Competitiveness Enhancement and MSME Performance Through Development of Internal, External, and Entreprenual Skills in Bali Province

I Komang Mahayana Putra  
Business Administration Dept.  
Politeknik Negeri Bali  
Denpasar, Indonesia  
komangmahayanputra@pnb.ac.id

I Ketut Pasek  
Business Administration Dept.  
Politeknik Negeri Bali  
Denpasar, Indonesia  
pasekketut1@gmail.com

I Wayan Sukarta  
Business Administration Dept.  
Politeknik Negeri Bali  
Denpasar, Indonesia  
wayansukarta@pnb.ac.id

Abstract - The focus of this research is how to improve the performance and competitiveness of MSMEs. Theoretically the problem of performance and competitiveness of MSMEs must examine several factors that were suspected as the cause, including internal factors such as strengths and weaknesses, external factors related to opportunities and threats. Another problem that was no less important in terms of MSME performance and competitiveness was the problem of entrepreneurial skills and business strategies. This research used survey research design, which was a research approach in an effort to obtain facts about phenomena related to the problem that becomes the object of observation by using samples and questionnaires as data collection tools. This study is included a causal explanation which aimed to explain the interrelationship of the relationship between one variable with another. This research method also aimed to make a description to produce a construct of a social phenomenon based on the relationship model derived from theoretical studies. Based on the conceptual framework and hypothetical framework, the analysis technique used was path analysis technique. Based on the recapitulation of data analysis stage I and II using SPSS version 23.0, it was known that in the framework of MSMEs improving company performance turned out that all variables were internal factors. External and entrepreneurial skills had a significant effect, where the variable entrepreneurial skills had the most dominant influence. Meanwhile, in relation to MSME building competitiveness it turned out that only the performance variable had a significant direct effect, the other variables had an indirect effect through performance. Other findings in this study were the relationship among internal, external and entrepreneurial skill variables on performance was a strong relationship (R is equal to 0.742) with a contribution (R2) of 0.557. While the relationship among internal, external entrepreneurial skill and performance factors on competitiveness was a fairly strong relationship (R is equal to 0.675) with a contribution (R2) of 0.456.

Keywords— internal factor, external factor, entreprenual skill, competitiveness enhancement, MSME performance

I. INTRODUCTION

A. Background

MSME is a business entity with a maximum IDR 200 Million net capital exclude land and building and has an annual sales maximum IDR 1 billion. Regarding the role of small businesses, there are several results of research that small businesses have a complementary role with large companies in job creation and economic growth [1]. It has been observed that the development of small businesses in Indonesia, emphasizing that small businesses in Indonesia play an important role in several respects, among others, (1) Small businesses are the main drivers of Indonesia's economic activities; (2) Job provider; (3) has an important role in the development of the local economy and community development; (4) Market creators and innovations through their dynamic flexibility and sensitivity; (5) Contributing to the increase in non-oil and gas exports [2]. The main problem of MSMEs is competition with similar large and medium industries, both national and multi-national companies [3]. Indonesian MSMEs today must compete in a global business climate that demands high competitiveness. Many factors influence the performance of small entrepreneurs, both from internal and external. More internal factors come from the entrepreneurs themselves, including: (1) limited ability of resources, (2) background education, (3) technical ability, (4) capital, (5) marketing, (6) operating system, (7) information, (8) mental attitude, (9) work ethic, (10) business independence, (11) confidence, (12) motivation and (13) other internal problems. The entrepreneur's ability to run a business related to management functions (entrepreneur skills) is a power to change things for the better [4]. Thus an entrepreneur must remain based on the ability to implement management functions so that the business that is run can succeed well. Because the managers of small companies are also owners, they are in a position to take decisions and many perform managerial functions. In relation to the development of competitive advantage of MSMEs, a grand design can be developed that is built through three important and interrelated indicators, namely competitive performance, competitive potential, and management processes [5].

