
H1c: Risk taking affects competitive intensity
H2a: Innovation affects technology
H2b: Proactive affects technology
H2c: Risk taking affects technology
H3a: Innovation affects business performance
H3b: Proactive affects business performance
H3c: Risk taking affects business performance
H4a: Competitive intensity affects business performance
H4b: Technology affects business performance
H5a: Innovation affects business performance with the competitive as a mediator
H5b: Proactive affects business performance with the competitive as a mediator
H5c: Risk taking affects business performance with the competitive as a mediator

Business Competitive Enviroment

Most of the aspects affecting the long-term performance of SMEs is the competitive business environment. When the competitive business environment is difficult to predict or full of uncertainty, the performance of SMEs will be determined by how capable SME owners are in responding to changes in the environment. According to Kumar, Jones, Venkatesan, and Leone (2011) explain that the competitive business environment includes technology and the intensity of competition and technology will determine the performance of SMEs in the long term. Therefore, SMEs that can survive in a turbulent business environment need the ability to adapt to competitive instensity and rapid technological.

H6a: H5a: Innovation affects business performance with technology as a mediator
H6b: Proactive affects business performance with technology as a mediator
H6c: Risk taking affects business performance with technology as a mediator

Research Methodology

This research analyzes the role of technology and competitive intensity in mediating the relationship between entrepreneurial orientation and business performance with the research object being SMEs in Pekanbaru City, Riau Province, Indonesia. This research is aimed at SMEs in Pekanbaru City. This research will use a quantitative approach with a questionnaire survey method. The questionnaire was addressed to SMEs in Pekanbaru City. In this research, three analysis methods were carried out. First, all variables are searched for in existing literature. Some items were modified to fit the specific research context.

All constructs were measured through responses on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree); This scale is created in the questionnaire to measure respondents responses" (Hair et al., 2019). Second, the suitability ofthe questionnaire (measuring instrument) with the measurement (reliability test) and the accuracy of the measurement instrument is tested with what is being measured (validity test). Third, for the needs of implementing the daya processing process, this research uses data analysis technique using Structure Equation Modelling (SEM) – AMOS. software from the SEM AMOS statistical tool. Finally, descriptive analysis was carried out to provide an overview ofthe increase in weight ofthe question items.
The population in this research is SMEs in Pekanbaru City. Sampling was carried out using purposive sampling. Determination ofthe minimum size of SEM in research is based on (Hair et al., 2019) with the formula: (total indicators + total variables) x (5 to 10 times). The number ofquestionnaire items in this research was chosen to be multiplied by 10. So, the number ofquestionnaires for this research is 24x10, namely 240 respondents.

Distributing questionnaires directly to business actors/UMKM owner songket business. Statements from all the variables Studied are include in this research questionnaire and are based on indicators that refer to previous research.

All items in the questionnaire had good reliability with a Cronbach's alpha score above 0.60. This study used Structural Equation Modeling (SEM) to test the measurement model and structural model. To test the hypotheses in the model, the questionnaire consisted of two parts: the first part collected demographic information of respondents, while the second part measured the variables in the causal model. The constructs in this study were developed using measurement scales adopted from previous studies, and all constructs were measured using a five-point Likert scale (strongly disagree – strongly agree).

Analysis of new model development using structural equation modeling (SEM) equations with AMOS 26 program software. SEM is a hybrid technique that includes confirmatory aspects of factor analysis, path analysis and regression. The increase in the use of SEM for data analysis is due to two main advantages, namely that SEM is able to test complex research models simultaneously and is able to analyze variables that cannot be measured directly and calculate measurement errors (Lumpkin & Dess, 1996). This study used primary data collection techniques carried out by distributing questionnaires. In addition, secondary data was also obtained from the Cooperative and SME office to find out data on SME actors in the songket industry in Pekanbaru. Questionnaires were given to owners / actors of SMEs in the songket industry in the form of implementation of knowledge management, technology and collaboration that has been carried out. The questionnaire was also addressed to the Pekanbaru Cooperative and SME Office. Secondary data needs are obtained from the Biro Pusat Statistik (BPS) of the Provincial Government. The secondary data taken is in the form of the number of SMEs in the songket industry.

