

ANALYSIS ON PROSPECTOR, DEFENDER, ANALYZER AND REACTOR STRATEGY APPLICATION FOR SMALL AND MEDIUM ENTERPRISES

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ABSTRACT

In the last five years, small and medium enterprises (SMEs) received more attention from the government and banks. SMEs' ability to withstand waves of financial crisis in Indonesia, its significant contribution for national economy, and its capability in absorbing workforce made SMEs play an important part in Indonesia's economy. Every SMEs are surely implementing business strategy to keep their market share and expand their business. Using business strategy typology by Jabnoun – prospector, defender, analyzer and reactor – this research aims to map business strategy types used by SMEs in Batu city, the most used business strategy, and the result of the business strategy used on their business' success, both partially and simultaneously. The result of this research shows that prospector, defender, analyzer, and reactor business strategy partially and simultaneously affect business' success where prospector strategy being the most dominant factor.

Keywords: business strategy, small and medium enterprises (SMEs), business' success

INTRODUCTION

Small and medium enterprises (SMEs) is an integral part of the business world that has its own position, potential, role, and strategies in achieving national development goal of people-oriented economy, where the economic system leans toward society's interest instead of a small fraction of it.

The importance of SMEs can be seen from its distinct characteristics, e.g. (a) originated from traditional values and generally located in villages or rural communities, (b) informally managed, (c) owned by families or local communities, (d) workforce made up of family members or local residents, (e) less dependent on technologies, (f) the products geared toward supplying local demands and, (g) less disturbed by macro economical fluctuation since it's not dependent on imported commodities.

Meanwhile, SMEs' strategic roles in contributing for the government in macro economical scale is by its ability to absorbing less educated and less skilled workforce in local communities,

creating economic development centers in various locations and helped in shaping a stable and safe political and social environment.

With such important strategic role and potential, economic development experts suggest the government to treat SMEs as national assets with proper facilitation. A proper treatment will take SMEs a long way and strengthen its position as independent contributor in national economy.

Steps taken to ensure the goal is achieved become more vital in relation with Regional Autonomy, known as Otonomi Daerah (OTODA) and globalization issues. By OTODA, central government creates various regulations that allow faster economic development in provinces and ensuring political stability. Economic development in provinces focused on accelerating equal development and its results to ensure people's welfare, encouraging people contribution, and optimizing each province's unique potential. In relation to achieve people welfare, development is more focused in economic sector, especially in fair distribution of goods and services where SMEs directly plays important role.

From globalization aspect, SMEs is more vulnerable from the massive influx of imported goods that either cheaper or of better quality. With the saturated market, the possibility of SMEs products experience decrease in sales is high considering the preference of imported goods to local products. Without proper government preventive action (especially provincial government), local SMEs product will gradually disappears and resulting in higher unemployment rate.

The unwanted result illustrated above is fundamentally vital for SMEs to reevaluate their strategy and performance based on current condition to build their own competitive edge. Every business needs to continually improve to be able to benefit from the constantly changing trends and retains its ability to properly respond to business opportunities in timely manner (Herawati, 2003). This not only applies for major business but also for SMEs.

An effective effort to not only cementing SMEs independence, but also help it to operating in profit and contributed more for national economy requires more than government regulations. SMEs needed to understand strategy types that can support its performance in facing uncertain condition, ultimately creating a competitive advantage as the key of good business performance. A study by Jabnoun (2003) found the 4 (four) strategy typology influencing business performance, prospector, defender, analyzer, and reactor. Those four strategies considered relevant in relation to current SMEs situation. Batu as a city displays fast SMEs growth, resulting from its position as a major tourist attraction in East Java. SMEs in Batu are no exception in the four business strategies influence. This study will focus on whether the four business strategies, simultaneously and independently, contributing in business performance and which strategy has the biggest influence.

LITERATURE REVIEW

Strategic Management Process

Strategic management process consists of four basic elements, environment analysis, strategy development, strategy implementation, and evaluation and control (Hunger and Wheelen, 2001). Business everywhere always related to and interacts with an ever-changing environment. Naturally, it has to be able to adapt and utilize every opportunity presented by the changing environment.

Analysis and strategy development is a management process of analyzing and deciding which strategy alternatives will be suitable for the company. Company can utilize SWOT (Strength, Weakness, Opportunity, Threat) analysis in deciding which strategy to be utilized to achieve desired business result.

