ISSN: 2456-9348
Vol (02) _Issue (05) Impact Factor: 4.520

iJETRM
International Journal of Engineering Technology Research & Management

IMPROVING THE BUSINESS PERFORMANCE OF SMALL-MEDIUM ENTERPRISES IN INDONESIA THROUGH IMPROVEMENT IN THE COMPETITION STRATEGY

Nurul Hermina[*1]
IGNM Jaya[2]
[*1]Faculty of Business Management, Widyatama University, Indonesia
[2]Department of Statistics, Universitas Padjadjaran, Indonesia
hermina.nurul@gmail.com
mindra@unpad.ac.id

ABSTRACT
Small-Medium Enterprises (SME) or in the Indonesian language Usaha Mikro Kecil Menengah (UMKM) can be the solution to reduce the level of unemployment in Indonesia, therefore, improving business performance of SME has always been the focus of the government. This research is aimed to analyze business strategies applied by SME to improve their business performance. The analysis technique used was Structural Equation Modelling with variance based approach known as Partial Least Square Path Modelling (PLS-PM) The model calculation utilized software XLSTAT 2017. The data for this research were collected through web survey involving 94 Small Medium Enterprises. The research analysis indicated that business strategy variable had a positive and significant influence on the business performance of SME. The result can be used as a reference to improve the business performance of SME fostered by PT. Telkom Indonesia.

Keywords:
PLS-PM, SME, UMKM, XLSTAT

INTRODUCTION

Indonesian economy cannot be separated from the roles of Small Medium Enterprises (SME). Within the last five years, SME has given a high contribution towards the growth of Indonesian economy. Within this period, the contribution towards the Gross Domestic Product (GDP) has reached 57.84%; while towards the economic growth has come to 60%. SME has also become the strategic solution to reduce unemployment. It is recorded that SME is able to absorb a workforce of around 16 million people.

Yet, in order to be able to succeed in global industry competition, there some problems faced by SME that need serious attention from the government. The problems that come up are related to: marketing capability - mainly in promoting, brand setting and packaging, and setting the right market segment; product diversification (lack of capability of creating unique products); quality and competence of human resources; access towards capital; capability in human resources and finance management; innovation and creativity; and another aspect, i.e.: a tight business competition. Although all SME have applied various strategies in improving their business performance, it seems that the strategies applied have not yet given a maximum result.

Business performance is an output or result of the implementation of all activities related to business operation [1]. The indicators of SME's improvement in business performance are the growth of sales and profitability. In addition, stated that a good company needs to have a measurement system of business performance which is comprehensive and systematic with strategy mapping on four perspectives: (1) Financial Perspective, (2) Customer Perspective, (3) Perspective of Internal business process, and (4) Perspective of learning and growth ([2],[3]).

Business strategies play a very important role for companies to place them in the right competition strategy within the industry ([4],[5]). Business strategies are the decision to focus on the competitive level of the product/service of companies within the industry or certain market segment served by the ([6]-[8])

METHODOLOGY

This research is aimed to analyze the relationship between business strategies towards the business performance of SME. Business performance of SME is an output or result of the implementation of all activities related to business operation supported by the right business strategies. The research methodology is using the approach

iJETRM
International Journal of Engineering Technology Research & Management

from Management in Economics which is focused on Management Strategy with the level of management understanding towards the company's capability, business strategy, and business performance. Hence, based on the purpose of this research, i.e.: to obtain a picture or description of variables being studied, and to find out the relationship among variables; this research is a descriptive one and a verification.

Research Hypothesis

This research is to test the hypothesis related to the business strategy towards the business performance of SME in Indonesia.