Entrepreneurial orientation can be measured by indicators: innovation, courage in taking risks and proactive Susanto et al., (2023). Innovation is measured by indicators: product innovation, process innovation, research and development and product launching (Martinez et al., 2017). Courage in taking risks is measured by indicators: courage to face new things, courage to face difficult situations (Wenhong & Liuying, 2010). Proactive is measured by indicators: ability to seize opportunities, courage to initiate change and desire to create favorable conditions (Crant, 2000). Business performance consists of successful new product launches, waste reduction, increased market opportunities, improved product innovation, improved work methods and processes and quality improvement Terziovski (2010) measured using the Likert scale.

Results and Discussion

Goodness of fit test allow researcher to determine whether the sample follows a normal distribution. Using three to four fit models is sufficient to show that this research model is acceptable, at least each of the absolute fit, incremental fit, and parsimonious fit are fulfilled (Hair et al., 2011). In addition, the model Goodness of Fit is evaluated by certain indicators as mentioned in Table 1.

Table 1.
Goodness of Fit

Criteria	Threshold	Result	Rule of thumb
Chi-square	Small	238,116	Good
RMSEA	<0.08	0,024	Good
CFI	>0.95	0,991	Good
TLI	>0.95	0,988	Good
CMIN/ df	<5.00	1,197	Good

This model's CMIN/df score is 1,197 (<5.00), which is good; its RMSEA score is 0,024 (<0.08), which is also good; and its CFI and TLI scores are 0,991 and 0,988 (>0.90), suggesting excellent GOF. Overall, the ratings indicate that the Goodness of Fit model is satisfactory (Hair et al., 2011). According to Table 2, each indication of the research variable has a loading factor value greater than 0.5. based on how the loading factors turn out, it may be possible to say that the construct has good convergent validity. All of the factor loading values for each statement item exceed the standard, so none of the statement items are taken out of the model. As a result, the measurement model can be testes further.

Table 2 shows that the AVE value for all constructs is more than 0.5. The AVE value shows the convergent validity value. Its aim is to determine the variance of a construct component based on the indications. The AVE value should be more than 0.5. As a result, the convergent validity measurement model used in this study is likely to be accurate. Table 2 indicates that Cronbach's Alpha value. Cronbach's Alpha value between 0.70 and 0.90 are usually interpreted as meaning that the study is very satisfactory (Hair et al., 2011). Also, the total value of reliability is greater than 0.6. Because of these results, each study variable meets the assessment requirements, which means that the whole variable is considered reliable.

Table 2.

Measurement Model Indicators

Constructs	Items	Loadings	Cronbach's Alpha	CR	AVE
Innovation	X1.1	0.660	0.783	0.787	0.582
	X1.2	0.620			
	X1.3	0.780			
	X1.4	0.707			
Proactive	X2.1	0.832	0.805	0.843	0.584
	X2.2	0.842			
	X2.3	0.846			
	X2.4	0.569			
Risk Taking	X3.1	0.609	0.807	0.782	0.574
	X3.2	0.728			
	X3.3	0.669			
	X3.4	0.741			
Business Performance	Y1.1	0.593	0.827	0.851	0.594
	Y1.2	0.765			
	Y1.3	0.862			
	Y1.4	0.835			
Competitive Intensity	Z1.1	0.802	0.809	0.893	0.677
	Z1.2	0.791			
	Z1.3	0.862			
	Z1.4	0.835			
Technology	Z2.1	0.583	0.822	0.843	0.578
	Z2.2	0.829			
	Z2.3	0.809			
	Z2.4	0.796			

The reliability and convergent validity analysis results further strengthen the robustness of the constructs used in this study. As exhibited in table 2, all items met the minimum requirement for factor loadings, with each loading factor outpaced the threshold of 0.60. It displayed that the items strongly correlate with their respective constructs, affirming their validity. Additionally, the AVE values for all constructs are above 0.5, confirming that the constructs have attained convergent validity, meaning they are well-represented by their items.