Strategy implementation process is executing the decided strategy while the evaluation process compares the expected and the actual result and any discrepancies will be investigated and resolved by the management.

Strategic management is a companywide activity, performed by every management level. Thompson & Strickland (1998:44) classified strategy hierarchy based on the business type: (a) Corporate strategy is a specified strategy for company with various business lines, (b) Business strategy/competitive strategy, used mostly by companies with single business line and directly related to product/service in the market, (c) Functional strategy, strategy related to business departments' role in implementing corporate and business strategy and (d) Operating strategy, a more limited strategy, continuously implemented in daily operation.

Alternatively, Hunger & Wheelen (2001) stated that a multi-vision company normally utilizing three strategies, (1) corporate strategy, (2) business strategy, (3) functional strategy. (1) Corporate strategy envisions the company's direction and its general approach for growth and managing its various business lines to create a balanced product and service portfolio. (2) Business strategy/competitive strategy developed at department/division level and emphasized on improving product and service competitive advantage in the market. This strategy focused on profit increase from production and sales and integrating operational activities. (3) Functional strategy emphasizes on optimization of productivity and resource. Within the company and the business strategy, a functional department develops a strategy to organize various activities and competence to increase performance. The three strategy levels – corporate, business, and functional – form a strategy hierarchy in a company. These strategies simultaneously and closely interact and need to be integrated properly for a better performance.

Strategy Types

In analyzing intensity of industry competition or strategy types, it is important to recognize competitor to predict their goals. Miles and Snow (1978) stated that competitors can be classified by their general strategy direction to four basic strategy types. Each type characterized by a main strategy to withstand pressure from environment and combines a consistent structure, value and process. The difference between the strategy types will explain different reaction among companies toward the same situation and maintain the reaction for a relatively long time. Miles and Snow (1978) suggested that an organization build a systematic behavior pattern and identifiable to environment change. Main element of adaptation and the relationship defined as adaptive cycle. The cycle adapts different business strategy and represents organization's response toward competitive environment. Organizational strategy addressing three problems in the adaptive cycle. Those are entrepreneurship, technical skill, and administrative skill.

Entrepreneurship problem related on how organization oriented itself to market and related to product. Technical skill problem referring to organization's technical system on the technology utilized to manufacturing goods and rendering service. Administrative skill problem is how an organization coordinates and implements its strategy, a structure, control, and process issue. Miles and Snow (1978) states that there are four types of strategies, prospector, defender, analyzer, and reactor.

(a) Prospector: Strategy focused on inventing and exploiting new product and market opportunity. Innovation prioritized over profit. Prospector strategy focused on product innovation and market opportunities. Companies adopting this strategy tend to emphasize on creativity and flexibility than efficiency and quickly responds to market changes and benefit from new market opportunity. Orientation towards sales made an inefficient company; Stathakopoulos (1998) in Jabnoun, *et al* (2003:21) stated that a prospector organization using a more informal and decentralized structure to be more flexible and responsive towards changes, (b) defender: this strategy analyzes market stability and offered a limited product line for potential market niche. Defender classifies market and focused on hardly penetrable market

niche. They usually compete based on price, quality, delivery, and service and concentrated on operational efficiency and strict cost control to keep their competitive edge. Orientation on price made the company less inclined to innovate in new territories. Stathakopoulos (1998) in Jabnounet *al* (2003:21) stated that the structure and process of defender companies is formalized and decentralized. The organization took standard measures such as competitive price or high quality product.

(c) Analyzer combines both prospector and defender by minimize risk and maximizing opportunities. The strategy is only moved to new product or new market after proven success by prospector. Analyzer lives by imitation, taking successful ideas from prospector and imitates it. At the minimum, analyzer operates in two market areas, a stable one where they emphasize on efficiency and a variable one where innovation is encouraged. The organization structure is complex, resulted from the wide variety of market where they operate. An analyzer organization combines mechanistic and organic structure and (d) reactor: a residual strategy. The name given to explain the inconsistent and unstable pattern resulted if one of those three strategies pursued incorrectly. Reactors mostly react inappropriately and negative result making them reluctant to commit to any specific strategy in the future. Reactors reacted toward environmental change, changing strategy only when faced with pressure. Reactors also characterized by the lack of coherent strategy and inability to quickly respond to change.

