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### Innovativeness, Risk-Taking, Proactiveness, and Firm Performance with Learning Organizations as Mediating Variables.

Kadarusman<sup>1)</sup>, Siti Rosyafah<sup>2)</sup>

<sup>1)</sup> STIE Malangkeucwara Malang, <sup>2)</sup> Universitas Bhayangkara Surabaya  
email: [kadarusman@stie-mce.ac.id](mailto:kadarusman@stie-mce.ac.id)



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#### ABSTRAK

Penelitian ini bertujuan untuk menguji peran mediasi variabel *learning organization* terhadap pengaruh antara innovativeness, proactiveness dan risk-taking terhadap kinerja perusahaan pada UMKM Sub Bidang Fashion di Jawa Timur. Penelitian ini menggunakan pendekatan kuantitatif untuk menguji hipotesis penelitian dan pengolahan data menggunakan WarpPls 6.0. Kuesioner dibagikan pada pimpinan perusahaan sebagai representasi pengambil keputusan, dan kuesioner yang dianalisis pada penelitian ini sebanyak 140 kuesioner. Hasil penelitian menunjukkan bahwa innovativeness, risk taking, proactiveness berpengaruh langsung terhadap learning organization dan firm performance. Learning organization terbukti sebagai mediasi penuh pengaruh antara innovativeness, proactiveness, risk-taking terhadap firm performance. Peningkatan dimensi entrepreneurial orientation diharapkan dapat meningkatkan kinerja perusahaan. Peningkatan dimensi entrepreneurial orientation juga dapat menjadikan organisasi selalu belajar belajar untuk beradaptasi terhadap lingkungan yang selalu berubah.

**Kata kunci:** *Innovation, Proactive, Risk-Taking, Learning, Performance*

#### ABSTRACT

*The purpose of this study is to examine the mediating role of learning organization variable on the effect of innovation, pro-activeness and risk taking on the performance of Fashion Sub-sector SMEs in East Java. A quantitative approach is used to test the research hypotheses. Data are collected by distributing questionnaires to the company leaders as the representatives of decision makers. As many as 140 questionnaires were analyzed in the study using WarpPls 6.0. The results show that innovation, risk taking, being proactive have direct effects on organizational learning and company performance. Learning organization is proven to be a full mediation of influence between innovation, proactive, risks taking on company performance. Increasing the dimensions of entrepreneurial orientation is expected to improve company performance. The entrepreneurial orientation dimension can also make organization to improve continuously to adapt to an ever-changing environment.*

**Keyword:** *Innovation, Proactive, Risk-Taking, Learning, Performance*

#### INTRODUCTION

The Resources Based View (RBV) theory expects that the company's success is largely determined by intangible resources, including human resources, strategies, expertise and capabilities (Bakar & Ahmad, 2010). Resources must be exploited in combination with business processes in order to have a competitive advantage. The superior performing companies are those having valuable, rare, inimitable and non-substitutable (VRIN) resources (Barney, 1991). The resources combination strategy is expected to improve company performance. A turbulent environment demands an adaptive company's strategy by learning to create innovative ideas that are not easily imitated by competitors to achieve superior performance (Teece, 2010).

Organizations must be able to optimize resources through new strategies based on the availability of new market opportunities (Grande, Madsen, & Borch, 2011). The implementation of the company's strategy is reflected in the strategic orientation. The company's strategic orientation including market orientation, learning orientation, technology orientation and entrepreneurial orientation, which are parts of company resources to achieve the company's goals (Liu, Hou, Yang, & Ding, 2011). Entrepreneurial orientation (EO) is one of the resources owned by the company. The EO is a strategic orientation that encourages companies to be proactive towards opportunities that arise in the market (pro-activeness), tolerant of risk (risk taking), and can accept innovation (innovativeness) to achieve organizational goals (Covin, Jeffrey & Slevin, Dennis, 1989; Gregory G. Dess & Lumpkin, 2005).

The pro-activeness dimension related to the aggressive attitude of a company, being the first to enter the market and eliminating unprofitable activities (Covin & Lumpkin, 2011). As the first movers in the market, companies will get the opportunity to be known earlier, dominate distribution channels and thus making consumers incur high switching costs to other products (Wiklund & Shepherd, 2005). Proactivity can be used to identify whether a company is a leader or a follower. Innovativeness reflects the company's tendency to develop new ideas, experiments and creations to produce new products, services or technological processes (Fairoz, Hirobumi, & Tanaka, 2014; Lumpkin & Dess, 1996), that are used as the means to enter new markets. The ability to innovate is expected to seize opportunities and avoid threats in the future, anticipate market changes and tolerate risks to improve company performance. Risk taking is indicated by the company's commitment to allocate large and risky resources, as well as the willingness to carry out risky activities (Fairoz et al., 2014; Wiklund & Shepherd, 2011). Risk taking is used to describe the uncertainty that follows entrepreneurial behavior. Entrepreneurial behavior involves the dominant share of investment resources for risky projects (Eggers, Kraus, Hughes, Laraway, & Snyckerski, 2013; Kraus, Rigtering, Hughes, & Hosman, 2012).

