

The Role of Business Environmental and Strategy Alignment in the Optimization of Business Performance of Small Scale Manufacturing Companies in Indonesia

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Abstract — This research was conducted to test whether a conceptual model of manufacturing strategy relevant when applied in different research settings, the small and medium manufacturing companies in Indonesia. The study involved eighty-eight small and medium scale manufacturing companies yielding response rate of 17.6%. The study generally indicates that environmental uncertainty has no significant effect on the choice of competitive strategy and manufacturing strategy in small and medium scale companies. The study also indicate that both cost leadership and differentiation strategy has a significant effect on the flexibility, cost leadership has a significant effect on quality, differentiation strategy has a significant effect on the quality, manufacturing strategy choices that focuses on cost is significantly influenced by the cost leadership strategy but not by a differentiation strategy, while the competitive strategy choices, both cost leadership and differentiation does not significantly effect delivery strategy. Competitive strategies simultaneously effect the financial performance, the partial cost leadership effects financial performance but differentiation does not effect financial performance.

Index Terms : environmental uncertainty, business strategy, manufacturing strategy, firm performance

I. INTRODUCTION

Research in the field of operations management that focuses on the study of manufacturing strategies using empirical methods have improved. Some of the existing literature suggests that empirical research focuses on the internal consistency of manufacturing strategies and assesses the consequences for company performance (Akgul, Goslu, Tatoglu, 2015). But very little empirical research discusses the linkage between environmental dynamism, manufacturing strategy, competitive strategy, and company performance, although there has been a great deal of conceptual literature on the issue (Swink and Way, 1995). This condition attracts the authors to do a confirmatory study to test the hypothesis and answer the problem of research related to conceptual model of manufacturing strategy in the context of competitive strategy and environmental dynamism by using different research setting that is in small and medium manufacturing companies in Indonesia.

The selection of research setting at manufacturing company is based on the consideration that Indonesian manufacturing companies are faced with the challenge of global competition that requires companies to be able to perform cost efficiency and product differentiation, especially in creating goods and services able to compete globally and be able to take advantage of existing technology developments. This condition requires companies in Indonesia in particular, manufacturing companies, to be able to improve the competitiveness of goods and services based on local resources so that companies can compete and develop business on the international level.

This research was conducted to test whether the conceptual model of manufacturing strategy is still relevant if applied in different research settings that is in small and medium manufacturing companies in Indonesia. Indonesia has incredible resources, both natural resources in the form of raw materials, as well as considerable human resources. High amount of natural resources in various sectors and also the number of inexpensive labor become a benefit in various business sectors in Indonesia. However, the Small and Medium Enterprises (SMEs) hold an important role in the economy of the country. SMEs are able to increase regional GDP as well as national one (Permana, Laksmana and Ellitan, 2017). In this research, environmental dynamism represents the level of turbulence in product, technology, and product demand in a market (Miller and Friesen, 1983; Dess and Davis, 1984). Competitive strategies represent the broad dimensions that a business uses as a basis for excellence, such as price and differentiation (Porter, 1980). Manufacturing strategy is the dimension of manufacturing orientation to win the competition. While business performance shows the company's performance as a whole.

The research model is based on a conceptual model of manufacturing strategy, the research conducted by Ward and Duray (2000). In the model, competitive strategy is treated as a mediating variable between environmental dynamism and manufacturing strategy, and manufacturing strategy as a mediating variable between competitive strategy and firm performance. Although in previous studies the effect of competitive strategy mediation on the interrelation between environmental dynamism and manufacturing strategy (except

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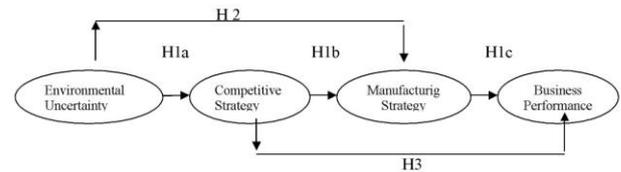
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Ward and Duray, 2000) research has not been studied, environmental dynamism has been identified as an important variable in both conceptual and empirical studies in both competitive and competitive strategies Manufacturing strategies (Skinner, 1969, Hofer, 1975, Van Dierdonk and Miller, 1980).