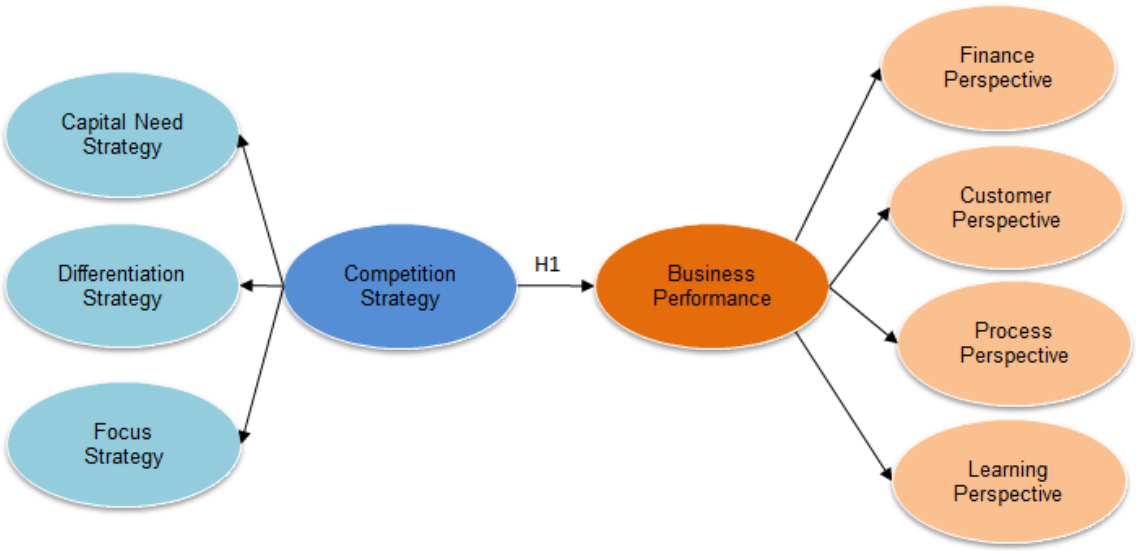


Fig. 1: Research Paradigm

Population and Sample

The population of this research is SME in 7 regions in Indonesia covering Sumatera, West Java, Central Java, East Java, Jakarta, Balikpapan, and Kalimantan with 5457 respondents. Based on data collection through web-based technique, the total sample obtained was 94 types of SME.

Research Variable

There are two research variables used in this study. Each variable consists of several dimensions and indicators.

Table 1: The Operation of Research Variable

Variable	Dimension	Indicator
Competition Strategy	Capital Need	2
	Differentiation	3
	Focus	4
Business Performance of SME	Financial Perspective	2
	Customer Perspective	2
	Business Process Perspective	3
	Learning Perspective	3

The Technique of Data Analysis

Data analysis method used to test the hypothesis is Structural Equation Modeling (SEM) technique. This model is used to find out the pattern of relationships between variables to find out the direct or indirect influence of a set of free variables (exogenous) towards bound variables (endogenous) [9].

iJETRM
International Journal of Engineering Technology Research & Management

The reason why SEM technique is implemented is that the purpose of this research - which is to find out the influence of exogenous variable towards endogenous variable - involves latent variables that cannot be measured directly but only through the use of dimension and indicator. The influence among variables that will be tested is built up based on a certain theoretical frame that is able to describe the quality relation among the variables [9].
SEM analysis is used to test the relation model among variables in the form of cause-effect (*causing-modeling*). Hence, within the relation model among the variable, there will be independent variable (free) and the dependent variable (bound).
The SEM analysis technique used in this research is Partial Least Square Path Modeling (PLS-PM) because the size of the sample is less than 200 [9]. The main purpose of PLS implementation is to predict. Other than predicting, another purpose of implementing PLS is to confirm a theory and explain whether or not there is a relationship between the latent variables. The focus of PLS is to maximize the variance of dependent variables explained by the independent variables as the substitute in resulting empiric covariance matrix.
The model that will be estimated in this research is:

$$\eta_1 = \gamma_{11}\xi_1 + \zeta_1$$

with:
η_1: SME Business Performance
ξ_1: Competition Strategy
γ_{11}: The influence of competition strategy towards SME business performance
ζ_1: Model error

PLS-PM consists of two models: measurement model and structural model. Measurement model analysis covers validity and reliability analysis.