The development of MSMEs in Bali Province over the past five years has grown from 51,409 units in 2010 to 56,534 units in 2014, or with average growth reached 2.41% /year. Likewise about employment absorption has experienced an average growth of 3.54% per year. While the contribution of MSMEs to Gross Regional Domestic Product (GRDP) experienced an average growth of 6.53% per year. Information. The percentage contribution of MSMEs to the value of exports fell from 26.82% in 2010 to 8.85% in 2011 and fell again to 8.41% in 2012 and continued to decline to 6.56% in 2013 [6]. Judging from the ability of MSMEs to absorb labor, 1,341,077 workforce turns out to be 1,237,546, the workforce or 92.28% is absorbed by MSMEs in 2016 [7].
The overall number of MSMEs in Bali Province in 2016 was 481,853 businesses. Of the total number of Denpasar Municipality has the highest number of MSMEs, which amounted to 97,277 businesses or 20.19%. Whereas the district that has the smallest MSME business is Klungkung Regency, which is 21,773 businesses or 4.52%. Based on the 2016 Census, there were 631 large businesses in Bali Province, or 0.13% of the total business amounting to 482,484 businesses [8]. From the data above, it can be concluded that the number of MSMEs in Bali Province is 99.87%. This means that MSMEs play an important role in the development and growth of the Balinese economy.

B. Research Questions

Based on the description of the background of the above problems, the formulation of the problem of this research is:

- Is there a significant influence between internal factors on the performance of MSMEs in Bali Province?
- Is there a significant influence from external factors on the performance of MSMEs in Bali Province?
- Is there a significant influence from entrepreneur skills on the performance of MSMEs in the Province of Bali?
- Is there a significant effect of performance on MSME competitiveness in Bali Province?
- Is there a significant influence between internal factors on the competitiveness of MSMEs in Bali Province?
- Is there a significant influence from external factors on the competitiveness of MSMEs in Bali Province?
- Is there a significant influence of entrepreneur skills on the competitiveness of MSMEs in Bali Province?
- Is there a significant influence of MSMEs in Bali Province?

C. Research Objectives

There are several objectives of this study, including: to find out the magnitude of the influence of internal, external, and entrepreneurial skills, on the performance of MSMEs in Bali Province; To find out the magnitude of the influence of internal, external, entrepreneurial skills, and performance on MSME competitiveness in Bali Province.

D. Benefits of Research

This research is expected to provide both practical and theoretical benefits. Practically, this research is expected to be used as one of the inputs for the decision making material in designing a strategic plan (Renstra) for the development of MSMEs in the Province of Bali. While in terms of academics, this research is expected to contribute meaningfully in finding the level of relations between internal, external, and entrepreneurial skills, on the performance and competitiveness of MSMEs.

II. LITERATURE REVIEW

A. Internal Factors and External Factors

The organizational circle can be distinguished from the internal environment (internal environment) and the external environment (external environment) [9]. The internal environment consists of structure (culture), culture (culture), resources (resources), the company’s internal environment is a company's resources (resources) that will determine the strengths and weaknesses of the company [10]. These company resources include human resources, such as experiences, capabilities, knowledge, expertise, and judgment of all company employees. There are two perspectives for conceptualizing the external environment. First, the perspective that views the external environment as a vehicle that provides resources. Second, the perspective that views the external environment as a source of information [11]. The first perspective is based on the premise that the external environment is a vehicle that provides critical resources for the survival of the company. This perspective also implies that the potential of the external environment is threatening the internal resources of the company. Strikes, deregulation, changes to laws, for example, have the potential to damage the internal resources of the company. The second perspective, linking information with environmental uncertainty. Environmental uncertainty refers to external environmental conditions that are difficult to predict changes [12]. This relates to the ability of members of the organization to make decision making.

B. Entrepreneur Skill

This study uses the term entrepreneurial skill which is defined as the ability of entrepreneurs to carry out their business related to the implementation of management functions, namely planning, organizing, monitoring, motivation and staffing. Because MSME managers are also owners, they are in a position to make their own decisions and run on their own. Descriptions of an entrepreneur are related to the courage to take risks, functions self-employed including supervision, control and providing direction for the company.

C. Business Performance

Factors that influence the performance of a business including MSMEs can be grouped into three factors, namely: (1) internal factors, (2) external factors, (3) entreprenual skill factors. All three can have an effect both directly and indirectly on the performance of small businesses through the application of strategies [13]. Furthermore, it is explained that there are five internal factors that strategically affect the company's objectives, namely: (1) marketing and distribution, (2) research, development and engineering, (3) production and operation management, (4) human resources, (5) excellence and accounting factors.