Some of the issues discussed in the research are expected to make a real contribution to the development of literature in the field of operations management and strategic management related to: 1) Whether the data have been collected from the sample of small and medium manufacturing enterprises in this research is consistent with the proposed and supported model conceptual manufacturing strategy By a number of existing literatures, 2) Whether the manufacturing strategy affects the business performance of the firm if the effects of environmental dynamism and competitive strategy are also considered, 3) To know the effect of competitive strategy on manufacturing strategy, specifically to know the effect of environmental dynamism on manufacturing strategy, The role of competitive strategy mediation. To address these issues, the data of small and medium manufacturing enterprises used in this research will be separated between companies with low business performance and high business performance.

II. LITERATURE REVIEW

In this research the model is replicated from Model proposed by Ward and Duray (2000) was developed using some of the empirical studies discussed earlier as shown in Figure 1. The model refers to opinions that indicate a linkage between environment, competitive strategy, Achieve good business performance. Environmental Dynamism is a rapid and unpredictable rate of external change from companies in industrial environment, such as rapid changes in technology, markets and strong competition (Dess and Beard, 1984). Jiao *et al.*, (2011) describes about four indicator to measure the level of Environmental Dynamism within a company (1). The Product/Service features desired by costumers which is Measured by the level of consumer demand for a pre-existing or new product or service. (2). The Product/Service features supplied by competitors which is measured by the frequency of discharge and the aggressiveness of new products or services issued by competitors that will affect the level of competition in the market. (3) Product Technologies in the Industry which measured by the level of technological advances in both the product / service used. The first major study referred to by Ward *et al.* (1995) examining the linkages between environmental dynamism, manufacturing strategy and performance. The results show that environmental dynamism has a positive influence on manufacturing flexibility. Subsequent studies also show the linkage between environmental dynamism and quality and delivery capability among high performance firms. The study used a path model to determine the effect of the environment on manufacturing strategy and performance, but did not include a competitive strategy in the research model.



Adopted from: Ward and Duray (2000)

Figure 1. Conceptual Model of Manufacturing Strategy

Given this research is an adoption of previous research, researchers are now developing further by adding control treatment based on industry type, firm scale (asset and size). The following table summarizes the uniqueness of this research compared to previous studies.

Table 1. Summary of Different Previous Research and This Research

No	Previous Research	Current Research
1.	The environmental context is more in its dynamics	The context of the business environment is more about its disparities that are considered more appropriate for developing countries
2	Previous research was conducted for countries that have advanced the industry	Trying to apply the model and test it in the culture of the country whose manufacturing sector is currently flaring

III. RESEARCH HYPOTHESIS

The literature review shows that, although the model of environmental dynamism, competitive strategy, manufacturing strategy, and business performance are conceptually supported, the empirical evidence in this research is lacking. This research is conducted to test the hypotheses and research questions that appear related to sequential relationship as illustrated in Figure 1 which shows the direct influence of environmental dynamism on competitive strategy (path 1a), competitive strategy with manufacturing strategy (path 1b), and manufacturing strategy with performance Business (path 1c). Simultaneous testing of these three paths is done to test the conceptual model in the operating strategy literature and show the question of whether the model is supported by the existing data. This research also examined the significant influence between environmental dynamism and manufacturing strategy (path 2) and between competitive strategy and business performance (path 3). In addition, the research also tested whether high performing firms would be better suited to existing conceptual models than those with lower performance.

Conformity of Conceptual Model

In this research the company is classified or differentiated into a high performance company class and low performance company. Based on the supporting literature it is expected that the model will be appropriate or fit for the company with relatively high performance. Low performing companies are less suited to the model. Skinner (1969) argues that the manufacturing strategy must fit the competitive strategy. Ward and Duray (2000) and also Tan, *et.al* (2012) describes a strategy process aimed at avoiding mis-alignment between marketing objectives and manufacturing capability because mis-alignment is usually caused by low business performance. Therefore, it is suspected that companies that have high business performance will follow or in accordance

with the model.

Specifically, this research was conducted to gain statistical support for the suitability of good path model in direct influence between environment, competitive strategy, and manufacturing strategy among high performance firms. The insignificant test results among high performing firms indicate that the data do not support the conceptual model.

Environmental Uncertainty and Competitive Strategy

Conceptual and empirical literature provides some evidence of the influence of environmental dynamism on the choice of competitive strategies. Competing in rapidly changing environmental conditions and indicated by increasingly short product life cycles, better informed consumers, rapid technological diffusion, customized products, and rising new competitors, require companies to set competitive strategies so that increased flexibility and productivity are achieved. Environmental uncertainty is identified as an important contingency in both conceptual and empirical studies in both competitive strategy and manufacturing strategy (Skinner, 1969, Hofer, 1975, Van Dierdonck and Miller, 1980). In this study it is shown that environmental dynamism will support in the choice of competitive strategy decisions.