Business' Success

Hisrich and Peter (1998) stated that there are two things that needs to be taken care of in building a successful business, (1) financial control, by minimizing cost and maximizing sales, and (2) human resource management by recruiting, motivating, and directing them to be a strong team.

Meanwhile Tambunan (2002) stated that SMEs business success can be observed from several aspects: (a) the importance of job opportunity creation to measure a business' success. With more workforce absorbed, SMEs' contribution in reducing unemployment becomes more important. More workforces also translate to higher productivity. (b) Contribution to Gross Domestic Product (GDP) by increasing national sales both domestic and overseas.

SMEs considered being successful based on increased profit over time. Higher sales amount also indicates increase of performance of the company. This study uses Tambunan (2002) measurement, growth of workforce and growth of sales.

SMEs

BPS Indonesia classifies companies with 1-4 workforce is a home industry, 5-19 workforce as small industry, while Department of Industry and Trade and Bank of Indonesia defines SMEs by asset value, small industry are companies with asset value (excluding land and building) less than 600 million rupiah and the working capital less than 25 million rupiah.

Those two categorizations illustrated the variation of SMEs classification applied in Indonesia. This study uses SMEs categorization to BPS, Department of Industry and Trade, Bank of Indonesia and UU No 9 year 1995: (1) Asset value less than or equal to 200 million rupiah (excluding land and building), (2) annual sales less than or equal to 1 billion rupiah, (3) owned by Indonesian citizen, (4) Not a subsidiary or branch office, (5) personal company and managed by the owner, (6) amount of workforce less than 20, (7) working capital less than Rp 250 million.

Three hypotheses proposed in this study, the first one being prospector, defender, analyzer and reactor strategy, both simultaneously and partially, influence Batu city SMEs' business success, the second is prospector, defender, analyzer and reactor strategy partially influence Batu City SMEs' business success and the third is prospector strategy dominantly influence Batu City SMEs' business success.

RESEARCH METHODS

Data used in this study are: (1) primary data acquired from questionnaire distributed to SMEs, (2) secondary data in the form of list of names and addresses from Batu City Disperindagkop office. Instrument used in this study is questionnaire distributed to respondents, supported by interviews and observation. The questionnaire a closed question with multiple choice questionnaire and directly distributed to respondents.

The population for this study is 447 government-licensed SMEs in Batu area. Sampling method using simple random sampling using Umar (2000:68) formula:

$$n = \frac{N}{1 + N(\alpha)^2} = 211$$

Questions in the questionnaire designed to be related with the implementation of the four business strategy, prospector, defender, analyzer and reactor based on Miles and Snow (1978). There are 3 (three) indicators assigned for each strategy with 4 (four) questions for each indicators resulting in 48 questions used as the basis for the data analysis. Respondents are required to scale their perception using five-point Likert scale started from 1 “strongly disagree” to 5 “strongly agree” (Sekaran, 2003). Business performance also measured by: (a) growth of workforce, calculated using the following formula: $\frac{\text{Number of workforce}_{(t)} - \text{number of workforce}_{(t-1)}}{\text{number of workforce}_{(t-1)}}$ (b) growth of sales ($Y_{1,2}$), calculated using formula: $\frac{\text{sales amount}_{(t)} - \text{sales amount}_{(t-1)}}{\text{sales amount}_{(t-1)}}$ in the last five years, averaged using ratio scale. Prior to data analysis, validity test is performed using Pearson’s product-moment correlation model (Ghozali, 2006:47) and reliability test using Alpha Cronbach model (Nunnally, 1967 in Ghozali 2006:42).

Data obtained analyzed using multiple linear regression analysis (Ghozali, 2006:85) using the following formula.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

where:

Y = business’ success

X1 = prospector strategy

X2 = defender strategy

X3 = analyzer strategy

X4 = reactor strategy

β_0 = constants

β_1, \dots, β_4 = coeff. variable regression X1, ..., X4

e = residual error

For the regression model to be able to function as estimator, classical assumption should be fulfilled. Classical assumptions that considered important to be tested in a regression analysis by Ghozali (2006:91-110) are: (a) multicollinearity test, used to determine whether there are correlation within variables, (b) heteroscedasticity test to determine whether any variance discrepancies among observations.