Unlike the previous studies (Kraus et al., 2012; Lisboa, Lages, & Skarmeas, 2011; Zhao, Li, Lee, & Chen, 2011) which mostly use entrepreneurial orientation as a unique unidimensional variable, this study uses a multidimensional approach consisting of innovativeness, pro-activeness and risk taking that influence organizational performance (Fadda, 2018; Lumpkin & Dess, 1996; Lumpkin, Wales, & Ensley, 2011). According to (Kreiser, Marino, & Weaver, 2002) three dimensions, namely innovativeness, risk taking, and pro-activeness are dimensions of entrepreneurial orientation can vary by person in various situations. Entrepreneurial orientation as a multidimensional variable is expected to provide additional insight about the origin of EO and the influence of each dimension on company performance.

Entrepreneurial orientation can improve company performance (Covin & Slevin, 1991; Wiklund & Shepherd, 2003), and organizational performance (Smart & Conant, 2011). Several researchers that tested the effect of entrepreneurial orientation on organizational performance found insignificant results. A researcher proposed by Tang, Tang, Marino, Zhang, & Li, (2008) shows that the relationship between entrepreneurial orientation and organizational performance is not linear but curvilinear. Pearce, Fritz, & Davis, (2010) states that dimensions of innovativeness can improve organizational performance but risk taking and being proactive do not significantly improve organizational performance. Meanwhile, research by (Fadda, 2018) shows that innovativeness and pro-activeness have a significant effect on performance, while risk taking does not significantly affect performance. Another research by (Gibb & Haar, 2010) shows that risk taking, and innovativeness have positive effect on company performance. (Begley & Boyd, 1987) report that risk taking has a curved relationship with company performance. The inconsistencies of the result of the previous researchers indicate the existence of variables that does not directly affect performance but is mediated or moderated by other variables.

This study proposes a new research model to fill the gap, by including the learning organization variable as a mediation. Learning organization solves problems systematically, by solving problems so as to enable the organization to improve its capabilities continuously (Marsick & Watkins, 2009). Innovative, risk-taking, proactive behavior creates opportunities for organizational members to continue by finding, recognizing, and assimilating knowledge through the learning process (Y. Wang & Zhang, 2008) so that through entrepreneurial orientation it is expected to facilitate organizational members to benefit from the knowledge (Ireland, Hitt, & Sirmon, 2003; Y. Wang & Zhang, 2008). Companies that are innovative, dare to take risks, and proactive tend to actively share information and take the continuous learning to improve their capabilities, knowledge, and opportunities faster. And as a result, the companies will have better performance.

## **THEORY DEVELOPMENT AND HYPOTHESES**

Entrepreneurship orientation is a proactive attitude that very open to market opportunities, tolerant of the risk (Risk Taking), and easy to accept innovation (Innovativeness) in order to achieve organizational goals (Covin & Slevin, 1991; Lyon, Lumpkin, & Dess, 2000). Innovativeness reflects a tendency to engage in and support new ideas, novelty, experimentation and creative processes leading to new products, or technological processes that can drive the success of companies or organizations (Lumpkin & Dess, 1996). Proactive refers to the process which aims to anticipate and act on future needs by seeking new opportunities which may or may not be related to the current line of activities, introduction of new products and brands ahead of the competitor. Strategies eliminate activities that are already in the mature stage and the declining phase of the life cycle (Shane & Venkataraman, 2000). Risk taking is a willingness to undertake projects that have a high risk of failure and unknown outcomes (Lumpkin & Dess, 1996; Rauch, Wiklund, Lumpkin, & Frese, 2009).

A learning organization provides opportunities for its members to develop capabilities to achieve the desired results. New mindsets are developed, freedom to express aspirations is developed to improve overall organizational performance (Kofman & Senge, 1993a). A learning organization always makes changes by continuously encouraging its members to learn (Pedler, Boydell, & Burgayne, 1989). Seven dimensions are used to measure the learning organization, namely continuous learning, dialogue and inquiry, team learning, sticking to the system, connection system, empowerment, and leadership (Marsick & Watkins, 2009).

