The Effect of Business Knowledge, Business Skill, Self Confidence and Innovation on Business Performance of Small and Medium Industry in the City of Bukittinggi

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Abstract. Small and Medium Industry (IKM) in economic development in Indonesia is a sector that plays an important role. This sector supports the family economy because most of Indonesian can only access low level of education and operate small business activities. This condition illustrates that the performance of Small and Medium Enterprises has a very important role in improving the country's economy. This study aims to identify the effect of Business Knowledge, Business Skills, Confidence and Innovation on the Performance of Small and Medium Industrial Business (IKM) in the City of Bukittinggi. The type of research is associative research (relationship) with quantitative analysis methods (data in the form of numbers) using SEM (Structural Equation Modeling) data analysis techniques based on Smart PLS variance. The results of this study indicate innovation, business skill, business knowledge and self confidence have positive effect on business performance of small medium industry in Bukittinggi. The Business knowledge has greater value among other variables which means more effort, guidance, facility should be emphasized on Small Medium Industry by the local authority and related parties to allow them to be able to be more competitive and sustainable. This study also recommends better progam and support to improve the self confidence of small medium industry’s owner.

1. Introduction
Small and Medium Industry (IKM) in economic development in Indonesia is a very important sector because this sector can be used as a livelihood to support the family economy. The performance of Small and Medium Industries has a very important role in improving the country's economy. For this reason, the Government seeks to provide support for increasing the productivity and performance of IKM, both in terms of regulations and financial support which are the main obstacles in increasing their productivity. There are several prominent determinant of the performance of IKM. In her study [1] Riana, Zain, Troena, & Sudarma mentioned that entrepreneurial orientation determine the business performance of IKM. There are also some skills that needed by the IKM for their business sustainability. The research by Urban & Naidoo mentioned that inventory, production, operation specification, production management and support production are skilled that is compulsory for IKM to sustain [2].

The low ability of the workforce at work needs to be improved in order to be able to create ideas and innovations for IKM in increasing competitiveness. Mentoring and coaching for IKM need to be done to overcome existing problems. The study by Rahayu Puji Suci [3] showed that the business strategy was influenced by the management skills of SMEs. Furthermore, the management skills influence performance, the higher the management skills of the entrepreneurs the higher their performance. Another scholar [4] confirmed that there is relationship between entrepreneurial competencies (skills), and entrepreneurship orientation on the performance of SMEs.

Obstacles for IKM to develop according to research by the Ministry of Industry in 2005 are : first, lack of capital due to insufficient capital entering industry players due to limited banking facilities and the participation
of other financial institutions; second, Limited market access due to lack of information regarding market changes and opportunities; third, the quality of human resources (HR) that is still low in terms of business knowledge and marketing strategies; and fourth, competition from the same IKM products produced in Indonesia that come from other countries and are considered a threat.

There are 38 types of industrial commodities which are grouped into 5 types of industry, namely Food, Clothing, Chemicals and Building Materials, Metals and Electronics and Crafts. In the industrial sector, work programs focus on developing IKM performance so that they are able to develop and be competitive. In its development and growth, IKM faces the same problem, namely the lack of competence in Business Knowledge, Business Skills, Confidence and Innovation, in which individual competencies play an important role in shaping the competence of the company itself. In making its work program, the Industrial Sector focuses on the problem of increasing Business Knowledge, Business Skills, Confidence and Innovation.

This fact also shows that the competence of Business Knowledge, Business Skills, Confidence and Innovation of HR from IKM Kota Bukittinggi is still low resulting in not optimal performance of IKM in providing customer or consumer satisfaction and loyalty to products and services produced by IKM. Research by Zarook, Tarek, Rahman, & Khanam [5] shows the effects of small and medium size enterprises’ (SMEs) management skills on access to financing in Libya. The study covers the relevant factors of management skills such as management experience, business planning, education level, and political connection. The study reveals management experience and education level to be significant factors regarding SMEs’ access to finance in Libya. In addition, management experience is a very important factor in allowing owners/managers of SMEs to obtain access to finance.

According to the management site on the linovhr.com application, there are several variables that can be used as indicators of performance appraisal which are:

1) Quality of work: whether the employee concerned has known the quality standards of work signaled by the company to the employee
2) Job Technical Knowledge Provided: this relates to the quality of work and the speed at which employees complete the tasks for which they are responsible.
3) Adaptability: employees have instinctive decisions and policies that can affect performance, because they have the ability to adapt and measure their work in support of the company's vision and mission.
4) Teamwork: the ability of employees to work with other employees
5) Ability to organize work: the ability of employees to manage their duties including making schedules
6) Ability to develop yourself; intention in developing himself to be better
7) Employee’s knowledge: about their work, because this factor is part of the responsibility
8) Speed in completing work: employees understand the quality standards of company productivity. This factor is related to the quality of work and the speed at which employees complete the work given.
9) Confidence: how far the employee is dependent on other employees in completing their work. This indicator relates to the independence of employees in carrying out their work
10) Communication between employees: the ability to communicate with fellow employees and superiors
11) The ability to convey ideas: the ability to convey ideas and ideas to others in attending meetings. This factor is a separate assessment in assessing a person's performance.
12) Leadership: Leadership is a factor that must be assessed in performance because employees who have the talent to lead can mobilize and motivate their colleagues;
13) Discipline: The suitability factor between educational background and the placement in the field given to employees
14) Timeliness: employees are able to plan and schedule their work

A study by Purwidianti & Rahayu [6] confirmed that business strategy effects the performance of Small Medium Industry in Kecamatan Purwokerto Utara. Another scholar Rohana & Jusoff [7] supported that in the wake of knowledge-based economy, tacit knowledge sharing is the best tool for SME in enhancing competence and organizational performance which suit its needs and background. Tacit knowledge sharing is still at infancy especially in SME. A study by Shams & Mahmudul [8] found that there is a strong correlation between entrepreneurial orientation on IKM performance mediated by governmental support.

