

The influence of environmental factors on firm performance with entrepreneurial orientation and manufacturing capability as mediation variables

Rifa Herdianti^{1*}, Gesit Thabrani¹

¹ Department of Management, Faculty of Economics and Business, Universitas Negeri Padang, Padang, Indonesia

ARTICLE INFO

Received 23 August 2023
Accepted 23 September 2023
Published 30 October 2023

Keywords:

Environmental factors; firm performance; entrepreneurial orientation; manufacturing capability

ABSTRACT

This research aims to analyze: (1) the influence of environmental factors on entrepreneurial orientation in SMEs in Padang City (2) the influence of environmental factors on manufacturing capabilities in SMEs in Padang City (3) the influence of entrepreneurial orientation on firms performance in SMEs in Padang City (4) the influence of entrepreneurial orientation on manufacturing capabilities in SMEs in Padang City (5) the effect of manufacturing capabilities on firm performance in SMEs in Padang City (6) the influence of environmental factors on firms' performance through entrepreneurial orientation in SMEs in Padang City (7) the influence of environmental factors environment on firm performance through manufacturing capabilities in SMEs in Padang City. This research is causal research. The Population of this research is 200 respondents from SMEs actors in the city of Padang who are engaged in manufacturing. The sampling method was using purposive sampling. Collecting data using a questionnaire with a Likert scale. The analysis technique used is smart PLS 4. The results of data processing in the study show that: (1) environmental factors have a significant positive effect on entrepreneurial orientation in SMEs in Padang City (2) environmental factors have a significant positive effect on manufacturing capabilities in SMEs in Padang City (3) entrepreneurial orientation has a significant negative effect on firm performance in SMEs in Padang City (4) manufacturing capability has a significant positive effect on firm performance in SMEs in Padang City (5) entrepreneurial orientation has a significant positive effect on manufacturing capabilities in SMEs in Padang City (6) environmental factors have a significant negative effect on firm performance through entrepreneurial orientation in SMEs in Padang City (7) environmental factors have a significant positive effect on firm performance through manufacturing capabilities in SMEs in Padang City.

How to cite: Herdianti, R., & Thabrani, G. (2023). The influence of environmental factors on firm performance with entrepreneurial orientation and manufacturing capability as mediation variables. *Operations Management and Information System Studies* 3 (3), 212-225. <https://doi.org/10.24036/omiss.v3i3.134>



This is an open access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2023 by author.

* Corresponding author: rifaherdianti65@gmail.com

INTRODUCTION

Small and Medium Enterprises (SMEs) play a very significant role in driving economic progress in Indonesia, especially in the city of Padang. SMEs have been recognized globally as an instrument of

development and economic progress in a country which makes SMEs a solution to solving problems in economic development, especially for providing employment and income for SMEs. However, the potential of SMEs has not been competitive and the low competitiveness of SMEs can cause difficulties in increasing their output.

SMEs cannot increase their competitiveness because they have several limitations for example, a lack of ability to adapt to the environment, less activity in capturing business opportunities, and a lack of creativity and innovation in anticipating environmental challenges (Mustikowati & Tysari, 2014). In addition, SMEs lack management skills. Internally a lack of skills, capital, and markets. Therefore, the existence of highly competitive competitiveness is mainly determined by the ability of organizations to apply entrepreneurial orientation in strategic activities that will determine goals and create superior performance (Li et al., 2009). If SMEs can apply an entrepreneurial and innovative orientation, then they must be able to develop a business strategy so that it can be used as a tool to face competition. This important role is especially shown in the development of aspects such as Environmental Factors, Entrepreneurial Orientation, Manufacturing Capability, and firm performance.

Firms' performance is the result shown by an organization or the level of achievement of the implementation of the tasks of an organization in an effort to realize the goals, objectives, mission, and vision of the organization (M. Abdullah, 2014). Entrepreneurial orientation is a principle or effort to identify and exploit opportunities (Lumpkin & Dess, 1996). According to (Wales, 2011) orientation is an entrepreneurial feature at the company level because it reflects behavior as well as the driving force of entrepreneurial activity.