D. Competitiveness

To achieve sustainable competitive advantage, companies must have two basic types of competitive advantage, namely low cost or differentiation. This type, if combined with the field of activity to be achieved by a company will lead to three generic competitions to achieve performance above the industry average, namely cost leadership, differentiation, and focus. Strengths or weaknesses that are significantly owned by the company are ultimately a matter function of the relative impact of costs and differentiation. Two Model Framework Concepts and Hypotheses. This research refers to research conducted by [9], Factors of Internal, External, entrepreneur skill and performance.
Entrepreneur Skill and Based on Figure 1 above, the research hypothesis can be formulated as follows:

**H1.** There is a significant influence between internal factor variables on the variable performance of MSMEs.

**H2.** There is a significant influence between external factor variables on the variable performance of MSMEs.

**H3.** There is a significant influence between entrepreneurial skill variables on the variable performance of MSMEs.

**H4.** There is a significant influence between performance variables on the variable competitiveness of MSMEs.

**H5.** There is a significant influence between internal factor variables on the variable competitiveness of MSMEs.

**H6.** There is a significant influence between external factor variables on the variable competitiveness of MSMEs.

**H7.** There is a significant influence between entrepreneurial skill variables on the variable competitiveness of MSMEs.

### III. RESEARCH METHODS

#### A. Types and Research Approaches

This study uses a survey research design approach, which is a research approach in an effort to obtain facts about phenomena related to problems that are the object of observation by using samples and questionnaires as data collection tools [15]. Furthermore, it was stated that this research was seen Performance and its influence on the competitiveness of MSMEs. Graphically the conceptual framework or functional approach will be the basis for the formulation of research hypotheses which can then be seen in Figure 2.1 below: from its purpose, this research including its description which aims to provide a causal explanation, is a study that aims to explain the relationship between variables with one another. This explanatory research method also aims to make a description in its description which aims to produce constructs of a social phenomenon based on relationship models derived from theoretical studies.

#### B. Population and Samples

The population in this study were all MSMEs that were geographically located in Bali Province with a total of 482,383 UMKM units. Because this study covers a fairly wide area and relatively large number of MSMEs, sampling research will be carried out, which means that research will study a portion or a small portion of the population members to be used as data sources. Sampling will be carried out in two stages, the first stage is determining the sample area / region. Samples of this region / region will use non-probability random sampling techniques, namely purposive sampling, which is a deliberate sampling technique for specific purposes and reasons [12]. By purposive sampling, the selected region / region is the Municipality of Denpasar. The reason for this election is because the Municipality of Denpasar has the largest number of MSME units was 97,307 units or 20.01%. The second reason is because Denpasar Municipality is the center of government and business center in Bali Province. The second stage of sampling is determining the sample of the research subjects. In the case of selecting samples, respondents will use probability random sampling techniques, namely Proportional Stratified Random Sampling [12]. Determination or determination of respondent samples can be done through two stages, the first stage is determining the number or size of the sample using the Slovin formula, and second, sampling using the Proportional Stratified Random Sampling technique [12]. By using the formula above, then with a population of 97,307 MSMEs with the level of precision used is 10%, the sample size in this study is: 97,307 / (1 + (97.307 x 0.1,2)) = 99.90 MSMEs are rounded up to 100 MSMEs. The number of MSMEs that reaches 100 units can be considered as the number of samples that are representative and can represent the population. The sampling method of respondents will be used probability random sampling technique, which is by proportional stratified random sampling technique, is a sampling technique by making strata / groups (micro, small and medium enterprises) and then the number of samples will be taken proportionally.

#### C. Data Collection Method

Data Collection Techniques and data source: To obtain the data needed in this study, data collection techniques used are survey, questionnaire, interview, and documentation. The source of data are primary and secondary.