RESULT

Instrumental Test

Validity test result shows that between tested variables, using Pearson’s product-moment correlation model, p value less than α 0,05 which means obtained information is valid. Instruments determined as reliable if the Alpha Cronbach above 0.6. Reliability test result of 48 instruments are valid with Alpha Cronbach value $0.765 > 0.6$, thus the instrument is valid and reliable

Variable Description

To describe prospector, defender, analyzer and reactor strategy, each strategy broken down in 3 (three) indicators with 4 (four) questions each. The result of each question analyzed and presented below:

Table 1. Frequency Distribution Variable(X₁)Prospector

Respondent Answer	Score	X _{1,1}		X _{1,2}		X _{1,3}	
		F	%	f	%	f	%
Never	1	-	-	-	-	-	-
Rarely	2	1	0.44	1	0.44	-	-
Sometimes	3	48	22.75	50	23.27	47	22.75
Often	4	126	58.30	127	58.31	128	58.32
Always	5	37	18.51	32	17.57	36	18.49
Total		211	100	211	100	211	100

Table 2 shows that (1) 58,30% often inventing new product ideas, new opportunities, creating previously not existed and try to offer new product to the market, (2) 58,31% quickly responds new market opportunity, aiming to be main player in the market, trying to expand market share without regard to competitor and try to responds faster than competitors and (3) 58,32% emphasize on production flexibility than efficiency, has flexible business structure, flexible product line and flexible in responding to uncertain market condition.

Table 2. Variable Description X₂ (Defender)

Respondent Answer	Score	X _{2,1}		X _{2,2}		X _{2,3}	
		F	%	f	%	f	%
Never	1	-	-	-	-	-	-
Rarely	2	-	-	-	-	-	-
Sometimes	3	39	18.44	35	16.59	35	16.59
Often	4	132	62.10	136	63.95	133	63.05
Always	5	40	18.96	40	18.96	43	20.37
Total		211	100	211	100	211	100

Table 3 shows that: (1) 62.10 % concentrated on limited product line, emphasizing on better product quality from competitor, emphasizing on better service quality from competitor, emphasizing on better price from competitor (2) 63.95% operated in a specific market, market products to specific market segment, keeping a stable market environment, able to identify its market niche and(3) 63,05% emphasized on work efficiency, emphasized on production efficiency, efficient work structure, and efficient human resource management.

Table 3. Variable Description X₃ (Defender)

Respondent Answer	Score	X _{3,1}		X _{3,2}		X _{3,3}	
		f	%	f	%	f	%
Never	1	-	-	-	-	-	-
Rarely	2	1	0.48	1	0.48	-	-
Sometimes	3	42	19.91	43	20.38	49	23.22
Often	4	131	62.01	133	63.03	130	61.61
Always	5	49	17.50	34	16.11	32	15.17
Total		211	100	211	100	211	100

Table4 describes (1) 62.01 % observing new products from competitor, developing new product that positively responded by the market, improving existing product to suit market demand, and continuously improve existing product. (2) 63.03 % carefully analyze market trends, continuously observing market leader, observing market response toward new product, entering new market after ensuring its stability and (3) 61,61 % observing competitors, analyzes competitor mistake, improving mistakes made by competitor,and adopting competitor strength.

Table 4.Variable Description X₄ (Reactor)

Respondent Answer	Score	X _{4.1}		X _{4.2}		X _{4.3}	
		f	%	f	%	F	%
Never	1	2	0.95	2	0.95	1	0.47
Rarely	2	47	22	45	21.33	41	19.43
Sometimes	3	118	56.20	101	47.86	126	59.72
Often	4	41	19.43	60	28.43	43	20.38
Always	5	3	1.42	3	1.42		
Total		211	100	211	100	211	100

Table5describes: (1) 56,20 % develop new product based on market pressure, lacking response toward competitor’s new product, ignoring continuous product development strategy, has no clear product orientation. (2) 47.86 % develop similar market strategy with competitor to minimize risk, has no clear and consistent market orientation, not aggressively marketing product, provide simple reaction to change and (3) 59.72 % rarely focusing on competition strategy, rarely focusing on business vision and mission, rarely responds to competitor strategy and unable to keep up with competitor strategy.

Classical Assumption Test

The result of the test presented below:

Multicollinearity test resulted in *VIF*value less than 10, meaning there is no multicollinearity. This shows no correlation among independent variable.