Organizational performance relates to the organization's ability to achieve its goals by utilizing resources efficiently and effectively. Performance is a multidimensional concept that is highly dependent on the indicators used to assess the performance (Lumpkin & Dess, 1996). It can be measured in many ways. Rauch et al., (2009) classifies performance measures into three categories, namely financial measures of performance, non-financial measures, and the financial data. This study uses a performance measure based on the research by (Zhao et al., 2011), which consists of three indicators, including growth, profit/earnings and efficiency.

### **Innovativeness, learning organization, firm performance**

Innovativeness is a corporate culture that supports experiment, new ideas, creativity that results in new products, services, and technological processes. Innovativeness reflects the company's tendency to develop new ideas, experiments and creative processes to produce new products, services or technologies (Fairoz et al., 2014; Lumpkin & Dess, 1996). Through an innovation strategy, it is expected that the company can be the first mover and always be better than competitors so that the company has a competitive advantage that leads to superior performance (Kreiser & Davis, 2010; Z. Tang, Kreiser, Marino, Dickson, & Weaver, 2009). First movers can gain an advantage as a technology and company leader or additional cost to the buyer (Kreiser & Davis, 2010). Innovative companies tend to always face competition through process, market, product, and technology innovations so that they can always create new opportunities. Corporate innovation has a positive impact on company performance (Akman & Yilmaz, 2008), because innovative companies tend to be creative which can be a differentiator compared to competitors so that it leads to the company's competitive advantage.

The culture of innovation consider the customers as the very valuable part of the company, the products needed, the right processes and strategies to satisfy customers, so that organizational members are needed to always continue learning to change the environment (Ma'atoofi & Tajeddini, 2013). Companies with a tendency to innovate, have a higher knowledge-sharing culture than competitors, so they tend to develop better and take advantage of opportunities faster than their competitors (Zhao et al., 2011). Research results (Gibb & Haar, 2010) show that innovative firms are more likely to enjoy greater performance. Meanwhile, the results of the study by (Fadda, 2018) show that innovation is significantly related to the performance of tourism companies. Based on this, the first two hypotheses are formulated as follows:

H1: innovation has a positive effect on company performance

H2: innovation has a positive effect on learning organizations

### ***Proactiveness, learning organization, and firm performance***

Pro-activeness refers to the process of anticipating and acting on the future needs by seeking new opportunities either relevant or not to the current line of activity. Other characteristics include introduction of new products and brands ahead of competitors, elimination of activities in a mature and declining activity of life cycle (Shane & Venkataraman, 2000). Companies proactively act to anticipate future business situations (Bolton & Lane, 2012; Lumpkin & Dess, 1996). Thus, proactive companies tend to try to create value that can increase the motivation of organizational members to find new approaches in technology, make products that can ultimately help developing learning abilities and organizational performance (Tang et al., 2009). Organizational learning through the exchange of information between organizational members is increasing, making environmental scanning both internal and external tend to be more accurate, so that many opportunities can be identified. Relevant, timely and accurate information helps to create new knowledge within the

organization, and this new knowledge can be utilized by companies to scan their external environment more effectively (Tang et al., 2009). Companies that are proactive in scanning environmental conditions tend to have commitments to continue strengthening their organizations (Ma'toufi & Tajeddini, 2015). Through this learning commitment, the organization is able to develop knowledge about the market, competitors and customers (Hurley & Hult, 1998). The results of the study (Fadda, 2018) show that pro-activeness companies significantly influence the company performance measured by sales. Based on this, hypotheses 3 and 4 of this study are as follows:

H3: there is a positive effect between pro-activeness and firm performance

H4: there is a positive effect between pro-activeness and learning organization

### **Risk-taking, learning organization, firm performance**

Management's courage in making decisions depends on their attitude in dealing with risk taking, one of entrepreneurial orientation. Risk taking is the courage of managers in making decisions to obtain opportunities with a high probability of failure (Dada & Watson, 2013; Rauch et al., 2009). Management decisions tend to benefit from the emergence of opportunities in the market by trying to get a high rate of return (Tang et al., 2008). An entrepreneur is more risk taker than non-entrepreneurs. Entrepreneurs have a more optimistic view and have a high level of confidence in seizing opportunities in the market compared to non-entrepreneurs (Zhao et al., 2011). Companies that are more proactive, risk tolerant, and innovative have a culture of information sharing and learning so that they can develop knowledge capabilities and take advantage of opportunities faster than their rivals (Zhao et al., 2011). Increased risk taking can improve organizational performance, but at a certain level increased risk taking will cause company performance to decrease, this is in accordance with research results of (Begley & Boyd, 1987) which states that the relationship between risk taking and performance is curved.