According to (Swink et al., 2007) manufacturing capability is a source of competitive advantage which refers to the actual strength of manufacturing in facing major competitors. (Xiaosong et al., 2008) suggest that this capability is related to a set of decisions and practices that support the structure and infrastructure of operations. The result is that manufacturing capabilities are usually conceptualized as operational strengths embodied as competitive performance. From the data obtained at the Cooperative and SME Office of West Sumatra Province, it was stated that during the last three years, the growth of SME in the city of Padang has experienced fluctuating growth every year. This happened because, in the past few years, Indonesia has been affected by the Covid-19 pandemic, especially in the city of Padang which has caused the economy and growth to become unstable or decline. And one of the sectors that was affected at that time was the manufacturing sector. Therefore, researchers make this sector to be the object of research because it is a sector that is mostly carried out in the city of Padang. Even so, the fact is that not all SMEs in the city of Padang are successful in running their business. Globalization has made changes to business people with dynamic and flexible circumstances. This condition is something that must be considered in utilizing potential resources, especially in the manufacturing sector. There are many competitors so a business actor must have a strategy to maintain his business. Based on the description above, the researchers tried to examine the influence of environmental factors on the performance of companies with entrepreneurial orientation and manufacturing capabilities as mediating variables in SMEs in the city of Padang.

LITERATURE REVIEW

Firm performance

According to (Bastian, 2001), Firm Performance is a picture of the level of achievement of the implementation of the tasks of an organization in an effort to realize the goals, objectives, mission, and vision of the organization. Firm Performance measurement consists of three indicators proposed by (Hooley et al., 2005). (1) Customer Performance; to be able to see a good performance or not can be seen from the number of customers. Customers themselves are an important element in business because customers will be the driving force of a business. Customers will be created if the company can provide

satisfaction to buyers, both in terms of product benefits, company services, or convenience in shopping and various businesses carried out by the company. (2) Market performance; Market performance can be interpreted as the extent to which the company increases the value of the company's shares that have been traded on the capital market. Market performance is measured using the Price Earning Ratio and Price Book Value indicators. (3) Financial performance; the company's financial performance is used to measure the company's ability to generate profits as described in the company's financial statements. Measuring financial performance can be done by measuring the ratio of liquidity, profitability, solvency, and activity.

Environmental factors

Environmental factors are one of the factors of change in organizational theory. There are two theories of the external environment, namely technological upheaval and competitive intensity. Technological upheaval describes the degree of technological change an organization is experiencing. The intensity of competition describes the level of competition in the industry, starting from low competition, consumers are trapped in a product to high competition, and consumers have many choices to fulfill their needs and desires (Frishammar & Hörte, 2014). Environmental factor measurement consists of three indicators proposed by (Jaworski & Kohli, 1993). (1) Market turbulence; Market turbulence assesses the extent to which an organization's composition and customer preferences tend to change over time (2) Technological turbulence; Technological turbulence taps the degree to which technology is in an industry in a state of flux (3) competitive intensity; Competitive intensity assesses competitors' behavior, resources, and ability to differentiate.

Entrepreneurial orientation

According to (Covin & Wales, 2011) entrepreneurial orientation is a characteristic at the company level because it reflects company behavior and is the driving force of entrepreneurial activity. The measurement of entrepreneurial orientation consists of five indicators found in research (Boso et al., 2013): (1) Innovative; Innovative is the tendency to engage in creativity and experimentation through the introduction of new products or services and technological leadership through research and development in new processes. (2) Dare to take risks; Dare to take risks is the courageous attitude of an entrepreneur to venture into new markets by giving all the resources they have for businesses with uncertain results. (3) Proactive; Proactive is decision-making that is carried out on an initiative by anticipating, pursuing new opportunities, and participating in emerging markets. (4) Aggressive in competition; Aggressive in competition, namely the intensity of the company's efforts to excel in competition is marked by an attitude or an aggressive response to competitive actions. (5) Autonomy; Autonomy is individual freedom in thinking and acting creatively in terms of overcoming various problems or in optimizing new opportunities that attract the market.

Small and medium enterprises (SMEs)

According to (Law of the Republic of Number 20, 2008) concerning Micro, Small, and Medium Enterprises (MSMEs): (1) Micro businesses are productive businesses owned by individuals or individual business entities that meet the criteria for micro-businesses as stipulated in this Law. (2) Small Business is a productive economic business that stands alone and is carried out by individuals or business entities that are not subsidiaries or not branches of companies that are owned, controlled or become part either directly or indirectly of Medium Enterprises or large businesses that meet the criteria for Small Business as referred to in this Law. (3) Medium Business is a productive economic business that stands alone and is carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become part of either directly or indirectly with large businesses with a total net worth or annual sales proceeds as stipulated in this Law.