1) **Operational Definition of Variables**

   a) **Internal Variable Factor (X1):** Internal factor variable (X1) is the firm's resources that will determine the strengths and weaknesses of the company. This variable is measured using indicators: (1) innovation, (2) production and availability of raw materials, (3) the existence of HR.

   b) **External Factor Variable (X2):** Is an environmental factor that is outside the organization and needs to be analysed to determine the opportunities and threats that will be faced by the company. This variable is measured using indicators, i.e., existing competitors, buyers, suppliers, government policies and macro economics.

   c) **Variable Entrepreneur Skill (X3):** An entrepreneur must rely on his ability to implement management functions, so that the business can succeed well. This variable is measured using indicators as follows: (1) planning and supervision, (2) organization, (3) talent and motivation, and (4) staffing / HR.

   d) **Performance Variable (X5):** It is an achievement achieved by the company in a certain period, which reflects the level of the company health. This variable is measured using indicators, i.e., sales, profit, business productivity, and service.
e) Competitiveness Variable (Y): Competitiveness as a variable Y is the extent to which a company can meet market demand in producing goods and services, while maintaining or increasing the income of the company and its employees. Competitive advantage is influenced by internal, external factors and appropriate strategies are needed to improve the performance and competitiveness of the company. Indicators for measuring these variables are legal status of the company, good access to funding, access to information, business opportunities and markets, sales, profits, business productivity and labour.

2) Micro, Small and Medium Enterprises (MSMEs): MSMEs in this study are in accordance with Law Number 20 of 2008. According to the Ministry of State for Cooperatives and Micro, Small and Medium Enterprises, what is meant by Small Business (SB) is a business entity that has a net worth of at most Rp. 200,000,000 which excludes land, building business premises, and has annual sales at of most Rp. 1,000,000,000.

3) Validity and Reliability Test: The decision on the results of testing the validity of the research instrument can also be done by looking at the significance value (α). If the results of testing validity obtain a significance value of α <0.05, it can be concluded that the research instrument used is valid, and vice versa. The reliability of the instrument was tested using the Cronbach alpha formula [12]. The determination of the reliability standard of the research instrument is when the Cronbach alpha value is 0.6 or more.

D. Data Analysis

This study uses five data analyses such as inferential; statistics analysis, classic assumption test of heteroscedasticity test, normality test, and linearity test.

IV. FINDINGS AND DISCUSSIONS

From 100 questionnaires that were distributed to the respondents, it turned out that the questionnaires that returned and were feasible to be analyzed were as many as 90 questionnaires. Calculations in data analysis use the IBM SPSS program (Statistical Product and Service Solution) version 23.0.

A. Validity and Reliability Test

From the variable validity and reliability test, it can be seen that all the questions in the questionnaire are valid (because they have a validity coefficient <0.05). Whereas, all research variables are reliable (have coefficient values > 0.6).

B. Inferential Statistic Analysis

1) Classic Assumption Test

a) Heteroscedasticity Test: Heteroscedasticity testing aims to determine whether in the model there is an inequality of variance from one residual observation to another. If the residual variance of observation is constant, it is called homoscedasticity. A good regression model and a requirement for the use of this model are no symptoms of heteroscedasticity. Testing for heteroscedasticity using the Gledser test. The results of heteroscedasticity test show that all significance values are smaller than 0.005.

b) Normality Test: The normality test can be done through a normal probability plot display. If the data spreads around the diagonal line and follows the direction of the diagonal line, the regression model is said to fulfill the assumption of normality. The normality test is a test of the normal distribution of data centered on the mean and median values. To find out whether the data is normally distributed or not, it can be seen on the P-P plot. data will be normally distributed if the observed Cum Prob value is the same as the value of the observed probability (Observed Cum Prob).

c) Linearity Test: Linearity tests can be done by using a scatter plot as used to detect outlier data with additional member regression lines. Linearity requirements will be fulfilled if the regression line on the graph leads to the upper right (Santoso, 2004).

C. First Stage Path Analysis

The first stage path analysis is an analysis to test the effect of internal factor variables (X1), external factors (X2), and entrepreneurial skill variables (X3) on business performance variables (X4) by using IBM SPSS version 23.0, the recapitulation of linear regression analysis. The first multiple multiplices which are standardized are shown in Table I.

### Table I. Recapitulation of Path Analysis Results, First Phase

| Model          | Unstandardized Coefficients | Standardized Coefficients | T    | Sig. | Information |
|----------------|-----------------------------|---------------------------|------|------|-------------|
|                | B   | Std. Error | Beta |      |             |
| Constant       | 1.677 | 1.263 |       | 1.328 | 0.000 | R = 0.675 |
| Internal Factor| 0.128 | 0.119 | 0.123 | 1.070 | 0.000 | R = 0.456 |
| External Factor| 0.247 | 0.101 | 0.297 | 2.436 | 0.000 | F = 23.984 |
| Entrepreneurial Skill| 0.319 | 0.099 | 0.345 | 3.212 | 0.000 |             |

From Table I, it is known that all paths of the influence of internal factor variables (X1), external factors (X2), and entrepreneurial skill variables (X3) on business performance variables (X4) are significant (significance value <0.05). The results also show the determination coefficient value R2 (R square) for the first stage of the pathway is 0.456 or 45.60%.