Validity Analysis
Validity Analysis is the co-relation analysis of item and dimension. A validity coefficient which is greater than 0.500 shows that the indicator is valid ([9]-[11]).
Validity coefficient is measured using the following formula [10]:

$$Cor^2(x_{jh}\xi_j) = \frac{n\sum_{i=1}^{n} x_{ijh}\xi_{ij} - \sum_{i=1}^{n} x_{ijh}\sum_{i=1}^{n}\xi_{ij}}{\sqrt{\left[n\sum_{i=1}^{n} x_{ijh}^2 - \left(\sum_{i=1}^{n} x_{ijh}\right)^2\right]\left[n\sum_{i=1}^{n}\xi_{ij}^2 - \left(\sum_{i=1}^{n}\xi_{ij}\right)^2\right]}}$$

with
x_{jh}: the ke- h item of the ke- j dimension
ξ_j: the ke-j dimension

Reliability Analysis
Reliability analysis commonly used is composite reliability (CR) and Average Extracted Variance (AVE) [11].
a. Composite Reliability
Composite Reliability is formulated as under:

$$\text{CR} = \frac{\left(\sum_j^J l_j\right)^2}{\left(\sum_j^J l_j\right)^2 + \sum_j^J (1 - l_j^2)}$$

with
R: Coefficient Composite Reliability
J: the number of indicators
l_k: Standardized loading factor
b. Average Extracted Variance
AVE is formulated as under:

$$\text{AVE} = \frac{\left(\sum_j^J l_j^2\right)^2}{J}$$

iJETRM
International Journal of Engineering Technology Research & Management

A questionnaire is considered having good reliability is the value of CR is greater than or equal to 0.700 and AVE > 0.500 [9].

Structural Model

Structural Model is a regression model for latent variable. The regression coefficient is obtained with ordinary least square (OLS) method:

$$\hat{\beta} = (\xi^t \xi)^{-1} \xi^t \eta$$

with

$\hat{\beta}$: Coefficient of the influence of exogenous variable towards endogenous variable
ξ: Exogenous variable
η: Endogenous variable

The goodness of Fit Index

The goodness of fit index is a descriptive measurement used in PLS to evaluate the quality of the model constructed. There are four evaluation measurements namely [11]:

Tabel 2. The goodness of Fit Criterion

Criterion	Formulation
1. Absolute	$AbsGoF = \sqrt{\frac{1}{J}\sum_j \sum_j Cor^2(x_{jh}\xi_j)} \times \sqrt{\frac{1}{\#Endogenous\ LV} \sum_{Endogenous\ \ LV} R^2(\xi_j : \xi_i\ explaining\ \xi_j)}$ where $J = \sum_j p_j$
2. Relative	$RelGoF = \sqrt{\frac{1}{J}\sum_j \frac{\sum_j Cor^2(x_{jh}\xi_j)}{\lambda_j}} \times \sqrt{\frac{1}{\#Endogenous\ LV} \sum_{Endogenous\ \ LV} \frac{R^2(\xi_j : \xi_i\ explaining\ \xi_j)}{\rho_j^2}}$ With: λ_j : eigen value calculated from PCA block ke-j ρ_j : the first canonical correlation between j^{th} block of dethe pendent variable with all block *i* that explains *j*
3. Outer	$OuterGoF = \sqrt{\frac{1}{J}\sum_j \frac{\sum_j Cor^2(x_{jh}\xi_j)}{\lambda_j}}$
4. Inner	$InnerGoF = \sqrt{\frac{1}{\#Endogenous\ LV} \sum_{Endogenous\ \ LV} \frac{R^2(\xi_j : \xi_i\ explaining\ \xi_j)}{\rho_j^2}}$

RESULT OF ANALYSIS

Competition strategy is hypothesized to have a positive influence towards company business performance (David et al, 2009). To prove the hypothesis, Structural Equation Modelling of the influence of competition strategy towards business performance of SME has been constructed. The Structural Equation Modelling used in this study is a model based on variance structure because the size of the sample is less than 100.

Structural modeling has two phases of analysis, namely: measurement model analysis and structural model analysis. Measurement model analysis is related to validity analysis and indicator reliability used to measure the dimension or research variable; structural model analysis, on the other hand, explains the influence of competition strategy towards the business performance of SME in Indonesia. However, before structural

iJETRM
International Journal of Engineering Technology Research & Management

modeling is carried out, there is an analysis on the suitability of the model constructed with the data that have been collected using Goodness of Fit Index.