Hypothesis

In this study there are environmental factors as the dependent variable, the use of company performance as the independent variable, and entrepreneurial orientation and manufacturing capability as mediating variables. With the conceptual framework and empirical studies above, the researcher proposes several research hypotheses as follows:

- H1: Environmental factors have a significant effect on Entrepreneurial Orientation in SMEs in Padang City
- H2: Environmental factors have a significant effect on Manufacturing Capability of SMEs in Padang City
- H3: Entrepreneurial orientation has a significant effect on Manufacturing Performance in SMEs in Padang City
- H4: Manufacturing Capability has a significant effect on Manufacturing Performance in SMEs in Padang City
- H5: Entrepreneurial Orientation has a significant effect on Manufacturing Capability in SMEs in Padang City
- H6: Environmental factors have a significant effect on Manufacturing Performance through Entrepreneurial Orientation for SMEs in Padang City
- H7: Environmental Factors have a significant effect on Company Performance through Manufacturing Capability in SMEs in Padang City.

METHOD

In this study the authors used quantitative research because the data used in this study were in the form of numbers. For this research to be directed and close to what is expected, this study aims to determine how much influence "Environmental factors influence on firm performance with entrepreneurial orientation and manufacturing capability as mediating variables". The population of this study is 200 SMEs in the city of Padang who are engaged in manufacturing. The sampling technique was carried out using purposive sampling. Collecting data using a questionnaire with a likert scale. The analysis technique used is Smart-PLS 4 software. The sampling technique in this study used a purposive sampling method, namely a sampling technique with certain considerations. The data used in this study were obtained through primary data and secondary data. Primary data was obtained directly by distributing questionnaires to SMEs in the city of Padang which contained answers about environmental factors, firm performance, entrepreneurial orientation, and manufacturing capabilities. And secondary data is obtained through media intermediaries such as archives, notes, or reports. Furthermore, data collection techniques in this study used 2 techniques, namely: 1.) Questionnaire, collecting data by distributing a list of questions about 2.) the influence of environmental factors on firm performance with entrepreneurial orientation and manufacturing capabilities as mediation 3.) Observation, by direct recording to the location of the object of research to be studied. Data analysis techniques using descriptive statistical analysis techniques and inferential statistical analysis. The first descriptive analysis provides an empirical or descriptive description of the data collected in the study. The data comes from the respondents' answers to the items contained in the questionnaire and will be processed by grouping and tabulating and then explaining. Each inferential statistical analysis is a statistical technique used to analyze sample data and the results are applied to the population. In this study, inferential statistical data analysis was measured using PLS software version 4. From the external measurement model, the internal model, and the hypothesis testing.

RESULTS AND DISCUSSION

Based on the results of calculating the frequency distribution to measure environmental factors, 3 indicators with 15 terminal items were used to produce an accumulated average score of 3.82 and a TCR of 76%. It can be concluded that environmental factors in SMEs in the city of Padang are said to be sufficient. Because with data, all indicators can be explained using environmental factors with sufficient information. Furthermore, to measure firm performance, 3 indicators with 7 question items were used which resulted in an accumulated average score of 4.26 and a TCR of 85%. It can be interpreted that firm performance is said to be good. Because with this data, all indicators can explain firm performance with good information. Then for entrepreneurial orientation, 5 indicators with 17 question items were used which resulted in an accumulated average score of 4.21 and a TCR of 84%. It can be concluded that the entrepreneurial orientation of SMEs in the city of Padang is said to be good. Because with the data, overall indicators can explain entrepreneurial orientation with good information. The last variable manufacturing capability used 4 indicators with 17 question items which resulted in an accumulated average score of 4.24 and a TCR of 85%. It can be concluded that the manufacturing capability of SMEs in Padang City is said to be good. Due to the presence of data, overall indicators can explain manufacturing capability with good information. Instrument tests are used to see the validity and reliability of a model. In the instrument test, the validity test and reliability test. Validity tests each indicator was measured outer loading, AVE and cross loading.

Table 1. Average Variance Extracted

Variable	(AVE)
Environmental factors	0.547
firm performance	0.586
entrepreneurial orientation	0.570
manufacturing capability	0.544

Based on the table it can be seen that the AVE values of all variables have fulfilled the required rule of thumb ($AVE > 0.5$). It can be concluded that the construct has a good level of validity. Thus, each variable in this study can be declared to have met the convergent validity test criteria.