H5: risk taking has a positive effect on firm performance

H6: risk taking has a positive effect on learning organization

### **Dimensions of entrepreneurial orientation and firm performance through a learning organization**

Learning organization is the key for entrepreneurial-oriented companies, because learning organizations can facilitate organizations to acquire and use knowledge through the learning process (Ireland et al., 2003). Research in developed countries shows that companies that have a tendency to innovativeness, risk taking, pro-activeness can facilitate learning in their organizational members as a means to gain competitive advantage (Zhao et al., 2011). Companies with strategies of innovativeness, risk taking, and pro-activeness always provide space for individuals to continue learning in order to adapt to organizational goals, organizational business processes and environmental changes (C. L. Wang, 2008; Zhao et al., 2011). The organization's ability to continue to learn is an effort to empower employees, an effort to provide experience to employees, an effort to continue to collaborate with business partners and other external parties that can create a competitive advantage which in turn can improve firm performance (Aly, 2016). The results of the study of (Akhtar, Arif, Rubi, & Naveed, 2012) show significant results of the effect of learning organization on firm performance. Organizational innovativeness, risk taking, and pro-activeness tend to provide opportunities for organization members to learn so that organizations have more ability to find opportunities than competitors. Based on this, the following hypotheses are formulated.

- H7: learning organization has a positive impact on firm performance  
H8: learning organization mediate effect between innovativeness and firm performance  
H9: learning organization mediates the effect between pro-activeness and firm performance  
H10: learning organization mediates the effect between risk taking and firm performance  
Based on the background and theoretical study, the following research model is proposed:

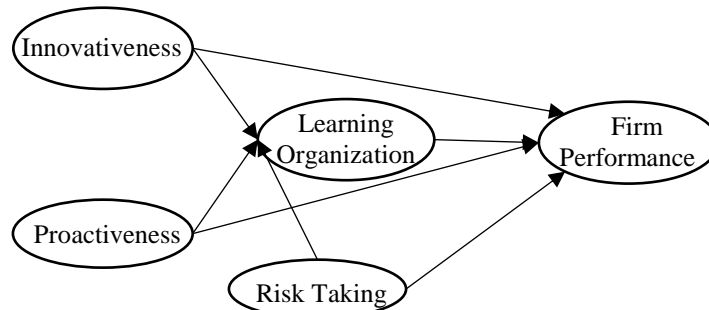


Figure 1: Research Model

## RESEARCH METHODS

The population includes SMEs in the field of fashion in East Java, with a total sample of 140 companies. Questionnaires were distributed to company leaders as representatives of the company decision makers. The operational definition of variables and their measurements are as follows: Innovativeness is the tendency of companies to innovate in their business (Covin & Slevin, 1991), which is measured by three items, namely: excelling in R/D, technology and innovation, maintaining a large number of product lines, and changing line the product is quite dramatic. Pro-activeness refers to how a company relates to market opportunities (Covin & Slevin, 1991), with three characteristics, namely: Initiative in dealing with competitors, tendency to be a leader in introducing new products, services and technologies, strong tendency to compete. Risk Taking willingness to carry out projects that have a high risk of failure and unknown results (Covin & Slevin, 1991), with three measurements, namely the tendency to undertake high risk projects, dare to take action to face the environment and be aggressive. A learning organization is an organization that continuously learns so that it has speed in anticipating change (Marsick & Watkins, 2009), with the following items: Continuous learning, inquiry and dialogue, team learning, embedded systems, empowerment, connection systems, strategic leadership . Firm performance results obtained as a result of strategy implementation, which is used as a basis for evaluating strategy implementation (Li, Huang, & Tsai, 2008) are measured by three items, namely: growth, efficiency, profit.

The outer model and inner model analysis method uses WarpPLs 6.0. The outer model test is used to test the validity and reliability. Validity testing is done by testing convergent validity and discriminant validity. Convergent validity is used to ensure that the respondents understand the filled-out questionnaire. Convergent validity is measured by the loading factor between latent variables and their indicators and is said to be valid if the loading factor value  $> 0.7$ , or loading value  $> 0.5$  but the average variance extracted (AVE) value  $> 0.5$  (Hair, Hult, Ringle, & Sarstedt, 2017; Latan & Noonan, 2017). Discriminant validity is used to test different constructs that have significant differences, as measured by cross loading, the Fornell-Larcker Criterion (Hair et al., 2017; Henseler, Hubona, & Ray, 2016).