Tabel 3. The goodness of Fit Index

	GoF
Absolute	0.652
Relative	0.838
Outer model	0.993
Inner model	0.843

The goodness of fit index consists of four criteria, i.e.: absolute, relative, outer model dan inner model. The value of Goodness of fit approaching 1 indicates that the model suits the data The result of the analysis shows that all the four criteria of GoF have the value which is more than 0.500; and, more precisely, it can be derived that it is closer to 1, thus, it can be considered that the model is able to represent well the research data or phenomena being studied. Another measurement used is predictability $Q^2 = 1 - (1 - R^2)$. The result of the analysis describes that the determination coefficient of the model constructed is 0.658, so that the value of $Q^2 = 1 - (1 - 0.658) = 0.658$. The value of Q^2 which is approaching 1 also indicates that the model is able to verify the phenomena being studied. The analysis results in the value of $Q^2 = 0.658$, a figure which is great enough to confirm that the model suits the data.

Measurement Model Analysis

Measurement model analysis is performed to find out the validity and reliability indicator in measuring the dimension; and the dimension in measuring the research variable. The indicator and dimension are confirmed valid if the loading factor (validity coefficient) is greater than 0.500 and considered reliable if the Composite Reliability (CR) is greater than 0.700 and the value of AVE is greater than 0.500. Analisis These analyses are also used to figure out the most important items or dimensions in measuring the research variables so that they are able to be used as a reference to improve company business performance

Table 4. Analysis of Validity and Reliability Indicator of Competition Strategy Variable

Dimension	Indicator		Coeff. Validity	R^2	t-value	C.R	AVE
Capital Need Strategy	Control operational cost efficiently	X1	0.913	0.833	29.357	0.799	0.669
	Setting up prices lower than competitor	X2	0.711	0.506	6.352		
Differentiation Strategy	Improvement in product quality through bundling product which was more interesting and different from products in the market so that customers were willing to pay more than competitors	X3	0.811	0.658	11.803	0.890	0.731
	Providing after sales service which was more responsive and different from competitors	X4	0.882	0.779	26.256		
	Producing more varied products than competitors	X5	0.869	0.755	32.394		
Focus Strategy	Setting up a certain market segment (customers which were not yet penetrated by competitors) as the target market	X6	0.855	0.732	25.197	0.867	0.621
	Serve the customers' need and demand with products suitable to the market segment	X7	0.765	0.585	13.097		
	Serve a particular segment with different treatment/service	X8	0.852	0.726	26.814		
	Serve a certain segment with a lower price	X9	0.665	0.443	7.264		

iJETRM
International Journal of Engineering Technology Research & Management

The analysis shows that all indicators used to measure each dimension in competition strategy variable has a loading value greater than 0.500, and the value of t calculated is greater than t table at the signification level 5% and a free level of 92 (1.986). This result confirms that all indicators are valid. In addition, all indicators also have a high level of reliability with CR and AVE value for each dimension greater than 0.700 and 0.500 respectively.
Based on the analysis, it is found out that the most important indicator in measuring Capital Need Strategy dimension is an indicator of Controlling Operational Cost efficiently. In case of Differentiation Strategy dimension, the most important is an indicator of Producing more product variants than the competitors; while the most important indicator for Focus Strategy dimension is Setting up certain market segment (customers which have not yet been penetrated by competitors) as the target market.