The reliability of the constructs is also wellsupported by the Cronbach's alpha and CR values. For the EO construct, innovation, proactive and risk taking Cronbach's alpha is 0783, 0,805 and 0,807. The business performance construct shows a Cronbach's alpha of 0.827, CR of 0.851, and an AVE of 0.594. The competitive intensity construct has a Cronbach's alpha of 0.809, CR of 0.851, and an AVE of 0.594. The technology construct has a Cronbach's alpha of 0.822, CR of 0.843, and an AVE of 0.578. All these values exceed the upholder threshold of 0.7 for Cronbach's alpha and CR, indicating that the constructs are reliable and consistent in measuring the intended dimensions. Overall, the results confirm that the constructs employed in this research are both valid and reliable, providing enterprenurial orientation for the subsequent analysis.

This reinforces the credibility of the findings and supports the robustness of the model in assessing the relationships between EO dimensions, business performance, competitive intensity and technology.

Competitive intensity are not shown to be favorably influenced by innovation as a result, H1a is not supported. Competitive intensity are shown to be significant influenced by proactive as a result, H1b is supported. competitive intensity are shown influenced by risk taking as a result H1c supported. As predicted, the component of innovation has a positive influence on dependent variable of technology thus, H2a is proven. Technology are shown to be favorably influenced by proactive, as a result, H2b which proposes a favorable effect of proactive on technology is confirmed. Risk taking and technology had a comparable positive significant correlation as a result, H2c is supported. Business performance are shown to be significant influenced by innovation as a result, H3a is supported. Business performance are not shown to be favorably influenced by proactive, as a result H3b is not supported. Business performance are shown to be significant influences by risk taking as a result, H3c is supported. Business performance are shown favorably influenced by competitive intensity as a result H4a is supported. Business performance and technology had a comparable positive significant correlation as a result H4b is supported.

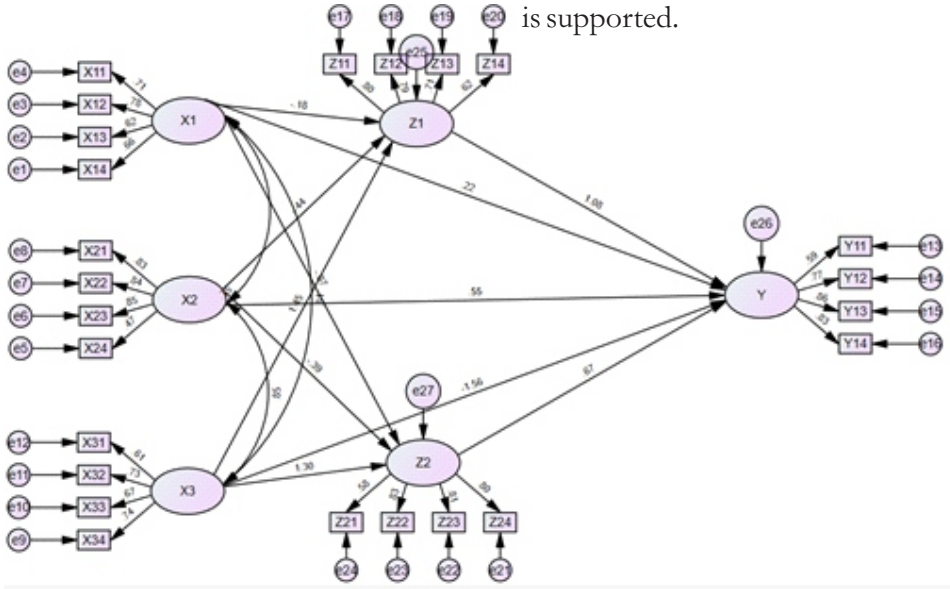

Figure 1.
Structural Equation Model

Table.3
Structural Model Result

Hypotheses	Path Effect	Critical Ratio	Std. Regression Weight	P value	Decision
H1a	Competitive Intensity ← Innovation	1.260	0.269	0.208	Rejected
H1b	Competitive Intensity ← Proactive	2.841	0.215	0.005	Accepted
H1c	Competitive Intensity ← Risk Taking	8.582	0.538	***	Accepted
H2a	Technology ← Innovation	3.493	0.228	***	Accepted
H2b	Technology ← Proactive	3.763	0.205	***	Accepted
H2c	Technology ← Risk Taking	6.013	0.474	***	Accepted
H3a	Business Performance ← Innovation	3.105	0.520	0.002	Accepted
H3b	Business Performance ← Proactive	0.736	0.369	0.462	Rejected
H3c	Business Performance ← Risk Taking	2.106	0.478	0.035	Accepted
H4a	Business Performance ← Competitive Intensity	2.056	0.362	0.04	Accepted
H4b	Business Performance ← Technology	2.836	0.276	0.005	Accepted