Cross loading to compare the loading factor of the item to its latent construct must be greater than the item with other latent constructs. The Fornell-Larcker Criterion is a test tool that compares the AVE roots with the correlation between latent variables in one model, it is said to be valid if the AVE root value is greater than the correlation of each latent variable in

the model (Hair et al., 2017). The reliability of the instrument is measured by composite reliability and Cronbach alpha tests. It is said reliable if the composite reliability value > 0.7 and Cronbach alpha > 0.5 (Hair et al., 2017). The inner model is used to test the suitability of the model and the hypothesis. The suitability of the model was tested with Goodness of Fit (GoF) = root (average AVE x average R2), predictive relevance (Q<sup>2</sup>) = 1 - (1 - R<sub>1</sub><sup>2</sup>) (1 - R<sub>2</sub><sup>2</sup>) ... (1 - R<sub>n</sub><sup>2</sup>) and R Square (R<sup>2</sup>) is a value that shows the predictive power of the sample. GoF values = 0.1, 0.2, 0.38 indicates small, medium and large values, Q<sup>2</sup> = 0.02, 0.15, 0.35 indicates small, medium and large values, R2 values = 0.19, 0.33, 0.67 indicates weak, moderate and strong values (Hair et al., 2017; Latan & Noonan, 2017). Hypothesis testing is used to test the hypothesis proposed in this study with the provision that if the value of p count > 0.05 then the hypothesis is accepted and vice versa.

**RESULTS AND DISCUSSION**

**Test of the Outer Model**

This test is used to test the validity and reliability of the data obtained from the questionnaire results.

Table 1: Testing Validity and Reliability

	<i>Loading Factor and Cross Loading</i>					AVE	<i>Composite Reliability</i>	<i>Cronbach Alpha</i>
	INN	PRO	LEAR	RISK	PERF			
<b><i>Innovativeness</i></b>						0.60	0.81	0.65
INN_1	<b>0.87</b>	0.22	0.27	0.19	0.18			
INN_2	<b>0.85</b>	0.17	0.24	0.23	0.11			
INN_3	<b>0.56</b>	0.37	0.22	0.15	0.26			
<b><i>Proactiveness</i></b>						0.64	0.84	0.72
PRO_1	0.21	<b>0.73</b>	0.30	0.18	0.22			
PRO_2	0.23	<b>0.87</b>	0.38	0.16	0.26			
PRO_3	0.30	<b>0.79</b>	0.39	0.21	0.26			
<b><i>Learning Organization</i></b>						0.54	0.89	0.86
LO_1	0.02	0.35	<b>0.69</b>	0.28	0.47			
LO_2	0.18	0.37	<b>0.82</b>	0.33	0.45			
LO_3	0.25	0.35	<b>0.75</b>	0.42	0.38			
LO_4	0.30	0.28	<b>0.68</b>	0.34	0.37			
LO_5	0.28	0.33	<b>0.76</b>	0.19	0.51			
LO_6	0.33	0.32	<b>0.75</b>	0.25	0.41			
LO_7	0.28	0.31	<b>0.69</b>	0.29	0.38			
<b><i>Risk Taking</i></b>						0.69	0.87	0.77
RISK_1	0.17	0.12	0.28	<b>0.79</b>	0.13			
RISK_2	0.22	0.22	0.40	<b>0.86</b>	0.28			
RISK_3	0.21	0.23	0.32	<b>0.83</b>	0.32			
<b><i>Firm Performance</i></b>						0.71	0.88	0.79
PERF_1	0.11	0.20	0.44	0.23	<b>0.80</b>			
PERF_2	0.28	0.26	0.51	0.23	<b>0.89</b>			
PERF_3	0.17	0.31	0.50	0.29	<b>0.83</b>			

Source: Data analysis using WarpPls 6.0

Table 2: Fornell-Larcker Criterion and Model Fit

	INN	PRO	LEAR	RISK	PERF	R <sup>2</sup>	Q <sup>2</sup>	GoF	AVIF	Model Fit Criteria
INN	<b>0.772</b>					-				R <sup>2</sup> > 0.33 moderate,
PRO	0.305	<b>0.800</b>				-				Q <sup>2</sup> > 0.36 strong, GoF
LEAR	0.316	0.450	<b>0.735</b>			0.34	0.57	0.47	1.42	> 0.38. AVIF < 3.3. all

RISK	0.244	0.231	0.407	<b>0.828</b>		-	criteria meet the model
PERF	0.225	0.309	0.578	0.297	<b>0.840</b>	0.34	fit