Hypothesis 1a. Environmental uncertainty affects the choice of competitive strategies.

Competitive Strategy and Manufacturing Strategy

Swink and Way (1995) show that relatively few studies provide empirical evidence of the influence of competitive strategy choices on manufacturing strategies eg that manufacturing strategy is supported by the choice of competitive strategies in high-performance business businesses. Vickery et al. (1983) states that in the development of a manufacturing strategy it is important to note that low business performance is generated when manufacturing strategies are not associated with competitive strategies. Hypothesis testing is intended to identify the influence of competitive strategy choices on manufacturing strategy.

H1b: Competitive strategy influences manufacturing strategy

Manufacturing Strategy and Business Performance

Swamidass and Newel (1987) show that performance has a positive influence on the implementation of manufacturing strategy. Several studies have shown that quality is associated with good performance. Ferdows and Demeyer (1990) and Noble (1995) have argued that effective manufacturing strategies generally begin with quality as a basis. The hypothesis is tested to determine whether there is a positive effect of manufacturing capability on business performance.

H1c: A manufacturing strategy affects business performance

Environmental Uncertainty and Manufacturing Strategy

The literature cites evidence of the direct influence of environmental factors, especially environmental dynamics and manufacturing strategies. Swamidass and Newel (1987)

and Ward et al. (1995) examines the interrelation of environmental dynamism, manufacturing strategy, and business performance. From the results of his research found that companies with high performance, choose a manufacturing strategy that is consistent with the environment. Testing is also conducted to examine the existence of a direct influence of environmental dynamism on a manufacturing strategy taking into account the role of competitive strategy mediation. The coefficients for insignificant path analysis will result in a competitive strategy mediating the effects of environmental dynamism on the manufacturing strategy.

H2: Environmental uncertainty has a direct influence on manufacturing strategy

Competitive Strategy and Business Performance

Ward and Duray, 2000; Doty et al. (1993); Parnel (2013) argues that effective strategies are used to achieve high business performance. Implementation strategy is the key to the relationship between competitive strategy and company's success as measured by business performance. Some authors argue that the manufacturing strategy describes implementation by providing a more detailed picture of how competitive strategies are applied (Hatten et al., 1978, Miller, 1987). The path analysis coefficient is conducted to determine the effect of competitive strategy on the company's business performance and to test the importance of manufacturing strategy intervention in defining the linkage between competitive strategy and business performance. The insignificant path analysis coefficient indicates that the manufacturing strategy mediates the influence of competitive strategies on business performance.

H3: Competitive strategy has a direct influence on business performance.

IV. RESEARCH METHODS

Population and Sample

In this research the unit of analysis is the organization of small and medium manufacturing companies in Indonesia. Data on small and medium manufacturing companies are obtained from the Manufacturing Industry Directory published by the Indonesian Central Bureau of Statistics in 2007. This research uses industrial classification based on the Statistics of Large and Medium Manufacturing Statistics issued by the Central Bureau of Statistics, 2007. Classification based on International Standard Industrial Classification (ISIC) which has been adapted to the conditions in Indonesia under the name of Industrial Business Classification / KLUI (BPS, 2007). The classification of the company is divided into four groups: 1) large, with a workforce of 100 people or more, 2) medium, with a labor force of 20-99 people, 3) small, with a workforce of 5-19 people, and 4) Households, with a workforce of 1-4 people. Based on these criteria, the selected sample is a manufacturing company with 100 more employees or a permanent workforce. The sampling technique used in this research is simple random sampling (simple random

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sampling). This technology is used with the aim of minimizing the bias that occurs as a result of sample selection and to improve the generalization of research results. The data in this study was obtained by sending a structured questionnaire to the leaders of small and medium manufacturing enterprises in Indonesia.

Data Collection Technique

The study in this research used primary data obtained through the spread of questionnaires (mailed questionnaires) in small and medium manufacturing companies in Indonesia which is addressed to the leadership of the company as the target subject. Distribution of questionnaires conducted for one month with a limit of return for four weeks. To improve the return of the questionnaires, the researcher tried to follow the suggestions proposed by Issac and Michael (1990) with the system of free postage stamps and sending letters to the respondents.