Previous studies indicate firms with entrepreneurship orientation show better perfomance such as financial perfomance (Rauch et al., 2009; Slevin & Terjesen, 2011). In addition, hypothesis testing was carried out by looking at the critical ratio (CR) value, greater than 1.96 at a significant level of p-value < 0.05 and 2.58 at significant level of p-value < 0.01. It can be seen from Table 3 that the critical ratio of innovation on competitive intensity is 1.260, p-value 0.208, **H1a not supported.** The value of proactive on competitive intensity is 2.841, p-value 0.005, **H1b supported**. The critical ratio of risk taking is 8.582, p-value <0.05. The value of innovation on technology is 3.493, p-value <0.05, which **H1b supported**. The critical ratio of proactive on technology is 3.763, p-value <0.05, which is supported with our **hyphoteses H2b**. In fact, entrepreneurial proclivity is an important consideration for managers in improving their business perfomance (Pehrsson, 2016).

The value of risk taking on technology is 6.013, p-value <0.05, which is **supported H2c**. The critical ratio of innovation on business performance is 3.105, p-value 0.002, which in line with our **hypotheses H3a**. The finding in line with Terziovski (2010), who finds that innovation is a key driver of SME perfomance. The value of proactive on business performance is 0.736, p-value 0.462, **H3b not supported.** The critical ration of risk taking on business performance is 2.106, p-value 0.035, **H3c supported**. Moreover, the SME's perfomance is also affected by their risk taking. Managers who dare to take risks have a chance to get better results. According Kraiczy, Hack and Kellermannns (2014) suggest the SME perfomance is largerly determined by risk taking, especially in uncertain situations. The value of competitive intensity on business performance 2.056, p-value 0.040, **H4a supported** and the critical ratio of technology on business performance is 2.836, p-value 0.005, which in line with our **hyphoteses H4b**.

Table 4.
Mediating Effect Testing Result (Sobel Test)

Hypotheses	Path Effect	T-Statistic	Std. Error	P-value	Conclusion
H5a	Innovation → Competitive Intensity → Business perfomance	1.077	0.026	0.281	Rejected
H5b	Proactive → Competitive Intensity → Business Perfomance	1.665	0.036	0.096	Rejected
H5c	Risk taking → Competitive Intensity→ Business perfomance	2.000	0.106	0.046	Accepted
H6a	Innovation → Business perfomance	2.203	0.038	0.028	Accepted
H6b	Proactive → Technology→ Business perfomance	2.266	0.040	0.023	Accepted
H6c	Risk taking → Technology → Business perfomance	2.574	0.054	0.010	Accepted

In addition, mediating effect was carried out by looking at the t-statistic value greater than 1.960 at a significant level of p-value < 0.05, **H5a not supported.** The results of the Sobel test showed a t-statistic value of 1.077 < 1.960 and a p-value of 0.281 > 0.05, which means that there is no influence of competitive intensity as a mediation between innovation and business performance.

The t-statistic value is 1.665 < 1.960 and the p-value is 0.096 > 0.05 which means that there is no effect of competition intensity as a mediation between being proactive and business performance, which is **H5b not supported.** The t-statistic value is 2,000 > 1,960 and the p-value is 0.046 so that there is an influence on the intensity of competition as a mediation between the courage to take risks on business performance, which in line with our hyphoteses **H5c supported.** The Sobel test results show a t-statistic value of 2,203 > 1,960 and a p-value of 0.028 < 0.05 so that there is an influence of technology as a mediation between innovation and business performance, which **H6a supported.** For instance, Tsai and Yang (2014) studied 452 manufacturing firms in taiwan and found the link between innovativeness and business perfomance was stronger when they had a higher market and technological turbulence. The t-statistic value is 2,266 > 1,960 and the p-value is 0.023 <0.05 so that there is an influence of technology as a mediation between being proactive and business performance, which **H6b supported**. It can be seen from the ability of SMEs in seeking and exploiting existing business opportunities.