Tabel 5. Analysis of Validity and Reliability Indicator from the Variable of SME Business Performance

Dimension	Indicator		Standardized loadings	R^2	t-value	CR	AVE
Finance Perspective	Achievement of sales target	Y1	0.957	0.917	69.082	0.957	0.917
	Achievement of profit growth targeted	Y2	0.958	0.918	85.080		
Customer Perspective	Success in increasing the number of new customers	Y3	0.898	0.807	37.612	0.863	0.760
	Success in maintaining customers	Y4	0.844	0.712	13.148		
Business Process Perspective	Success in improving products and product reliability	Y5	0.799	0.639	13.158	0.900	0.750
	Success in more responsive after sales service	Y6	0.896	0.802	41.173		
	Succeed to operate efficiently	Y7	0.900	0.810	34.584		
	Improvement in human resources competence	Y8	0.893	0.797	42.067		
Perspektif Pembelajaran Learning Perspective	Ability to accommodate fast-changing technology and information system	Y9	0.788	0.621	12.397	0.886	0.723
	Leadership pattern that is able to motivate employees to achieve goals	Y10	0.866	0.751	29.158		

The variable of business performance of SME also shows that all indicators are valid and reliable. All indicators in each dimension have relatively the same level of importance.
Further, the analysis of validity and reliability dimensions in measuring the research variables is performed.

Tabel 6. Analysis of Validity and Reliability Dimension of Competition Strategy Variable

Dimension	Standardized loadings	R^2	t-value	CR	AVE
Cost Leadership Strategy	0.727	0.528	12.170	0.831	0.621
Differentiation Strategy	0.796	0.634	15.702		
Focus Strategy	0.837	0.701	16.877		

The result shows that all dimensions are valid and reliable in measuring Competition Strategy variable with validity coefficient value greater than 0.500 and reliability coefficient CR greater than 0.700 and with reliability AVE greater than 0.500. The analysis indicates that the most dominant indicator in measuring Competition Strategy variable is Focus Strategy.

iJETRM
International Journal of Engineering Technology Research & Management

Tabel 7. Analysis Validity and Reliability Dimension of SME's Business Performance Variable

Dimension	Standardized loadings	R^2	t-value	CR	AVE
Financial Perspective	0.853	0.728	21.000	0.922	0.748
Customer Perspective	0.838	0.703	23.448		
Business Process Perspective	0.891	0.794	32.192		
Learning and Improving Human Resource Competence Perspective	0.876	0.768	41.545		

The analysis shows that all dimensions are valid and reliable in measuring the variable of business performance with validity coefficient greater than 0.500 and reliability coefficient CR greater than 0.700 and with AVE reliability greater than 0.500. The result indicates that the most dominant indicator in measuring Business Performance Variable was the Business Process Perspective.

Structural Model Analysis

After the analysis of measurement model, the structural model analysis is conducted to find out signification influence of Competition Strategy towards SME's Business Performance. The diagram of paths that have been estimated is described in the following picture:

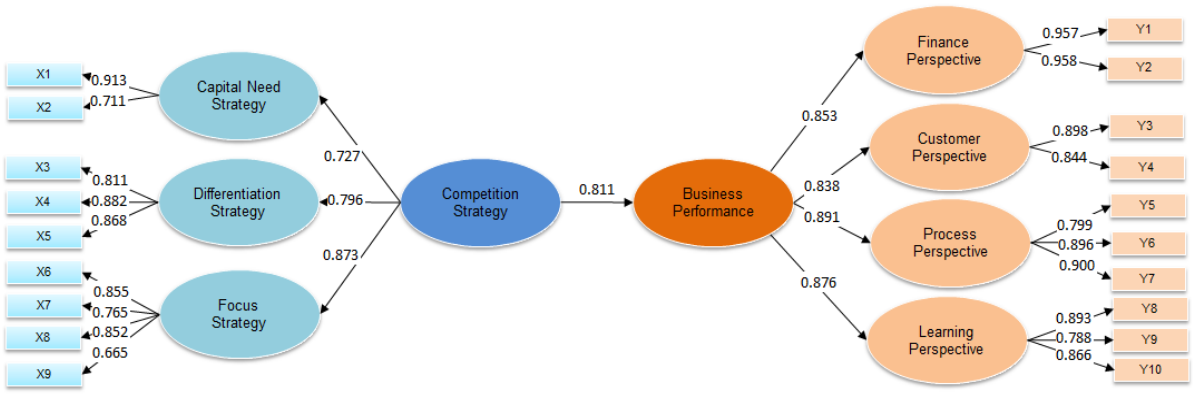


Fig. 2:- Path Diagram of the Influence of Competition Strategy towards SME's Business Performance