Variables and Measurements

The level of environmental dynamism was measured using a seven-point Likert scale with the lowest score of 1 (very slow) and the highest score of 7 (very fast). A higher numerical score indicates greater emphasis and is measured on a seven-point Likert scale with the lowest score of 1 (very unimportant) and the highest score of 7 (very important). To measure the level of activity suppression in the manufacturing strategy used a seven-point Likert scale with the lowest score of 1 (greatly unaddressed) and the highest score of 7 (strongly emphasized). Business performance is seen using two measures of financial performance, such as ROI (return on investment) and ROS (Return on Sales) and manufacturing performance related to business unit position compared to its competitors. To measure the level of business performance of the company compared to its competitors used a seven-point Likert scale with the lowest score of 1 (very low) and the highest score of 7 (very high).

V. DATA ANALYSIS

Rate of Return

Companies participating in this research were eighty-eight who were all small and mid-size manufacturing companies according to the criteria used for this research. The eighty-eight companies participating in this research were selected samples and provided complete responses to the required data. The total number of questionnaires in this study were 500 questionnaires aimed at small and medium manufacturing companies. The nine companies targeted by the study provided incomplete information that could not be included in the data analysis, six companies returned for reasons unknown address or changed address.

Characteristics of Respondents

The profile of the companies participating in this research is categorized by business, long-standing operations, assets owned, and general performance achieved over the past 3 years. Of the eighty-eight companies involved in this research, most companies have been operating for 2-10 years

with a percentage of 35.23%, 26.13% in the chemical, oil, coal, rubber and plastic industries, and most companies have labor Amounting to 101-150 workers with a percentage of 14.77%

Test Validity and Reliability Test

Instrument reliability testing performed by calculating Chronbach's alpha with the rule of thumbs of the instrument is considered to have high reliability if the value of Chronbach's Alpha is higher than 0.6 (Nunnally, 1978). In addition, additional testing is also done by looking at instrument reliability instruments by calculating keofisien homegenitas. The homogeneity coefficient is the correlation between individual items and the total score of all items. The higher the coefficient the more reliably the instance. If the correlation between individual items and their total score is not significant then the item is invalid. Tables 2 - 5 present a summary of the reliability test and the validity of the instrument. The results of this study indicate high instrument reliability.

The result of the validity test for the environmental uncertainty shows the value of loading factor between 0.630 - 0.839 so that all question items are declared valid and can be used in further data analysis. For competitive strategy variables consisting of 11 items of questions that are 6 items of questions about cost leadership strategy and 5 item questions about differentiation strategy show that the value of factor loading for cost leadership between 0.614-0.795 and differentiation strategy between 0.710-0.822. There is one question item that must be excluded from the analysis because it clumps on another component of cost leadership so it is declared invalid and can not be used in further analysis.

Table 2. Test of Environmental Uncertainty Validity

KMO and Bartlett's Test	Item Question	Loading Factor
0.706	ED1	.758
	ED2	.695
	ED3	.630
	ED4	.839

Description: ED = Environmental Uncertainty

Table 3. Test of Validity of Competitive Strategy

KMO and Bartlett's Test	Item Question	Loading Factor	
		Component 1	Component 2
0.788	CS1	.675	
	CS2	.733	
	CS3	.614	
	CS4	.772	
	CS5	.795	
	CS6	.767	
	DS1		.710
	DS2		.822
	DS3		.812
	DS4		.804

Description: CS = Cost Leadership Strategy; DS = Differentiation Strategy

Table 4. Test of Validity of Manufacturing Strategy

KMO and Bartlett's Test	Item Question	Loading Factor			
		Component 1	Component 2	Component 3	Component 4
0.745	F1				,831
	F2				,824
	F3				,835
	K1	,860			
	K2	,710			
	K3	,758			
	K4	,710			
	P1		,761		
	P2		,638		
	P3		,561		
	B3			,897	
	B4			,834	

The results of the validity test for the manufacturing strategy variables (Table 6) show that the manufacturing strategy includes four dimensions of strategy that is flexibility with loading factor value (0.824-0.835), quality with loading factor value between (0.710-0.860), delivery with loading factor value between (0.561 -0.761), and cost by loading factor (0.834-0.897). There are three question items that are thrown away ie F4 with loading factor value 0.641 but clustered on quality dimensions and items B1 and B2 with loading factor values of 0.635 and 0.757 but clustered on shipping items. Table 6. shows that all question items representing firm performance are valid with loading factor of 0.521-0.926. The reliability test results are shown in Table 7 with the Cronbach Alpha values corresponding to those listed in the table.

