

# INTERNAL AND EXTERNAL ENVIRONMENT AS A PERFORMANCE PREDICTOR FOR MIDDLE SMALL INDUSTRIES

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## ABSTRACT

*This study illustrates the increase in performance through the influence of the Internal and External Environment of Small and Medium Industries. This study aims to analyze the influence of the internal environment and the external environment on the sustainability performance of Small and Medium Industries (SMI). The population of this study were all Herbal Products, Bali which were the best products in Badung Regency. The number of population is 110 units. The number of samples was taken by census is 110 units ; the data collection method was done by using a questionnaire. Data were analyzed using variance based or component based analysis methods with Partial Least Square (PLS). This study found that the internal environment and the external environment are significant predictors of SMIs performance.*

**Keywords:** Internal Environment and External Environment, Performance

## INTRODUCTION

Small and Medium Industries (SMIs) has long been understood to have an important role for the economic development of a country Ombongi & Long (2018); Amoah & Amoah, (2019). It is proven that SMIs have absorbed a workforce of 11.68 million people or 60 percent of the total workers in the sector industrial and SMIs are the dominant sector of the total manufacturing industry in Indonesia, with a contribution of up to 99 percent of all business units in the industrial sector (Pasar-Dana, 2019).

Industry in Badung Regency is dominated by Small and Medium Industries (SMIs), data shows that more than 90% of Badung Regency industry is SMIs, until 2019 there were 1,230 SMI units capable of absorbing 14,9430 people. The contribution of SMIs on average is 60 percent of commodity exports produced by SMIs (Disperindag & Bali Province, 2019). Preliminary research on 25 SMIs in Badung Regency in 2018, the problems experienced by SMIs in Badung Regency are; (1) the quality of human resources, (2) access to the use of technology in market information and production processes; (3) a less conducive business climate; (4) capital problems related to limited amount of capital, knowledge of sources of capital, collateral value that is not in accordance with capital requirements, and difficulties in fulfilling credit requirements. The problems experienced by these SMIs, if not handled can affect the performance of SMI.

The performance of SMIs can be influenced by the surrounding environment, including internal factors and external factors. Internal factors are factors that influence from within the SMIs, while external factors are factors that influence originating from the environment outside the SMIs. Some opinions regarding the internal environmental analysis were carried out by: Pearce & Robinson (2013); Barney & William (2012); Thomson, et al., (2010) reveal that the analysis of the company's internal environment including the resources, capabilities and competencies of the company is a Resource Based View (RBV) approach where the company's

resources, capabilities and competencies far more important than industry structure in gaining and maintaining a competitive advantage.

Pearce & Robinson (2013: 164) divides resources into 3 (three), namely: (1) visible assets (tangible assets) including production facilities, raw materials, financial resources, and technology; (2) intangible assets (intangible assets) including brand, reputation, company morale, technical knowledge, patents, trademarks, and accumulated company experience; (3) Organizational capabilities, skills and abilities to combine assets, people, and processes that can be used by companies to convert inputs into outputs. Resources Base View Theory (RBVT) from Barney (1991), explains that companies that can use unique resources will be able to create sustainable performance. The internal environment of the company, including the resources, capabilities and competencies of the company, are intangible assets and unique resources for SMIs, which are expected to be able to increase SMIs performance.

Danga, et al., (2010) examined the internal and external environment on the performance of Rural Small and Medium Enterprises in the State of Tanzania, found that business capability, access to finance, market access, business location are the internal environment for SMIs and regulatory frameworks, social factors, infrastructure, politics, tax, and entrepreneur characteristics constitute the external environment which have an effect positive on the performance of SMIs. Kamunge, et al., (2014) found that access and availability of funds, access to information, management experience which constitutes the internal environment and availability of infrastructure, community socio-economy, government policies in the form of regulations have an effect positive on the performance of small and medium enterprises in Limuru City Market, Kiambu Regency, Kenya. Indris & Primiana (2015) found that the internal and external environment has an effect positive on the performance of Small and Medium Enterprises in Indonesia. These findings support previous research conducted by Munizu (2010) on Small and Medium Enterprises in South Sulawesi.