Table 2. Cross Loading

Variable	Manufacturing capability	Environmental factors	Firm performance	Entrepreneurial orientation
	(M)	(X)	(Y)	(Z)
M1	0.702	0.415	0.648	0.601
M10	0.771	0.305	0.542	0.734
M11	0.801	0.362	0.572	0.736
M12	0.709	0.240	0.522	0.682
M13	0.711	0.281	0.507	0.656
M14	0.745	0.377	0.519	0.729
M15	0.776	0.252	0.549	0.760
M16	0.793	0.291	0.589	0.768
M17	0.722	0.337	0.530	0.670
M2	0.702	0.182	0.655	0.654

Variable	Manufacturing capability	Environmental factors	Firm performance	Entrepreneurial orientation
	(M)	(X)	(Y)	(Z)
M3	0.726	0.257	0.649	0.720
M4	0.713	0.249	0.704	0.672
M5	0.718	0.273	0.684	0.642
M6	0.733	0.358	0.684	0.696
M7	0.756	0.393	0.586	0.668
M8	0.744	0.239	0.556	0.695
M9	0.710	0.275	0.471	0.699
X1	0.234	0.744	0.259	0.168
X10	0.254	0.704	0.250	0.216
X11	0.261	0.738	0.303	0.194
X12	0.392	0.750	0.381	0.309
X13	0.400	0.764	0.388	0.338
X14	0.436	0.755	0.380	0.357
X15	0.219	0.731	0.241	0.155
X2	0.212	0.750	0.266	0.127
X3	0.155	0.724	0.158	0.096
X4	0.166	0.745	0.221	0.123
X5	0.262	0.759	0.252	0.177
X6	0.266	0.742	0.234	0.219
X7	0.324	0.743	0.309	0.263
X8	0.279	0.717	0.259	0.232
X9	0.285	0.729	0.314	0.228
Y1	0.545	0.285	0.786	0.479
Y2	0.596	0.415	0.812	0.493
Y3	0.544	0.238	0.727	0.480
Y4	0.583	0.244	0.765	0.544
Y5	0.580	0.287	0.772	0.525
Y6	0.652	0.348	0.759	0.550
Y7	0.731	0.320	0.734	0.687
Z1	0.749	0.269	0.659	0.792
Z10	0.709	0.183	0.433	0.743
Z11	0.681	0.159	0.464	0.724
Z12	0.685	0.254	0.457	0.730
Z13	0.714	0.266	0.442	0.738
Z14	0.707	0.238	0.481	0.746
Z15	0.689	0.244	0.449	0.745
Z16	0.733	0.318	0.510	0.746
Z17	0.656	0.278	0.518	0.711
Z2	0.744	0.212	0.657	0.811

Variable	Manufacturing capability (M)	Environmental factors (X)	Firm performance (Y)	Entrepreneurial orientation (Z)
Z3	0.731	0.235	0.643	0.785
Z4	0.761	0.230	0.671	0.779
Z5	0.729	0.223	0.572	0.802
Z6	0.705	0.256	0.524	0.746
Z7	0.703	0.222	0.509	0.750
Z8	0.701	0.284	0.538	0.753
Z9	0.665	0.225	0.508	0.732

Based on the table, it can be seen that the Output Cross Loading value indicates good discriminant validity because the value of the indicator correlation to the variable is higher than the correlation value of another variable.

Table 3. Reliability Test

Variable	Cronbach's alpha	Composite reliability
Environmental factors	0.942	0.955
Firm Performance	0.882	0.885
Entrepreneurial orientation	0.953	0.954
Manufacturing capability	0.948	0.948

Based on the table above, it can be seen that the value of composite reliability and Cronbach's alpha for each variable is greater than 0.7. Referring to the rule of thumb, the composite reliability and Cronbach's alpha values, each of which has a value greater than 0.7 (> 0.7), mean that all variables in the study are declared reliable (Hair et al., 2018).

Table 4. R-Square

Variable	R-square	R-square adjusted
Manufacturing capability	0.897	0.896
Firm performance	0.652	0.648
Entrepreneurial orientation	0.102	0.097

The table shows that the R-Square value of the manufacturing capability variable is 0.897. This result shows that at 89.7%, the manufacturing capability variable can be influenced by environmental factors. Meanwhile, the firm performance variable is 0.652. This result shows that 65.2% of firm performance can be influenced by environmental factor variables. then for the entrepreneurial orientation variable obtained 0.102, this result shows 10.2% of entrepreneurial orientation is influenced by environmental factor variables.

Table 5. influence of environmental factors (X), firm performance (Y), entrepreneurial orientation (Z), manufacturing capability (M)

Variable	Direct influence	T statistics	Indirect influence		T statistics		Total
			Z	M	Z	M	
Environmental factor-> Entrepreneurial orientation	0.319	5.778	-0.114	0.133	2.856	4.504	0.338
Environmental factor-> Manufacturing capability	0.117	5.037					0.117
Entrepreneurial orientation-> firm performance	-0.356	3.278	-			-	-0.356
Manufacturing capability-> firm performance	1.133	11.756					1.133
Entrepreneurial orientation-> manufacturing capability	0.903	67.157	-			-	0.903