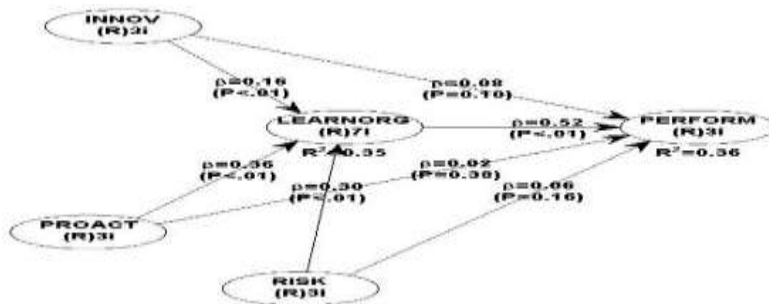
Source: Data analysis using WarpPls 6.0

Tables 1 and 2 show that all indicators have loading factors > 0.7 except for indicators INN\_3 = 0.56 and LO\_7 = 0.69 but all latent constructs have AVE values > 0.5. This means that according to Hair et al., (2017); Latan & Noonan, (2017) the value has met convergent validity. The value of the loading factor of each indicator on the latent construct is greater than the value of the loading factor on the other latent constructs. The square root value of AVE is greater than the correlation between latent variables in one model, so that based on the cross-loading criteria and the Fornell-Larcker Criterion, the discriminant validity is met. The results of the reliability test show that the composite reliability value is > 0.7 and the Cronbach alpha value is > 0.5, so it can be concluded that the accuracy of the measuring instrument has met the requirements and can be used for further analysis.

**Inner model**

**Hypothesis testing**

The results hypothesis testing using WarpPls 6.0 are as follows:



**Figure 2: Path Coefficient**

Source: Data analysis using WarpPls 6.0

**Table 3: Direct, Path Coefficient Indirect and Total Effect**

Variable	Direct Effect	Path Coefficient	Indirect Effect	Total Effect	P Value Direct	P value Indirect
INN --> PERF	0.23				<0.001	
INN --> LEAR	0.32	0.16			<0.001	
PRO --> PERF	0.31				<0.001	
PRO --> LEAR	0.45	0.36			<0.001	
RISK --> PERF	0.30				<0.001	
RISK --> LEAR	0.41	0.30			<0.001	
LEAR --> PERF	0.58	0.52			<0.001	
INN --> LEAR --> PERF		0.08	0.09	0.17		0.030
PRO --> LEAR --> PERF		0.02	0.19	0.21		<0.001
RISK --> LEAR --> PERF		0.07	0.16	0.22		<0.001

Source: Data analysis using WarpPls 6.0

Based on Table 3, the direct effect between innovativeness, pro-activeness, and risk taking on the company's performance have value of 0.23, 0.31, 0.30 and with p-values <0.001 respectively. The probability value is less than 0.05, so it can be concluded that the innovativeness, pro-activeness and risk-taking variables directly affect positively and significantly on company performance. The direct effect of innovativeness, pro-activeness, risk



taking on the learning organization of each direct effect is 0.32, ( $p < 0.001$ ), 0.045 ( $p < 0.001$ ), 0.41 ( $p < 0.001$ ). All  $p$  values are less than 0.05, so it can be concluded that innovativeness, pro-activeness, risk taking have a positive and significant effect on organizational learning. The direct effect of learning organization on company performance is 0.58 ( $p < 0.001$ ), meaning that learning organization directly has a positive and significant effect on company performance. Indirect effect of innovativeness, pro-activeness, risk taking on company performance through learning organization values of 0.09 ( $p = 0.030$ ), 0.19 ( $p < 0.001$ ), 0.16 ( $p < 0.001$ ), it is proven that learning organization is a mediating variable. The path coefficient values of the influence between innovativeness, pro-activeness, risk taking on company performance are 0.08 ( $p = 0.10$ ), 0.02 ( $p = 0.36$ ) and 0.07 ( $p = 0.16$ ), respectively. All  $p$  values  $>$  from 0.05 so it can be concluded that after the mediation variable the effect becomes insignificant, meaning that learning organization becomes a full mediation variable.