Table 5. Multicoliniarity Test Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2,912	1,075		2,709	,007		
	X1	,542	,148	,643	3,367	,000	,928	1,078
	X2	,323	,118	,238	2,274	,028	,917	1,090
	X3	,218	,112	,276	2,194	,033	,955	1,047
	X4	,160	,144	,177	2,479	,027	,966	1,035

a. Dependent Variable: Y

Heteroscedasticity test result using scatterplotmethod shows scattered result and no identifiable pattern and no heteroscedasticity.



Figure 1. Heteroscedasticity Test – Scatterplot

Normality test result using Kolmogorof-Smirnov model shows value 0,496 or less than α 5% meaning the data distributed normally.

Table 6. Normality Test Result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		211
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,36255048
Most Extreme Differences	Absolute	,087
	Positive	,087
	Negative	-,047
Kolmogorov-Smirnov Z		,830
Asymp. Sig. (2-tailed)		,496

a. Test distribution is Normal.

b. Calculated from data.

Regression Analysis

Data analysis resulted in the following regression result from four independent variables and one dependent variable as presented below:

Tabel 7. Result of Multiple Linear Regression Analysis

Variable	B	t	Sig.t	Result
Constants	2.912	2.709	0.000	Significant
<i>Prospector</i> (X1)	0.542	3.367	0.000	Significant
<i>Defender</i> (X2)	0.323	2.274	0.028	Significant
<i>Analyzer</i> (X3)	0.218	2.194	0.033	Significant

Reactor(X4)	0.160	2.479	0.027	
R Square	0.744			
Adjusted R Square	0.795			
Sig. F	0.000			

Based on the table, the regression formula is:

$$Y = 2,912 + 0.542 X_1 + 0.323 X_2 + 0.218 X_3 + 0.160 X_4 + e$$

Where:

Y = business success

X1 = prospector strategy

X2 = defender strategy

X3 = analyzer strategy

X4 = reactor strategy

β_0 = constants

β_1, \dots, β_4 = variable regression coefficient X1.....X4

e = error

Based on the above formula, prospector, defender, analyzer and reactor strategy positively correlate to SMEs business success.

Regression result shows that 74,40 % (R Square = 0,744) of SMEs business success influenced by prospector, defender, analyzer, and reactor strategy implementation, while the rest influenced by other variables not included in this study.

Hypotheses Test

Data analysis shows that p value Sig. F 0.000 less than α 0,05, means hypothesis that prospector, defender, analyzer and reactor simultaneously influencing SMEs business success. With this result, the first hypothesis is accepted. The analysis result also shows that prospector shows $t_{count} 3.367$ and $sig.t = 0.000$ less than $\alpha = 5\%$ meaning prospector strategy significantly influencing business result.

Significant influence of defender strategy variable on business success explained by concentrated effort on certain product line when a company decided that they will create a focused product with emphasis on product quality. X_{2,1,3} emphasizes on better service value and competitive price while for focused market companies will market their product in a niche market and maintaining a stable market environment. On efficiency issues, companies tend to focus on production, business structure, and human resource efficiency.

Significant influence of analyzer strategy variable on business success can be observed when a company maintaining a continuous product they will analyze new product or services presented by competitor and improving the product or existing ones to get better response and continuously developing product. Analyzers also carefully analyze market trend and its response on new product launch and enter a market when it has been stabilized.

Significant influence of reactor strategy variable on business success observed during product launch based on market pressure and its relation with competitor product. Reactors mostly show little to no clear product orientation and development strategies. In relation with market anticipation, reactors shows lack of strategy and consistent market orientation. Products were not marketed aggressively and response on market change is often simple.

Overall, the four independent variables significantly influence business success. This result agrees with McCann et al (2001) and Vargas (2001) where prospector strategy has more significant influence to business success compared to other strategies. Outward oriented strategy responds better to customer and resulted in better financial result and market share. Conclusively, to win the market competition, SMEs encouraged implementing strategies where prospector shows the best result.

CONCLUSION

Prospector, defender, analyzer and reactor strategy, both simultaneously and partially, influence SMEs' business success with the most dominant strategy is prospector.

Prospector, defender, analyzer and reactor strategy, partially influence SMEs' business success and with most dominant strategy is prospector.

SMEs owner should consider prospector, defender, analyzer and reactor strategies in business development decision making process.

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