This means that the variation or diversity of data that can be explained is equal to 0.456 or 45.60%, while the rest of 0.544 or 54.4% can be explained by other variables and errors.
D. Second Stage Path Analysis

The second stage path analysis is an analysis to test the effect of internal factor variables (X1), external factors (X2), entrepreneur skill variables (X3) and business performance variables (X4) on competitiveness variables (Y). The results of the second stage path analysis calculations are shown in Table II.

| Model          | Unstandardized Coefficients | Standardized Coefficients | T       | Sig. | Information |
|----------------|-----------------------------|---------------------------|---------|------|-------------|
|                | B   | Std. Error | Beta |       |          | R^2 | F   |
| Constant       | 6.625 | 1.351 |       | 4.906 | 0.000 | 0.742 |
| Internal Factor| 0.094 | 0.127 | 0.079 | 0.742 | 0.460 | 0.551 |
| External Factor| 0.200 | 0.111 | 0.207 | 1.801 | 0.075 | 0.616 |
| Entrepreneur Skill | 0.168 | 0.111 | 0.157 | 1.509 | 0.135 | 0.247 |
| Performance    | 0.616 | 0.114 | 0.631 | 5.391 | 0.000 | 0.319 |

From Table II, it is known that the relationship between the influence of internal factor variables (X1), external factors (X2), and entrepreneur skill variables (X3) and business performance variables (X4) on the competitiveness variable (Y) does not have a direct effect significant (significance value > 0.05). On the other hand, the relationship path of the business performance variable (X4) to the competitiveness variable (Y) has a significant direct effect (significance value < 0.05). The results also showed that the determination coefficient value R^2 (R square) for the second stage of the pathway was 0.551 or 55.10%. This means that the variation or diversity of data that can be explained is equal to 0.551 or 55.10%, while the rest of 0.449 or 44.9% can be explained by other variables and errors.

E. Model Testing

Paths that are not significant are removed so that a model supported by empirical data is obtained. The path coefficient of the influence of indirect relationships is obtained by multiplying the path coefficients between the modelled variables. In addition, the model testing also serves to identify the paths of relationships that have a direct influence between the independent variables and the most dominant dependent variable based on the path coefficient value.

From Table I and Table II, it can be concluded that the relationship paths from internal factor variables (X1), internal factor variables (X2), and entrepreneur skill variables (X3) have significant influence (value significance smaller than 0.05) on the variable business performance (X4). The paths of the relationship of the direct influence of the independent variables (X1, X2, X3, and X4) on the competitiveness (Y) dependent variable only business performance variables (X4) have a significant direct effect on the competitiveness variable (Y). Meanwhile, the other relationship paths (Py1, Py2, and Py3) do not have a direct influence relationship so they must be removed from the model. So thus the final model of research after eliminating the paths of the relationship of direct influence that is not significant is as shown by Fig. 2.

Based on the path analysis of the first stage and the second stage above, it can be determined the amount of direct influence and indirect influence as below:

- Internal factor variable (X1) to business performance variable (X4) or called P41 path has a significant direct effect (significant value 0.00 < 0.05) and path coefficient of 0.128.
- External factor variable (X2) to business performance variable (X4) or called P42 path has a significant direct effect (significant value 0.00 < 0.05) and path coefficient of 0.247.
- Variable entrepreneurial skills (X3) to business performance variables (X4) or called P43 lines have a significant direct effect (significance value 0.00 < 0.05) and path coefficient of 0.319.
- Business performance variable (X4) to competitiveness variable (Y) or called Py4 pathway has a significant direct effect (significant value 0.00 < 0.05) and path coefficient of 0.616.
While the relationship paths that have an indirect influence relationship are as follows:

- The internal factor variable path (X1) to the sainy power variable (Y) is called the indirect path or relationship. The amount of influence or indirect relationship can be calculated by multiplying the path coefficient value of the direct relationship between the internal factor variable (Xi) to the business performance variable (X4) or P41 with the direct correlation coefficient value to competitiveness (Y) or Py1. So thus, the magnitude of the effect of the indirect relationship of variable X1 to the variable competitiveness (Y) through the business performance variable (X4) is = P41 × Py1 = 0.128 × 0.616 = 0.079.