Tabel 8. Degree of Influence

Latent variable	Value	Standard error	t	Pr > |t|	f^2
Competition Strategy	0.811	0.061	13.309	0.000	1.925

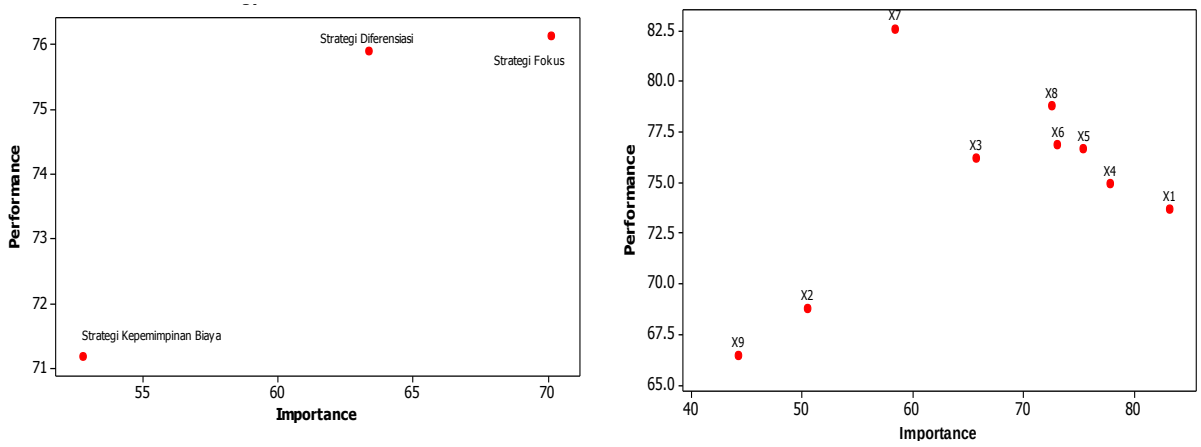
The analysis result pictures that Competition Strategy has the influence as big as 0.811 deviation standard towards company business performance. The result describes that the change in Competition Strategy results in positive influence towards company business performance. The influence can be defined as signification at signification level 5% with p.value =0.000 smaller than 0.500. The value of f^2 1.925 indicates that the size of the effect of Competition Strategy towards Business Performance is categorized moderate.

Tabel 9. Determination Coefficient

R^2	F	Pr > F
0.658	177.127	0.000

Determination coefficient 0.658 shows that 65.8% variability of company business performance is influenced by Competition Strategy developed by SME in Indonesia. This analysis can be connected with the importance analysis and performance of each dimension and indicator as shown in the following pictures:

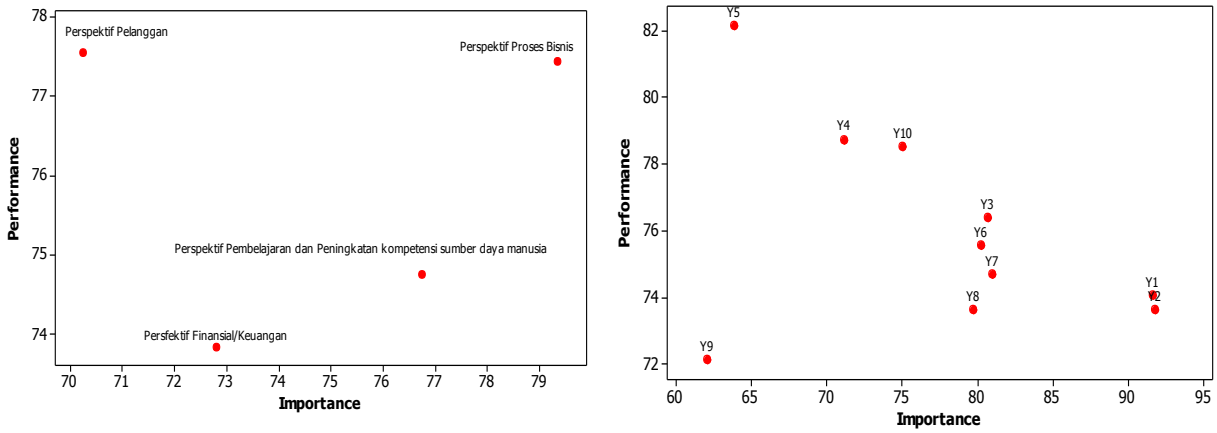
iJETRM
International Journal of Engineering Technology Research & Management