Based on the table above, it can be seen that the direct effect of environmental factors on entrepreneurial orientation is 0.319 with a T-statistic value of 5.778. This is greater than environmental factors on manufacturing capability with a coefficient of 0.117 with a T-statistic of 5.037, then the effect of entrepreneurial orientation on company performance has a negative coefficient value of -0.356 with a T-statistic of 3.278, this shows that this hypothesis is decreasing because of the negative and significant effect. The fourth hypothesis is the effect of manufacturing capability on company performance directly with a coefficient value of 1.133 with a T-statistic of 11.756, and in the fifth hypothesis, the effect of orientation on manufacturing capability has a direct effect with a T-statistic coefficient value of 0.903 with a T-statistic of 67.157. Then in the sixth hypothesis, the effect of environmental factors on company performance through entrepreneurial orientation has an indirect effect with a negative coefficient of -0.114 with a T-statistic of 2.856. this shows that this hypothesis is rejected because of the negative and significant effect. While the seventh hypothesis, namely the influence of environmental factors on company performance through manufacturing capabilities has an indirect effect with a coefficient value of 0.133 with a T-statistic of 4.504. This shows that the hypothesis is accepted because it has a positive and significant effect.

The influence of environmental factors on entrepreneurial orientation

The results of the analysis of the frequency distribution of environmental factor variables with an average score of 3.82 and a TCR of 76% are in the sufficient category, which means that environmental factors in SMEs in Padang City are sufficient but need to be improved further. The results of the analysis of the frequency distribution of the entrepreneurial orientation variable with an average score of 4.21 with a TCR

of 84% are in a good category, which means that the entrepreneurial orientation of SMEs in Padang City is good but needs further improvement. The results of testing the first hypothesis show that the environmental factor variable with an entrepreneurial orientation has a t count of 5,778. this value is greater than the t table (1.96). this means that there is a significant influence between environmental factors on entrepreneurial orientation in SMEs. The path coefficient value is 0.319 so if the environmental factors are getting higher, it will have an impact on increasing entrepreneurial orientation in SMEs. Vice versa, if environmental factors are low, entrepreneurial orientation in SMEs is also low. Based on the explanation above, the first hypothesis, namely environmental factors that have a positive and significant effect on entrepreneurial orientation in SMEs in Padang City, can be accepted.

The results of this study are also by previous studies which stated that according to (Stanley Kam & Sing Wong, 2014) environmental turbulence or environmental factors were found to have a strong and significant positive influence on the three dimensions of EO. The higher the turbulence in the environment, the more proactive, and innovative the company will be and the higher the propensity to take risks. In the context of Entrepreneurial Orientation (EO), the direct positive impact of environmental turbulence is to encourage organizations to develop the ability to adapt to be better. When the business environment undergoes rapid and unpredictable changes, EO encourages companies to be more responsive to market changes, identify new opportunities, innovate in products and services, and take measured risks to create added value. Thus, environmental turbulence strengthens EO ability to meet challenges with agility and creativity, ultimately enhancing a company's competitiveness and long-term success. in front of Management's job is to identify new opportunities and act on them for business success.

The influence of environmental factors on manufacturing capabilities

The results of the analysis of the frequency distribution of environmental factor variables with an average score of 3.82 and a TCR of 76% are in the sufficient category, which means that environmental factors in SMEs in Padang City are sufficient but need to be improved further. The results of the analysis of the frequency distribution of the manufacturing capability variable with an average score of 4.24 and a TCR of 85% are in a good category, which means that the manufacturing capability of SMEs in Padang City is good but needs further improvement. The results of testing the second hypothesis show that the environmental factor variable on manufacturing capability has a calculated t value (5.037), this value is greater than the t table (1.96). This means that there is a significant influence between environmental factors on manufacturing capabilities in SMEs. The path coefficient value is 0.117 so if the environmental factor is getting higher, it will have an impact on increasing manufacturing capability in SMEs. Vice versa, if environmental factors are low, the manufacturing capability of SMEs is also low. Based on the explanation above, the second hypothesis, namely environmental factors on manufacturing capabilities in SMEs in Padang City, can be accepted.

The results of this study are also by previous studies which stated that according to (Amoako-gyampah, 2003) business environment variables influence manufacturing strategies in developing countries. There is a significant relationship between business environment factors and each component element of the manufacturing strategy. The findings from this study indicate that concerns about excessive competition from the business environment are related to the intention to promote an emphasis on flexibility as an integral part of the manufacturing strategy. The results show the extraordinary impact of perceptions of the level of competition that exists in the business environment on the content setting of the adopted manufacturing strategy. The decision to emphasize flexibility, quality, and low-cost strategies are all influenced by perceptions of the adversarial competitive business environment.