Table 5. Test the Validity of Company Performance

KMO and Bartlett's Test	Item Question	Loading Factor
0.688	Prod	,710
	ROI	,920
	ROA	,672
	ROS	,768
	MS	,521

Table 6. Test Reliability

Variable	Cronbach Alpha
Environmental uncertainty	0.706
Cost Strategy	0.849
Differential Strategy	0.825
Flexibility	0.790
Quality	0.856
Delivery	0.707
Cost	0.898
Company performance	0.769

Hypothesis Testing Results

Multivariate multiple regression analysis (MMRA) is used for the research model and the results of model testing are summarized in Table 7 - Table 11 which discusses the results of hypothesis 1 testing, hypothesis 2, hypothesis 3, hypothesis 4, and hypothesis 5.

Table 7. Results of Hypothesis Testing 1a

Dependent Variable	Parameter	B	Std. Error	T	Sig.
Meancs	Intercept	3,632	,351	10,356	,000
	meancd	-,040	,093	-,428	,670
Meands	Intercept	3,229	,425	7,595	,000
	meancd	,004	,113	,036	,971

Hypothesis 1a examines the effect of environmental uncertainty on competitive strategies, based on data in Table

16, that the uncertainty of the environment has no significant effect on the choice of competitive strategies, partially environmental uncertainty also does not affect the choice of cost strategies and differentiation strategies. This condition is in accordance with the real conditions of small and medium enterprises in Indonesia that small and medium-sized enterprises do not pay attention to the influence of the external environment in determining the company's competitive strategy but rather focus on internal influences of firms such as labor, material and other physical assets. In other words, the usual scanning environment strategy by large companies is not done by small companies so that the environment does not have a significant influence on competitive strategy.

Table 8. Results of Hypothesis Testing 1b

Dependent Variable	Parameter	B	Std. Error	t	Sig.
Meanf	Intercept	4,179	,377	11,093	,000
	meancs	-,248	,108	-2,299	,024
	meands	,246	,089	2,763	,007
Meank	Intercept	1,868	,468	3,995	,000
	meancs	,493	,134	3,685	,000
	meands	,063	,110	,572	,569
Meanp	Intercept	3,006	,411	7,314	,000
	meancs	,132	,117	1,127	,263
	meands	,054	,097	,560	,577
Meanb	Intercept	2,668	,435	6,133	,000
	meancs	,412	,124	3,313	,001
	meands	-,130	,103	-1,265	,209

Hypothesis 1b that examines the influence of competitive strategies on manufacturing strategies is supported. Partially the effect of each choice of competitive strategy on each choice of manufacturing strategy is shown in Table 17. The test results show that both cost leadership and differentiation strategies have significant influence on flexibility strategy shown by t value at 5% confidence level of 0.024 and 0.007. The test results with the dependent variable of quality indicates cost leadership has a significant influence on quality but differentiation strategy has no significant effect on quality. It can be explained that most small and medium enterprises in Indonesia still focus on cost leadership strategies and not on differentiation strategies because the implementation of differentiation strategy requires large capital which is the main constraint of companies with small and medium scale industries.

The choice of competitive strategies for both cost leadership and differentiation does not significantly affect delivery strategies. This is because delivery speeds proxied in timely delivery may not be a priority for small and medium manufacturing companies. The choice of manufacturing strategies that focus on costs is significantly influenced by cost leadership strategies but not by this differentiation strategy has been explained in the previous discussion because the main focus of small and medium manufacturing enterprises is on cost rather than differentiation.



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Table 9. Results Hypothesis Testing 1c

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,840	,469		6,052	,000
	meanf	,048	,089	,059	,532	,596
	meank	-,102	,083	-,165	-1,233	,221
	meanp	,031	,094	,040	,326	,745
	meanb	,131	,087	,188	1,506	,136

Hypothesis 1c examines the effect of manufacturing strategy on firm performance. The result of regression with financial performance as dependent variable shows that manufacturing strategy has no effect to financial performance either partially or simultaneously. It can be explained that applying a manufacturing strategy in any form can not directly improve profitability. However, this strategy will improve the operational performance first, and regulatory toward financial improvement takes time.