### **Hypothesis testing**

H1: innovativeness has a positive effect on the firm performance. The result shows that the coefficient of direct effect is 0.23 with a  $p$  value  $< 0.001$ , which is less than 0.05, thus the first hypothesis is accepted. This means that an increase in product, processes and technology innovation tend to increase company performance. Innovation will enable the company to become the first mover so that it has advantages in technology, markets, and distribution channels compared to its competitors. Innovation allows companies to increase creativity, and therefore the products, processes and technologies will be unique compared to the competitors. The company will also have strong bargaining power and ability to continue to grow, which in turn can improve company performance. It can be expected to achieve high profit and increase the company's growth and market value. Furthermore, exploitation and reconstruction of resources through innovation can increase the ability of new resources to adapt to environmental changes. Innovation can facilitate company growth by offering new products that have high profit potential and increase the company's market value (Morris, Kuratko, Allen, Ireland, & Schindehutte, 2010; Wiklund & Shepherd, 2005, 2011). Innovation also increases the organization's ability to cope with changing market environments by offering innovative products (Morris et al., 2010). Companies with low levels of innovation are likely to have their products rejected by the market, thus lower the product competitiveness. Market changes must be followed by changes in products, processes, and technology to increase the performance. This study's result supports the findings of (Fadda, 2018; Gibb & Haar, 2010) which state that innovation has a positive and significant effect on company performance.

H2: innovativeness has a positive effect on the learning organization. The results in table 3 show that the value of direct effect is 0.32 and  $p < 0.001$  meaning that the second hypothesis is accepted. An increase in company innovation tends to be followed by an increase in learning process of the organization. Innovation allows the company to be open in accepting input, so that it is possible for organizational members to continue to learn by expressing their abilities and views openly without fear of making mistakes. The company's product, process and technology innovation stimulate organizational members to continue learning so they don't feel left behind by these changes. The company is expected to continue to reconfigure its resources so that it has the capability of both product and market solutions to anticipate environmental changes. Innovative companies tend to involve their members in the preparation of a shared vision so that organizational members have the responsibility to achieve that vision according to their level of responsibility. Scanning for environmental changes will be better if the company involves organizational members who have knowledge and experience abilities

through the organizational learning process. The innovative companies will encourage team work so that members of the organization can learn together and work together. The company also creates an integrated work system to enable members of the organization learn through routine work activities. Companies that have a culture of innovation make their members continue to look for opportunities to innovate in every area of the organization. Members of the organization are always trying to find new ways to provide services to consumers in terms of products, services, and new technologies.

H3: there is a positive influence between pro-activeness and firm performance. The direct influence between pro-activeness and firm performance is obtained by the value of  $\beta = 0.31$  with  $p < 0.0001$  less than 0.05 meaning the hypothesis is accepted. Companies that have a proactive tendency to respond to environmental changes can improve their performance by exploiting new opportunities. Companies that tend to be proactive in responding to environmental changes will be better in adapting to environmental changes, so the companies will be the first movers in the market. Companies that are sensitive to changes in the external environment, can quickly anticipate changes that occur so that they can enter the market earlier than competitors. These companies will have advantages in terms of switching costs, premium prices that can increase company performance.

H4: there is a positive effect between pro-activeness and learning organization. The value of  $\beta = 0.45$  with  $p < 0.0001$  less than 0.05 means that the hypothesis is accepted. Proactive companies tend to facilitate organizational members to continue learning. Sharing information is a characteristic of a proactive company so that members of the organization are able to develop their knowledge and abilities through taking advantage of opportunities faster than competitors. Proactive companies tend to be flexible in structure so that they can give their members the freedom to be involved in the decision-making process. Organizational members are encouraged to take the initiative in completing work, so that they can measure their own risk. The initiative of organizations in pursuing new opportunities through participation in developing markets requires organizations to analyze the environment to anticipate possible changes. This can increase possibility to act faster than competitors, and thus to win the competition.

H5: risk taking has a positive effect on firm performance. The value of  $\beta = 0.30$  with  $p < 0.0001$  is smaller than 0.05, then the hypothesis is accepted, which means the higher the company is willing to take risks, the higher the tendency to improve performance. Risk taking on the entrepreneurial orientation dimension is a risk that can be calculated and accepted and managed by the company. Companies that are dared to expend resources with a measurable level of risk and results and with a higher failure rate and are willing to get out of routine things can improve company performance. The courage in preparing resources and managed risks can strengthen the company to face new entrants, because of the companies' uniqueness in terms of products, processes, and technology. The uniqueness of the company is also expected to win the bargaining power of both consumers and suppliers to gain competitive advantage over its competitors which in turn can improve the company's performance. The results of this study are in line with the findings (Pratono, 2018), which states that risk taking behavior has a significant effect on firm performance. SME business has a higher risk compared to large companies due to low access to resources, low economies of scale, so that the willingness to invest in SMEs is indicated as courage in taking risks. This study is also in line with the results of research (Zhao & Zhu, 2018), which states that companies that avoid risk tend to have lower performance.