The influence of entrepreneurial orientation on firm performance

The results of the frequency distribution analysis of the entrepreneurial orientation variable with firm performance with an average score of 4.21 and a TCR of 84% are in a good category, which means that the

entrepreneurial orientation of SMEs in Padang City is good but needs to be improved. The results of the analysis of the frequency distribution of firm performance variables with an average score of 4.26 and TCR 85% are in the good category, which means that the firm performance in SMEs in Padang City is good but needs further improvement. The results of testing the third hypothesis show that the entrepreneurial orientation variable on firm performance has a t count (3.278) this value is greater than the t table (1.96). This means that there is a significant influence between entrepreneurial orientation on firm performance in SMEs. The negative path coefficient value is -0.356 so the lower the entrepreneurial orientation, the lower the firm performance, and vice versa, the higher the entrepreneurial orientation, the higher the firm performance. So, it can be concluded that the third hypothesis is accepted.

The results of this study are not to previous research which states that entrepreneurial orientation shows a strong relationship to SME performance (Li et al., 2009). This is because SMEs can respond quickly to threats and business opportunities (Chen & Hambrick, 1995). This research was conducted by (Wiklund, 1999) examining the relationship between entrepreneurial orientation and performance. The results of this study indicate that there is a positive relationship between entrepreneurial orientation and performance.

The influence of manufacturing capability on firm performance

The results of the analysis of the variable frequency distribution of manufacturing capability on firm performance with an average score of 4.24 and a TCR of 85% are in a good category, which means that manufacturing capability in SMEs in Padang City is good but needs to be improved. The results of the analysis of the frequency distribution of the firm performance variable with an average score of 4.26 and a TCR of 85% are in the good category, which means that the firm performance in SMEs in Padang City is good but needs to be improved again. The results of the fourth hypothesis test show that the manufacturing capability variable on firm performance has a t count (11.756) the value is greater than the t table (1.96). This means that there is a significant influence between manufacturing capabilities on firm performance in SMEs. The path coefficient value is 1.133 so if the manufacturing capability is higher, the firm performance will be high and vice versa, if the manufacturing capability is lower, the firm performance will be also low. So, it can be concluded that the fourth hypothesis is accepted.

The results of this study are also consistent with previous studies which stated that (Chavez et al., 2017) revealed that there is a significant and positive relationship between manufacturing capability indicators, namely flexibility, and cost, with organizational performance. This suggests that leveraging organizational resources can provide flexibility leading to positive returns in organizational performance. So, resource flexibility is of strategic importance and a generative means of organizational performance. These results also support a significant and positive relationship between cost capability and organizational performance. This suggests that the ability to manage and control costs across operations and the supply chain is a resource in the RBV sense as it leads to competitive advantage. Therefore, our results reinforce the view that cost capability and flexibility are resources that enhance organizational performance.

The influence of entrepreneurial orientation on manufacturing capabilities

The results of the analysis of the frequency distribution of the entrepreneurial orientation variable on manufacturing capability with an average score of 4.21 and a TCR of 84%. In the good category, means the entrepreneurial orientation of SMEs in the city of Padang is good but needs to be improved again. The results of the analysis of the variable frequency distribution of manufacturing capability with an average score of 4.24 and a TCR of 85% are in a good category, which means that manufacturing capability in SMEs in Padang City is good but needs to be improved. The results of testing the fifth hypothesis show that the entrepreneurial orientation variable on manufacturing capability has a t count (67.157) that value is greater than the t table (1.96). This means a significant influence between entrepreneurial orientation on manufacturing capabilities in SMEs. The path coefficient value is 0.903 so that if the entrepreneurial orientation is high, then manufacturing capability will be high and vice versa, if the entrepreneurial

orientation is low then manufacturing capability will be low too. So it can be concluded that the fifth hypothesis is accepted.

The results of this study are also consistent with previous studies which stated (Miller, 1983) defined entrepreneurial orientation as an orientation in terms of innovation in the market, having an attitude of taking risks, and being proactive towards changes that occur in the market. Meanwhile, manufacturing capability according to (Swink et al., 2007) is a source of competitive advantage which refers to the actual power of manufacturing in facing major competitors. Where manufacturing capability is usually conceptualized as operational strength which is manifested as competitive performance (Xiaosong et al., 2008). From the understanding of these two variables it can be said that the development of operational capabilities can be positively influenced by entrepreneurial behavior (Giunipero et al., 2005) and (Kickul, 2011). Entrepreneurial companies characterized by tolerance for risk, innovation, and proactivity are more willing to adapt their business, creating capabilities to meet rapid changes. For example, high levels of uncertainty demand adaptive and flexible abilities, which are supported by EO skills such as innovation and proactivity (Giunipero et al., 2005). Furthermore, there are entrepreneurial behavior traits that support the creation of operational capabilities such as flexibility, agility, quality, and efficiency, which are necessary to respond to market opportunities (Handfield et al., 2008) and (Hsu et al., 2011).