The problems experienced by SMIs in Badung Regency which have been described include: the quality of human resources; access to technology use in market information and production processes; capital related to a limited amount of capital, knowledge of sources of capital, collateral value that is not in accordance with capital requirements, and difficulties in meeting credit requirements; as well as the less conducive business climate is the internal and external environment of the SMIs themselves. Based on the role of SMIs, the problems experienced by SMIs, as well as research findings on the influence of the internal and external environment on performance, this study aims to describe and analyze the influence of the Internal and Environment External on the performance of Herbal Products SMIs in Badung Regency. Herbal products are the superior products of Badung Regency which are determined based on the competencies core of regional industries, where in addition to being a tourism destination for Bali, Badung Regency also has agricultural potential to produce raw materials for herbal products such as SPA products and scrubs. Herbal products for SMI in Badung Regency are not only intended for export, but are also very necessary to support existence Bali's as a destination for foreign tourists.

## LITERATURE REVIEW

The company's performance is the result of all management decisions that are carried out continuously (Wiagustini, 2014). Company performance is a general construct used to measure the effect of a company policy or decision. Policies or decisions are always directed to produce performance, one of which is financial performance (Weaver & Weston, 2005: 194). A business organization can measure its performance using measures financial or what is called financial performance by using profit and sales volume (Chong, 2008). The procedure for measuring the performance of Small and Medium Enterprises will depend on how *valid* these measures are in accordance with the performance achieved by SMIs (Covin & Slevin, 1989). Performance is the level of achievement or achievement. Sanchez and Marin (2005) develop

performance measures including: (1) sales volume growth; (2) Profit growth; (3) Asset growth; (4) Market growth; and (5) Workforce growth.

The internal environment of the company is the strengths that exist within the organization itself and has properties that can be controlled by the management of David (2011). This factor is related to the conditions that occur within the company that affect the company's decision making. The RBV theory considers the company's internal capabilities as an important factor in managing the company's resources so that the company is able to gain competitive advantage. Schienstock (2009) argues that the consequences of management's ability to manage company resources in an integrated manner can increase the company's competitive advantage. Barney (1991) states that capability managerial will increase along with the increase in the company's competitive advantage so that it can ultimately improve organizational performance. The company's internal environment, including the resources, capabilities and competencies of the company, are intangible assets and unique resources for SMIs which are expected to improve their performance. Pearce & Robinson (2013) disclosure of the external environment consists of aspects of human resources, financial aspects, technical aspects of production/operations, and aspects of markets and marketing. This indicator is also used in the research of Munizu (2010); Kamunge, et al., (2014).

The external environment has a major role in influencing managerial decision making, organizational processes and structure, so it is important to monitor and analyze the external environment. Pearce & Robinson (2013) stated that the external environment is a condition that occurs outside the business being carried out, but also has the potential to influence the business. Furthermore, Pearce & Robinson (2013) also disclosed the external environment consisting of aspects of government policy, socio-cultural and economic aspects, and aspects of the role of related institutions. This indicator is also used in the research of Munizu (2010); Kamunge, et al., (2014).

Research on the influence of the internal environment and the external environment on performance has been carried out, namely: Octavina (2007); Danga, et al., (2010), Idris & Primiana (2015); Munizu (2010); Kamunge, et al., (2014); Hanggraeni (2019) found that the internal environment and the external environment have effect positive on the performance of small and medium enterprises.

Based on the theory and empirical that has been described; the hypothesis is formulated as follows.

*H1: Internal Environment effect positive the on performance of SMIs seed in Badung*  
*H2: External Environment effect positive the on performance of SMIs seed in Badung*

## METHODOLOGY

This research is explanatory in the form of associative to analyze the environmental impact of Internal and External Environment on the Performance of SMIs Herbal Products in Badung regency. The variables of this study are performance as the dependent variable and the internal environment and external environment as the independent variable. Performance is the level of achievement or achievement of Leading SMIs in Badung Regency in the last five years; Performance Indicators were developed from the research of Sanchez & Martin (2005) which includes: Sales Volume Growth, Profit Growth, Asset Growth, Market Growth, and Workforce Growth.

The internal environment is the strengths that exist in the Herbal Products SMIs and has controllable properties. The dimension of the internal environment was developed from Pearce & Robinson (2013) which includes: (1) Aspects of Human Resources, with indicators: level of formal education, training that has been attended, leadership spirit, experience/length of

entrepreneurship; (2) Financial Aspects, with indicators: differentiating personal/family expenses, compiling financial reports, total assets under management; (3) Aspects Technical and Operational, with indicators: availability of raw materials, production capacity, availability of machinery/equipment; (4) Market and Marketing Aspects, with indicators: market demand, competitive pricing, promotional activities, and distribution channels and marketing areas.