- The path of the external factor variable (X2) to the sainy power variable (Y) is called the indirect path or relationship. The amount of influence or indirect relationship can be calculated by multiplying the path coefficient value of the direct relationship between the external factor variable (X2) to the business performance variable (X4) or which is called P41. With the value of the directional coefficient relationship to the competitiveness variable (Y) or Py1. So thus, the magnitude of the influence of the indirect relationship of external factor variables (X2) to the competitiveness variable (Y) through the business performance variable (X4) is = P42 × Py3 = 0.247 × 0.616 = 0.152.

- Path or indirect relationship. The amount of influence or indirect relationship can be calculated by multiplying between the path coefficients values of the direct relationship between the entrepreneurial skills variable (X3) to the business performance variable (X4) or called P41 with the direct correlation coefficient value to competitiveness (Y) or Py4. So thus, the magnitude of the effect of the indirect relationship of variable X1 to the variable competitiveness (Y) through the business performance variable (X4) is = P43 × Py4 = 0.319 × 0.616 = 0.197.

V. CONCLUSION AND RECOMMENDATION

A. Conclusion

Internal, external and entrepreneurial skills have a significant influence on the performance of MSMEs. Entrepreneurial skill factors have the most dominant influence on the performance of MSMEs with path coefficient values of 0.319. Business performance is the only variable that has a significant direct influence on the competitiveness of MSMEs, while internal, external, and entrepreneurial skills have indirect effects through business performance. In developing the competitiveness of MSMEs, business performance factors have the most dominant influence, namely with a path coefficient value of 0.616. Contributions of internal, external, and entrepreneurial skills to business performance are indicated by the coefficient of determination R2 of 0.551 or 51.1%.

B. Suggestions

The recommendation of this study results are as follows: in an effort to improve company performance, it is recommended to always improve the ability of entrepreneurial skills through the practice of internships in large companies throughout Indonesia or take part in various training and seminars on entrepreneurship and business management. The company's performance factor is the most important thing in building the competitiveness of MSMEs in Bali Province. This performance improvement can be achieved through the development of internal, external, and entrepreneurial skills.

REFERENCES

[1] T. T. H. Tambunan, Development of Small-Scale Industries during the New Order Government in Indonesia, Aldershot: Gower Publishing Limited, 2000.
[2] “Outline of Tentative Policy Recommendation for SME Promotion in Indonesia,” downloaded from http://www.jica.or.id/FOCI_ura.pdf.
[3] B. Ranto, “Analisis hubungan antara motivasi, pengetahuan kewirausahaan, dan kemandirian usaha terhadap kinerja pengusaha pada kawasan industri kecil di daerah Pulogadung,” Jurnal Usahawan, no. 10, October 2007.
[4] B. P. D. Riyanti, Kewirausahaan Dipandang dari Sudut Pandang Psikologi Kepribadian, Jakarta: Penerbit PT Grasindo, 2003.
[5] P. J. Buckley, C. L. Pass, and K. Prescott, “Measure of international competitiveness: A critical survey,” Journal of Marketing Management, vol. 4, no. 2, pp. 175-200, 1998.
[6] Bali in Figures, Bali Provincial Statistics Agency, 2017.
[7] Bali Economic Potential, Bali Provincial Statistics Agency, 2017.
[8] Wheelan and Hunger, Strategic Management Business Policy Sustainability, 13th Edition, 2010.
[9] E. Handriani. “Pengaruh faktor internal, eksternal, entreprenual skill, strategi dan kinerja terhadap daya saing UKM di kabupaten semarang,” Jurnal Dinamika Sosial Ekonomi, vol. 7, no. 1, 2011.
[10] Riyanti, Kewirausahaan dari Sudut Pandang Psikologi Kepribadian, Jakarta: Gramedia Widiasarana Indonesia, 2003.
[11] U. Sekaran, Research Methods For Business, New York: John Wiley and Sons, 2003.
[12] Sugiyono, Metode Penelitian Bisnis, Bandung: Penerbit Alfabeta, Bandung, 2004.