Table 10. Results of Hypothesis Testing 2

Dependent Variable	Parameter	B	Std. Error	T	Sig.
Meanf	Intercept	4,449	,335	13,299	,000
	meanf	-,091	,089	-1,025	,308
Meank	Intercept	3,549	,437	8,121	,000
	meank	,065	,116	,563	,575
Meanp	Intercept	3,870	,353	10,970	,000
	meanp	-,061	,094	-,655	,514
Meanb	Intercept	3,786	,392	9,663	,000
	meanb	-,028	,104	-,272	,786

Based on Table 9 the results of the study show that the uncertainty of the business environment does not affect the flexibility strategy with cost leadership as a dependent variable, so the uncertainty of the business environment has no impact on the company's choice of flexibility strategy. The results of the study also show that the uncertainty of the business environment has no effect on the qualitative strategy, so it can be concluded that with the uncertainty of the business environment in no way affects the choice of firms to perform flexibility strategies.

The test result with the delivery variable as dependent variable indicates that the uncertainty of the business environment has no effect on the delivery strategy, so that it can be concluded on the small and medium scale enterprises the uncertainty of the business environment has no impact on the company choice to perform a reliable delivery strategy. Neither partially nor the model fit test is significant. The result of regression with GLM method with cost strategy as dependent variable indicates that uncertainty of the business environment has no effect on cost strategy and hence can be concluded that uncertain business environment has no impact on company choice to do cost strategy. Neither partially nor the model fit test is significant. Of the four models that have been tested it is concluded that the uncertainty of the business environment does not affect the company's manufacturing strategy. Thus the hypothesis 2 of this study is not supported.

Table 11. Results Hypothesis Testing 3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,983	,290		6,850	,000
	meancs	,274	,083	,353	3,306	,001
	meands	,094	,068	,146	1,372	,174

The third hypothesis examines the influence of competitive strategies on firm performance. Regression results with financial performance as a dependent variable in Table 20. show that competitive strategy simultaneously affect the financial performance, partially cost leadership affect financial performance but deference does not affect financial performance.

VI. CONCLUSIONS

Based on the findings in this study, there are several things that can be underlined: 1) Environmental uncertainty has no significant influence on the choice of competitive strategy, partially environmental uncertainty also does not affect the choice of cost strategy and differentiation strategy, 2) Test results show that both leadership strategy Cost and differentiation have a significant influence on flexibility strategy. The test results with the dependent variable of quality indicates cost leadership has a significant influence on quality but differentiation strategy has no significant effect on quality. The choice of competitive strategies for both cost leadership and differentiation does not significantly affect delivery strategies. 3) The choice of manufacturing strategy that focuses on costs is significantly influenced by the cost leadership strategy but not by this differentiation strategy has been described in the previous discussion because the main focus of small and medium manufacturing firms is on cost rather than differentiation.

1. Uncertainty of the business environment does not affect the flexibility strategy with cost leadership as the dependent variable, the uncertainty of the business environment does not affect the qualitative strategy, delivery strategy, and cost. Of the four models that have been tested it is concluded that the uncertainty of the business environment does not affect the company's manufacturing strategy.

2. Competitive strategies simultaneously affect the financial performance, partially cost leadership affects financial performance but the deference does not affect financial performance.

This research still has some limitations which may cause bias and inaccuracy of research result, include: 1) The number of companies involved in this research is relatively small compared to the population of SMEs in Indonesia, so that the model and the results can not be generalized, 2) respondent's answer To the questionnaire given by the researcher using CEO perception in answering the questionnaire questions, thus causing the common method of bias caused by the undetected problems related to whether the fields directly related to the implementation of innovation strategy have the same perception of the innovation strategy undertaken by the company, 3) This research also focuses only on the influence of business environment uncertainty does not yet cover heterogonitas and hostility of business environment, 4) The research also only consider two competitive strategy that is cost leadership and deference and not yet mem Specify the focus strategy option.

Future research needs to consider other variables that

influence the relationship of competitive strategies, manufacturing strategies with performance, such as linking with technology. The results of this research are expected to provide benefits that are: 1) As a material consideration of the company in implementing competitive strategy and manufacturing strategy to improve performance, 2) Provide direction for managers to choose the appropriate innovation strategy that is in accordance with company goals, 3) To academics and practitioners, especially in developing operational production management literature and strategic management in general.

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