The external environment is the opportunities that may exist in the Herbal Products SMIs in Badung Regency and cannot be controlled. The external environmental dimension was developed from Pearce & Robinson (2013), which includes (1) Aspects of Government Policy, which include: access to finance and capital, development activities through related agencies, regulations and regulations that are pro-SMIs, provision of information; (2) Social, Cultural and Economic Aspects, including: level of community income, availability of employment, business and investment climate; (3) Aspects of the Role of Related Institutions, including: capital assistance from related institutions, technical guidance/training, mentoring, monitoring and evaluation; (4) Aspects Competition, which include: Business competition which is conducted dishonestly, Business competition which is conducted against the law, Business competition which is conducted by preventing competition among business actors.

The population of this research was all of the Herbal Products SMIs in Badung Regency, Bali, Indonesia as many as 110 units. The number of samples taken by census, namely the entire population sampled. Data were analyzed using variance based or component based methods with Partial Least Square (PLS).

## RESULTS AND DISCUSSION

### Result of Data Analysis

in this study consisted of the management or owners of the Herbal Products SMI with profiles showing that the number of respondents based on gender was male, 70.91%, the rest were women; the age group was dominated by the range 31- 40 years as much as 31.18%, and 41-50 as much as 27.27%; Education is dominated by: Bachelor (S1) 45.45% and Diploma (D1/D2/D3) 21.82%; Most of the assets owned (63.54%)> 500-10,000 million rupiah; Most of the sales achieved (63.45%)> 2,500 - 50,000 million rupiah were large and mostly used labor (62.54%) 20 - 99 people.

### Analysis of the Research Model with the Partial Least Square (PLS) Method Evaluation of the Measurement Model (Outer Model)

Evaluation of the measurement model (outer model) aims to determine the validity and reliability of indicators measuring latent variables, namely; Internal Environment ( $X_1$ ), Environment External ( $X_2$ ) and Performance ( $Y$ ). Evaluation of the measurement model by checking the convergent and discriminant validity of the constructs and composite reliability indicator for the block indicator.

### Composite Reliability

Composite reliability aims to test the reliability value between the indicator blocks of the constructs that make it up. The results of composite reliability are said to be good, if the value is above 0.70. Composite reliability testing aims to test the validity of the instrument in a research model specifically for reflexive indicators. The results of the composite reliability test are presented in Table 1, showing that the composite reliability values of the three variables that make up the research model are all above 0.70. This means that all the reflexive indicators that make up the research model are reliable.

<b>Variables</b>	<b>Composite Reliability</b>
Internal Environment (X <sub>1</sub> )	0.967
External Environment (X <sub>2</sub> )	0.969
Performance (Y)	0.970

Source: PLS Data processing results, 2020

### Convergent Validity

The test results are convergent validity measured based on the value of the loading factor (outer loading) of the construct indicator. According to Ghazali & Latan (2015) an indicator is said to be valid if the outer loading coefficient is above 0.50. Table 2 shows that the outer loading coefficient value of the Internal Environment variable indicator (X<sub>1</sub>); External Environment (X<sub>2</sub>) and Performance (Y). Each is above 0.50, this means that all variables are declared valid and no model reconstruction or measurement is required to meet the requirements of convergent validity.

<b>Variables</b>	<b>Indicator</b>	<b>Outer loading</b>
Internal Environment (X <sub>1</sub> )	Human Resources Aspects (X <sub>11</sub> )	0.963
	Financial Aspects (X <sub>12</sub> )	0.944
	Aspects Technical and Operational(X <sub>13</sub> )	0.908
	Market and Marketing Aspects (X <sub>14</sub> )	0.937
External Environment (X <sub>2</sub> )	Aspects of Government Policy (X <sub>21</sub> )	0.970
	Social, Cultural and Economic Aspects (X <sub>22</sub> )	0.977
	Aspects of the Role of Related Institutions (X <sub>23</sub> )	0.917
	Aspects of Competition (X <sub>24</sub> )	0.970
Performance (Y)	Growth of Sales Volume (Y) <sub>1</sub> )	0.957
	Profit Growth (Y) <sub>2</sub> )	0.923
	Asset Growth (Y) <sub>3</sub> )	0.961
	Market Growth (Y) <sub>4</sub> )	0.915
	Labor Growth (Y) <sub>5</sub> )	0.892

Source: PLS results of data processing, 2020

### Discriminant

Validity addition to testing the convergent validity, in the PLS analysis also examine validity discriminant (discriminant validity). The test method is to compare the square root of Average Variance Extracted ( $\sqrt{AVE}$ ) value of each construct with the correlation between other constructs in the model. If the initial measurement value of the two methods is better than the value of the other constructs in the model, it can be concluded that the construct has good discriminant validity or vice versa. The results of discriminant validity testing are presented in Table 3, showing that all AVE roots in the research variable have values above 0.5. So we can conclude that these measurements meet the requirements of discriminant validity.