(a) Dimension Level (b) Indicator Level

Fig. 3: *Performance and Importance analysis of Business Strategy*

The analysis describes that the most important dimension for Competition Strategy is Focus Strategy, and performance for Focus Strategy is categorized high. On the other hand, Cost Leadership Strategy has the lowest performance score and does not become the priority. Hence, it can be concluded that to improve company business performance the focus has to be improving the Focus Strategy by emphasizing on X8 indicator (Serving certain market segment by giving different treatment/service) pada Gambar 3(b) as shown in Picture 3(b), in which this indicator becomes the most important indicator.



(a) Strategi Bersaing Competition Strategy (b) Kinerja Bisnis Business Performance

Fig. 4: Performance and Importance analysis of Company Performance

The analysis result on the Business Performance variable provides a picture that the most important dimension is Business Perspective with X5 (Success in improving product quality and reliability) indicator as the most important indicator.

CONCLUSION

The research analysis shows that Business Strategy variable provides positive and significant influence towards SME Business Performance. The result can be used as a reference to improve the business performance of SME fostered by PT. Telkom Indonesia. It is also found out that the most important dimension of the business strategy related to SME business performance is Focus Strategy. On the other hand, Cost Leadership Strategy comes with the lowest performance score and does not make it as a priority. The result shows that to improve

company business performance, the main focus should be on improving Focus Strategy by emphasizing on the service to particular segments with different treatment or service.

REFERENCES

[1] Best, Roger J.. *Market Based Management: Strategies for Growing Customer Value and Profitability.* 5th Edition. Prentice Hall Inc, 2009

[2] Kaplan, R. S. & Norton, D. P. *Translating Strategy into Action: The Balanced Scorecard.* Boston: Harvard Business School Press, 1996.

[3] Kotler, P. & Keller, K. *Marketing Management: Analysis, Planning, Implementation, and Control.* Englewood Cliffs: Prentice Hall International Inc., A Division of Simon & Schuster, 2012.

[4] Wheelen, T.L. and Hunger, J.D., *Strategic Management and Business Policy: Achieving Sustainability 12th Edition,* New Jersey: Pearson International Edition, 2010

[5] Hunger, J. D. & Wheelen, T. L. *Essentials of Strategic Management.* 5th Edition. New Jersey: Prentice-Hall, 2011

[6] Jayawardhana, A. A. K. K., Silva, S. D., & Athauda, A. M. T. P.. *Business Strategy, Market Orientation and Sales Growth in Hotel Industry of Ancient Cities in Sri Lanka*. Tropical Agricultural Research, 24 (1) :228 – 237, 2013

[7] Karanja, S. C., Muathe, S. M. A., & Thuo, J. K.. *Marketing Capability and The Performance of Mobile Service Provider Intermediary Organizations in Nairobi County, Kenya*. International Journal of Education and Research, Vol 2 (1) , 499 – 512., 2014.

[8] Leonidou, L. C., Leonidou, C. N., Fotiadis, T. A., & Zeriti, A. *Resources and Capabilities as Drivers of Hotel Environmental Marketing Strategy: Implications for Competitive Advantage and Performance.* Tourism Management, 35(1) : 94 – 110. 2013

[9] Hair, Jr., Tomas G., Ringle, Christian., Sarstedt, Marko., *A Primer on Partial Least Squares .structural Equation Modeling (PLS-SEM),* Los Angeles: Sage Publication, 2014

[10] Vinzi, Esposito V., Chin, W.W., Henseler, J., Wang, H. *Handbook of Partial Least Squares. Concept, Methods, and Applications*, Berlin: Springer, 2010

[11] Tenenhaus M., LISREL Path Modeling, *Journal of Computational Statistics & Data Analysis*. 48(1):159 – 205, 2005