According to Brouthers, Nakos and Dimitratos (2015), proactiveness is one of the most important dimensions in entrepreneurial proclivity. It determines the perfomance of SMEs in many respects. Therefore, SMEs have to boost their ability in proactively capturing business opportunities (both local and international market).

The t-statistic value is 2.574 > 1.960 and the p-value is 0.010 <0.05 so that there is an influence of technology as a mediation between the courage to take risks on business performance, which in line with our **hypotheses H6c**. Moreover, the SMEs' performance is also affected by their risk-taking. Managers who dare to take risks have a chance to get better results.

Conclusion

The importance of dimensions entrepreneurial orientation (innovation, proactive, risk taking) on business performance through technology and competitive intensity as mediating was examined in this study. This study revisited the link between EO and SME performance, considering the mediating role of technology and competitive intensity. The main findings are as follows:

This study revisited the link between EO and SME performance, considering the mediating role of technology and competitive intensity. The main findings are as follows:

1) Innovation has a positive effect on SME business performance;
2) Risk taking has a positive effect on SME business performance;
3) Proactive has a positive effect on SME business performance;
4) Technology mediates the relationship between Entrepreneurial orientation and SME business performance;
5) Competitive intensity mediates the relationship between Entrepreneurial orientation and SME business performance;

These provide opportunities to gain new insights and broaden our understanding of entrepreneurial theory and practice by incorporating more contextualized considerations (Anderson and Ronteau, 2017). More specifically, this study built a theory-based mediation model to explain the link between EO and SME business performance. Explaining mediation- effects, our study provides insight into EO-performance relationships (Wales et al., 2021).

Additionally, the current study extends the study of Dirgiatmo et al. (2019) and Wiwoho et al. (2020) with empirical evidence of the mediating role of entrepreneurial orientation on SMEs in Indonesia. Furthermore, the current study extends the literature by offering new evidence on serial mediation between EO-SME business performance relationships, especially the studies of Dirgiatmo et al. (2019) and Wiwoho et al. (2020). The current study offers some practical implications for SMEs. First, SMEs should improve their entrepreneurial orientation, as well as their technology skills, to increase sales, profitability and business sustainability. More importantly, the usage of social media can help in leveraging real-time market knowledge.

Thus, through proactive EO, they should assess information obtained from technology platforms such as from social media and take appropriate action, allowing them to build customer-based and connect with customers in a more efficient manner, thereby improving business and financial performance. Second, small business people should be encouraged to come up with business ideas to resolve the problems in the firm and promote business goals. Third, those who lack skills can enroll in short courses in technology. In this type of situation, social media is likely to play the role of connecting customers and getting orders.

This research provides critical wisdoms into the relationships between EO, Business performance, competitive intensity and technology, as well as business performance in the songket sector in Pekanbaru, Riau Province, Indonesia.

The findings confirm that EO is important for enhancing SMEs performance in Pekanbaru, Riau Province Indonesia through technology and competitive intensity.

Future research should include other factors such as work-life balance, the owner's supervisory role and policy support that may aid in improving the business performance of SMEs for them to survive in the highly competitive and rapidly changing business paradigm. Moreover, the future study may investigate other niche categories of SMEs to give more in-depth insight into the specific factors, such as cost factors, that may be crucial for each SMEs category and their sustainability. The information can be collected from managers or owners who represent SMEs. Furthermore, future researchers may conduct interviews with SMEs. Moreover, the findings of this study are based on cross-sectional data, as the survey was conducted at a single point in time. Therefore, strong conclusions regarding the true dynamic effects of the model cannot be drawn in the same manner as if this study were conducted using a longitudinal design. Hence, it will be interesting to test the mode considering longitudinal design. Additionally, our study focused on the Indonesian market, so future studies may focus on other emerging markets, which will facilitate comparing and contrasting SME behaviour in emerging markets.

Declarations

Author contribution

All authors contributed equally as the main contributors of this paper. All authors read and approved the final paper.

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Competing interest

The authors declare that they have no conflicts of interest to report regarding the present study

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