<b>Variable</b>	<b>AVE</b>	<b><math>\sqrt{AVE}</math></b>	<b>Specification</b>
Internal Environment(X <sub>1</sub> )	0.675	0.822	Valid
External Environment(X <sub>2</sub> )	0.596	0.772	Valid
Performance (Y)	0.613	0.783	Valid

Source: PLS Data processing results, 2020

### Goodness of Fit Model

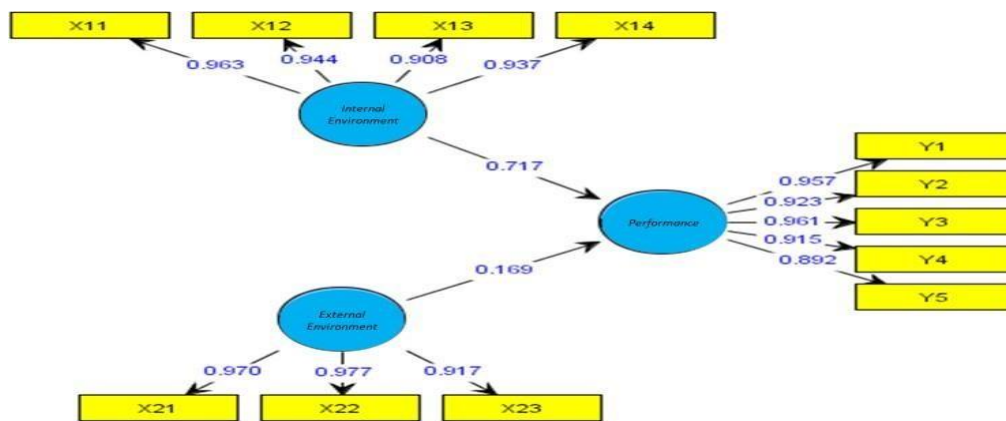
Testing Goodness of Fit (GoF) structural model of the *inner workings of model* the using the value of  $Q^2$  predictive-relevance ( $Q^2$ ) to test against variables - variables used in the model so that it can be known how the influence of exogenous on variables endogenous. Value of  $R^2$  endogenous variables in this study can be seen in Table 4.12, which shows the value- relevance predictive for Performance (Y) by 0.773, meaning that 77.30% of the variation can be explained by the Environmental Performance Internal ( $X_1$ ) and the External Environment ( $X_2$ ) while the remaining 22.70% is explained by other variables outside the research model.

variables Dependent variable	R-square
Performance (Y)	0.773

Source: PLS data processing results, 2020

### Testing of Inner Models and Research Hypotheses

Inner models or structural models evaluated by looking at the value coefficient path of the relationship between latent variables. From the PLS model output, structural model testing and hypotheses are performed by looking at the estimated path coefficient values and critical point values t- (t-statistics) that are significant at  $\alpha=0.05$ .



**FIGURE 1**  
**OUTPUT RESULT OF PARTIAL LEAST SQUARE (PLS)**

Relationship Between Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t Statistics ( O/STERR )	P Value	Information
Internal Environment ( $X_1$ ) - > Performance (Y)	0.717	0.801	0.088	8.185	0.000	Significant
External Environment ( $X_2$ ) - > Performance (Y)	0.169	0.074	0.097	2.748	0.000	Significant

Source: PLS data processing results, 2020

Based on Table 5 obtained p-value and t statistics for each variable is explained as follows.

- (1) The p-value of the variable Internal Environment on Performance was 0.000, compared with a significance value of 0.05. Because the p-value < significant ( $0.000 < 0.05$ ) with a beta value of positive 0.717 and t statistics value of 8.185, it can be concluded that Internal Environment has a significant positive effect on Performance.
- (2) The p-value of the variable External Environment on Performance was 0.000, compared with a significance value of 0.05. Because the p-value < significant ( $0.000 < 0.05$ ) with a beta value of positive 0.169 and t statistics value of 8.185, it can be concluded that External has a significant positive effect on Performance.