H6: risk taking has a positive effect on the learning organization. The value of  $\beta = 0.41$  with  $p < 0.0001$ , with a  $p$  value of less than 0.05 means that the hypothesis is accepted. Companies that are willing to take risks tend to implement continuous learning to experience both from a practical and managerial perspective. As a risk taker, a company develops different ways of thinking and build non-hierarchical environmental conditions to get a lot of information from the organization members. Every company, large or small, has inherent risks, making a risk-free business unreasonable. Risk will always exist and through the ability to manage the risk, it is expected to be a learning tool for the company. This condition implies that the higher the company's willingness to take risk, the more the company will learn to scan the environment both internally and externally to properly manage the risks.

H7: learning organization has a positive impact on firm performance. The value of  $\beta = 0.58$  with  $p$  value  $< 0.0001$  less than 0.05, it means that hypothesis 7 is accepted. Companies implementing continuous learning can act as the levers in building or creating intangible resources that are not easily imitated by competitors. Every member of the organization must be aware of his capacity as part of a system that must work together and interrelated. The higher the organizational learning capacity, the higher the organization's ability to improve its performance. Organizations that continuously learn and facilitate organizational members to continue learning can become organizations that have the speed of thinking and acting in response to various changes that arise. Organizational learning gives experience to every member of the organization in a means of dialogue which is not to find winners in the argument but to seek further meaning. A conducive learning environment is a work atmosphere that can foster the commitment of each individual to work and cooperate with other members of the organization which can improve the overall performance of the organization. Kofman & Senge, (1993) explain that without a learning environment, hard work and individual commitment cannot produce significant added value for the organization.

H8: learning organization mediates the effect between innovativeness and firm performance. The path coefficient is 0.09 with  $p$  value = 0.03, the results in table 3 show that the path coefficient value becomes insignificant after the learning organization variable is added as the mediating variable. Thus, it can be concluded that learning organization is a full mediation variable. Companies that have a high level of innovation tend to provide opportunities for their members to carry out continuous learning so that they are able to adapt to environmental changes. Organizations that are continuously learning tend to win the competition, are strong in facing the possibility of the entry of new entrants and are strong in bargaining power from both the consumer and supplier side. Product, process, and technology innovation carried out by the company requires individuals involved in the company to continue to adapt to changes made by the company through innovation. Innovative companies tend to provide flexibility for their members to continue to learn which is a source of competitive advantage in order to improve organizational performance.

H9: learning organization mediates the effect between pro-activeness and firm performance. The indirect effect coefficient shows the value of  $\beta = 0.19$  with  $p < 0.0001$ , it shows that learning organization is proven to be a full mediating variable for the influence between pro-activeness and firm performance. Proactive companies tend to be more active in scanning the changing environmental conditions through their members in order to enter the market ahead of competitors. The external environment that tends to change rapidly needs to be fast responded. The proactive companies are not only adapting to environmental changes but also anticipating the possibility of environmental changes. They provide opportunities for their

members to take the continuous learning, provide freedom and flexibility for individuals and teams to develop creativity. The results are expected to increase the members' ability to scan environmental conditions and provide different resources. This will increase the company's competitive advantage which in turn can improve organizational performance by increasing profits, efficiency and company growth.

H10: learning organization mediates the effect between risk taking and firm performance. The relationship produces a path coefficient value of = 0.07, indirect effect 0.16 and total effect 0.22 with  $p < 0.0001$ , so it can be concluded that learning organization is proven to be a full mediating variable in the relationship between risk taking and firm performance. Companies with high risk taking tend to continue allocating their resources to obtain the optimal rate of return. Increased members' participation in learning activities reflects the learning organization that can also increase the competitiveness of the company. A learning organization is expected to have more in action speed compared to the competitors. Companies that have more courage to act in the face of uncertainty than competitors tend to have the possibility of having high performance. SMEs tend to have a higher risk than large companies due to differences in ability to access resources. SMEs become more courageous in taking the business risks to access resources even with higher returns.

## CONCLUSION

This study shows that innovativeness has a positive effect on learning organization and firm performance. Risk-taking has a positive effect on learning organization and firm performance. The company always anticipates environmental changes that tend to increase the capacity of the learning organization, thereby increasing firm performance. Companies that carry out continuous learning tend to be able to improve their performance. Learning organization is a variable that mediates the effect of innovativeness, pro-activeness, and risk-taking on firm performance. Companies that tend to innovate, are proactive to environmental changes and dare to take risks must always provide opportunities for their members to continue to learn, because cumulatively the companies will become learning organizations.

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