The influence of environmental factors on firm performance through entrepreneurial orientation

The results of the analysis of the frequency distribution of environmental factor variables on firm performance through manufacturing capability with an average score of 3.82 and a TCR of 76% are in the sufficient category, which means that environmental factors in SMEs in Padang City are quite good but need to be improved. Then the results of the analysis of the frequency distribution of the firm performance variable average 4.26 and a TCR of 85% in the good category, which means that the firm performance in SMEs in Padang City is good but needs to be improved again. The results of the analysis of the frequency distribution of the entrepreneurial orientation variable with an average score of 4.21 and a TCR of 84% are in a good category, which means that the entrepreneurial orientation of SMEs in the city of Padang is good but needs to be improved. The results of testing the sixth hypothesis show that environmental factor variables on firm performance through manufacturing capabilities have a t count (2.856) the value is greater than the t table (1.96). This means that there is a significant influence between environmental factors on firm performance through entrepreneurial orientation in SMEs. The path coefficient value is negative of -0.114 so if the environmental factors on firm performance are high, then entrepreneurial orientation is low, and vice versa, if environmental factors on firm performance are low, then entrepreneurial orientation will be high too. So, it can be concluded that the sixth hypothesis is accepted.

The results of this study are also by previous studies by (Wardi et al., 2018) said the moderating role of a dynamic environment had no impact on SME performance. Sundqvist & Kuivalainen (2009) also states that environmental turbulence does not have a significant impact on strengthening or weakening the relationship between entrepreneurial orientation and SME performance. It is presumed that the SMEs in the city of Padang, most of the business is a business of regional specialty food products, so that the environmental impact does not significantly affect the relationship between entrepreneurial orientation and SME performance (Susanto, 2009, Wu et al., 2020).

The influence of environmental factors on company performance through manufacturing capabilities

The results of the analysis of the frequency distribution of environmental factor variables on company performance through manufacturing capability with an average score of 3.82 and a TCR of 76% are in the sufficient category, which means that environmental factors in SMEs in Padang City are quite good but need to be improved. Then the results of the analysis of the frequency distribution of the company's performance variable average 4.26 and a TCR of 85% in the good category, which means that the company's

performance in SMEs in Padang City is good but needs to be improved again. The results of the analysis of the frequency distribution of the entrepreneurial orientation variable on manufacturing capability with an average score of 4.21 and a TCR of 84% are in the good category, which means that the entrepreneurial orientation of SMEs in Padang City is good but needs to be improved. The results of testing the seventh hypothesis show that the environmental factor variable on company performance through manufacturing capabilities has a t count (4.504) the value is greater than the t table (1.96). This means that there is a significant influence between environmental factors on company performance through manufacturing capabilities in SMEs. The path coefficient value is 0.133 so that if environmental factors on company performance are high, then entrepreneurial orientation is also high and vice versa, if environmental factors on company performance are low, then entrepreneurial orientation will be low too. So, it can be concluded that the seventh hypothesis is accepted.

The results of this study are also consistent with previous research which states that according to Vickery (in Martono, C & Lena, E, 2011), there is a relationship between competitive strategy, manufacturing strategy, and business performance. The results of his research show that there is a covariance between competitive strategy and manufacturing strategy. This research was conducted to test the size of product competence where the results have a positive effect on the company's business performance. Based on Research conducted by Swamidass & Newell (1987) and Ward et al. (1995) which was rewritten by (Martono & Ellitan, 2011) contains research results that show that company performance has a positive influence on the role of manufacturing managers in decision making. Furthermore, business performance has decreased due to increasing environmental uncertainty. As for the results of further research which shows the attachment and positive influence between environmental dynamism, quality, and capability among companies that have high performance.