## Discussion

### Effect of Internal Environment on Performance Small and Medium Industries

Internal Environment has a positive significant effect on Sustainable Performance Small and Medium Industries Herbal Products in Badung Regency, Bali, Indonesia. This means that the stronger the Internal Environment of the Herbal Products SMIs in Badung Regency, the higher the performance. The Internal Environment of Herbal Products SMIs in Badung Regency is reflected by 4 (four) indicators: Human Resources Aspects, Financial Aspects, Technical and Operational Aspects, and Market and Marketing Aspects. The highest outer loading is the Human Resource Aspect, which means that this aspect is the main determinant of the Internal Environment for Herbal Products SMIs in Badung Regency, Bali, Indonesia. Performance is reflected in Sales volume growth, profit growth, asset growth, market growth and workforce growth. The results of the respondents' assessment of SMIs of the Internal Environment show an average of 3.65 which means high, then the average performance also shows a value of 3.66 which means that the

Internal environment of the company is the strengths that exist within the organization itself and has a controllable nature. By management David & David (2011). This factor relates to the conditions that occur within the company that affect the company's decision making. If the Internal Environment is well managed, it will be able to achieve Company Performance. The stronger the internal environment that can be controlled compared to the weaknesses, it can guarantee company performance. The findings of this study reinforce the findings of previous research conducted by Idris & Primiana (2015); Munizu (2010); Kamunge, et al., (2014), and In Danga, et al., (2019) which found that the Internal Environment has a positive effect on the performance of Micro, Small and Medium Enterprises.

### Effect of External Environment on Sustainable Performance Small and Medium Industries

External Environment has a positive significant effect on Performance Small and Medium Industries Herbal Products in Badung Regency, Bali, Indonesia. This means that the better the Internal Environment of the Herbal Products SMIs in Badung Regency, the higher the performance. The Environment of External Products SMIs Herbal in Badung Regency is reflected in 4 (four) indicators: Government Policy Aspects, Social, Cultural and Economic Aspects, Role Aspects of Related Institutions, and Aspects Competitive. The highest outer loading is the Social, Cultural and Economic Aspects, which means that these aspects as the main determinant in the External Environment of Herbal Products SMIs in Badung Regency, Bali, Indonesia. Performance is reflected in Sales volume growth, profit growth, asset growth, market growth and workforce growth. The results of respondents' SMIs assessment of the External

Environment show an average of 3.65 which means good, while the average performance also shows a value of 3.66 which means high.

## CONCLUSION

Based on the discussion of the research results, it can be concluded that the Internal Environment and External Environment have a positive effect on performance. Herbal Products SMI in Badung Bali Regency, which means that the stronger the Environment Internal owned by SMI, the better utilization of opportunities to minimize threats, the higher the performance of Herbal Products SMIs in Badung Regency, Bali.

Herbal Products SMIs in Badung Regency, Bali must have a strong Internal Environment to improve its performance. Internal Environment consists of (1) Human Resources Aspects, which include: level of formal education, training that has been attended, leadership spirit, experience/length of entrepreneurship; (2) Financial aspects which include: differentiating personal/family expenses, compiling financial reports, total assets under management; (3) Aspects Technical and Operational which include: availability of raw materials, production capacity, availability of machines/equipment; and Market and Marketing Aspects which include market demand, competitive pricing, promotional activities, and distribution channels and marketing areas.

Herbal Products SMIs in Badung Regency, Bali must be able to take opportunities by minimizing the threats that exist in improving their performance. The External Environment consists of (1) Aspects of Government Policy, which include: access to finance and capital, development activities through related agencies, Pro-SMIs Regulations and Regulations, provision of information; (2) Social, Cultural and Economic Aspects, including: level of community income, availability of employment, business and investment climate; (3) Aspects of the Role of Related Institutions, including: capital assistance from related institutions, technical guidance/training, mentoring, monitoring and evaluation; (4) Competition Aspects, which include: Business competition which is conducted dishonestly, Business competition which is conducted against the law, Business competition which is conducted by preventing competition among business actors.

This research is conducted at a certain point in time (cross-section), while the environment is always changing, especially government policies, competitors, technological advances so it is important to do it again in the future.

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