CONCLUSION

This study aims to examine and analyze the influence of environmental factors on firm performance with entrepreneurial orientation and manufacturing capabilities as mediating variables in SMEs in Padang City. In testing and analyzing these variables, this study used Partial Least Square (PLS) version 4. Based on the analysis and discussion in the previous section, the following conclusions can be drawn: (1) There is a direct and significant influence between environmental factors and entrepreneurial orientation in SMEs in Padang City. This means that optimal environmental factors can increase entrepreneurial orientation in SMEs in the city of Padang. (2) There is a direct and significant influence between environmental factors and manufacturing capabilities in SMEs in Padang City. This means that optimal environmental factors can increase the manufacturing capabilities of SMEs in Padang City. (3) There is a negative and significant influence between entrepreneurial orientation and firm performance in SMEs in Padang City. This means that the entrepreneurial orientation is not optimal so it is necessary to increase the entrepreneurial orientation so that firm performance increases. (4) There is a direct and significant influence on manufacturing capability with firm performance on SMEs in Padang City. This means that optimal manufacturing capability can improve company performance in SMEs in Padang City. (5) There is a direct and significant influence between entrepreneurial orientation on manufacturing capabilities in SMEs in Padang City. This means that an optimal entrepreneurial orientation can increase manufacturing capabilities in SMEs in Padang City. (6) There is a negative and significant influence of environmental factors on firm performance through entrepreneurial orientation in SMEs in the city of Padang. This means that environmental factors and entrepreneurial orientation are not optimal which results in low firm performance. Therefore, it is necessary to increase environmental factors and entrepreneurial orientation so that firm performance increases. (7) There is a direct and significant influence between environmental factors on firm performance through manufacturing capabilities in SMEs in Padang City. This means that

environmental factors with optimal firm performance can increase manufacturing capabilities in SMEs in Padang City.

REFERENCES

- Amoako-gyampah, K. (2003). The relationships among selected business environment factors and manufacturing strategy: insights from an emerging economy. 31, 287–301.
- Boso, N., Story, V. M., & Cadogan, J. W. (2013). Journal of business venturing entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy. *Journal of Business Venturing*.
- Chen, M., & Hambrick, D. C. (1995). Speed, Stealth, and Selective Attack: How small firms differ from large firms in competitive behavior. 38(2), 453–482.
- Chavez, R., Yu, W., Jacobs, M. A., & Feng, M. (2017). Manufacturing capability and organizational performance: The role of entrepreneurial orientation. *Intern. Journal of Production Economics*, 184(October 2016), 33–46.
- Frishammar, J., & Hörte, S. Å. (2014). The role of market orientation and entrepreneurial orientation for new technology analysis & strategic management the role of market orientation and entrepreneurial orientation for new product development performance in manufacturing firms. May.
- Giunipero, L. C., Denslow, D., & Eltantawy, R. (2005). Purchasing / supply chain management flexibility: Moving to an entrepreneurial skill set. 34, 602–613.
- Handfield, R., Carolina, N., Petersen, K., Cousins, P., & Lawson, B. (2008). An organizational entrepreneurship model of supply management integration and performance outcomes.
- Hooley, G. J., Greenley, G. E., Cadogan, J. W., & Fahy, J. (2005). The performance impact of marketing resources. 58, 18–27.
- Hsu, C., Tan, K. C., & Laosirihongthong, T. (2011). *International journal of production Entrepreneurial SCM competence and performance of manufacturing SMEs*. October 2014, 37–41.
- Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and consequences. *Journal of marketing*
- Kickul. (2011). Operations management, entrepreneurship, and value creation: Emerging opportunities in a cross-disciplinary context. 29, 78–85.
- Li, Y., Huang, J., & Tsai, M. (2009). Industrial marketing management entrepreneurial orientation and firm performance: The role of knowledge creation process. *Industrial Marketing Management*, 38(4), 440–449.
- Lumpkin, G. T., & Dess, G. G. (1996). Claryfying the entrepreneurial orientation construct and linking it to performance. 21(1).

- Martono, C., & Ellitan, L. (2011). Environmental impact of business on company business performance. through competitive strategy and manufacturing strategy as mediator: Studies on medium and large companies in Indonesia. *Management and business studies*.
- Miller, D. (1983). *The Correlates of Entrepreneurship in Three Types of Firms*. May 2014.
- Mustikowati, R. I., & Tysari, I. (2014). Entrepreneurship orientatioan, innovation, and business strategy to improve company performace (study of SMEs sentra Malang district). 10.
- Swink, M., Narasimhan, R., & Wang, C. (2007). Managing beyond the factory walls: Effects of four types of strategic integration on manufacturing plant performance. 25, 148–164.
- Wales, W. J. (2011). The measurement of entrepreneurial orientation. *Entrepreneurship: Theory and practice*, 36(4), 677–702.
- Wardi, Y., Susanto, P., Abror, A., & Abdullah, N. L. (2018). Social Sciences & humanities impact of entrepreneurial proclivity on firm Performance: The role of market and technology turbulence. 26, 241–250.
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation- performance relationship. 1992, 37–48.
- Xiaosong, D., Schroeder, R. G., & Shah, R. (2008). Linking routines to operations capabilities: A new perspective. 26, 730–748.