According to Dabić, Lažnjak, Smallbone, Švarc, & Smallbone [9] the business performance is positively related to intellectual capital innovation culture within an IKM. This finding is also supported by Shams &
Mahmudul [8] which in their study mentioned that organizational culture mediated the relationship between entrepreneurial orientation and IKM performance. Another study by Anwar [10] shows that IKM should have business model innovation to gain its competitive advantage and to expand its business operation.

According to Jeon, Han, & Lee [11] the empirical results of their study which are based on t-tests of the differences between adopters and non-adopters, the linear probability model, and the logit model, all suggest that the important determinants of the successful adoption of e-business by SMEs in Korea are: the CEO’s knowledge of information technology (IT)/e-business, relative advantages and benefits from implementing e-business, governmental support, globalization strategy and the North Korean factor. Business size, the cost of e-business adoption and competitive pressure of the industry do not seem to play an important role in the adoption of e-business by Korean SMEs. In addition Sugiarto [12] found that the emerge of disruptive innovation of IKM in Malang is relative simple. The phases are opportunity identification, fact finding, generating ideas, budgeting and implementation. The supposing aspects are market opportunity, customer, competition, information, personal motive and labor. While the barriers are capital, knowledge, mindset, legal aspect and supplier

The purpose of the research is to explore more of the effect of business knowledge, business skills, confidence and innovation on the performance of small and medium industry (IKM) in the City of Bukittinggi.

2. Methods

The research approach that will be carried out by researchers is the type of quantitative approach, where the quantitative approach is a number of studies to test a hypothesis. Quantitative research is a research method based on the philosophy of positivism to study a specific population or sample, data collection using research instruments, quantitative or statistical data analysis, with the aim of testing predetermined hypotheses. This type of research is associative research (relationship) with quantitative analysis methods (data in the form of numbers).

The population used in this study is the Small and Medium Industries (IKM) in 3 Districts in Bukittinggi City from all types of industries, totaling 2,504 business units. The population used in this research is Small and Medium Industries (IKM) in 3 Districts in the City of Bukittinggi from all types of industries, totaling 2,504 business units. Sampling was taken by determining the number of representative. This study uses research indicators as many as 28 indicators x 5 = 140. So the number of samples is 140 business units. The data from 140 business units were collected, although only 130 data could be processed as the remaining 10 respondents were considered error. The analysis in this research is analyzed through the following methods:

1. Descriptive analysis
   This analysis is carried out by collecting, compiling, and presenting data on Business Knowledge, Business Skills, Self-Confidence, Innovation and Business Performance.

2. Test Instrument
   Including the validity and reliability of the instruments.

3. SEM (Structural Equation Modeling)
   The data analysis technique used in this study is SEM analysis technique based on PLS variance. SEM is a statistical technique that is able to analyze the patterns of the relationship between latent constructs and their indicators, latent constructs with each other, and direct measurement errors. SEM testing uses the SmartPLS application.

Outer model test:
1) Convergent validity.
   The value of convergent validity is the value of the loading factor on the latent variable with its indicators. The expected value is> 0.7 (values above 0.5 are still acceptable, while values below 0.5 must be excluded from the model)

2) Discriminant validity.
   This value is the value of the cross loading factor which is useful for knowing whether a construct has sufficient discretion, by comparing the loading value of the intended construct, which must be greater than the loading value with other constructs.

3) Average Variance Extracted (AVE). Nilai AVE yang diharapkan > 0.5
4) Composite Reliability.
   Data that has composite reliability> 0.7 has high reliability.
5) Cronbach Alpha.
   To test construct reliability it will give a lower value (under estimate) so it is more advisable to use composite reliability in testing the reliability of a construct. Latent variable has high reliability if the composite reliability and / or Cronbach's Alpha value is above 0.70, although the value of 0.6 is still acceptable.

Structural Model (Inner Model) test:
   Inner model testing or structural models is carried out to see the relationship between latent constructs or variables, which can be seen from the R-square value of the research model and also by looking at the coefficient of the structural path. The higher the R² value, the better the predictive model of the proposed research model. A strong model is indicated by a value of 0.67, a moderate model is indicated by a value of 0.33 and a weak model is indicated by a value of 0.19. The value of R² is used to explain the effect of the latent (independent) variable on the latent (dependent) variable or how much influence it has

3. Results and Discussion

3.1 Output model and modified outer loading
   In the Convergent Validity Test, it can be seen from the standardized Loading Factor value. Loading Factor value illustrates the magnitude of the correlation between each measurement item (indicator) and its construct (latent variable). The following is a display of the SmartPLS output for the Outer Model:

   ![Output Model](Figure 1)

   Figure 1. Output Model
From the table above, it can be seen that the Loading Factors value on the Outer Loadings of each indicator on each variable has been declared valid because it has a loading factor value > 0.5. The conclusion is that the indicators for all variables can be used for hypothesis testing or further testing.

### a. Discriminant Validity Test

#### Table 2. Cross Loading Discriminant Validity

| Source: Output SmartPLS 3.0, 2020 |
|-----------------------------------|

| Innovation | Business Skills | Business Performance | Business Knowledge | Self Confidence | Status |
|------------|-----------------|-----------------------|--------------------|----------------|--------|
| INO1       | 0.756           | 0.317                 | 0.466              | 0.415          | 0.522  |
| INO2       | 0.682           | 0.295                 | 0.416              | 0.408          | 0.356  |
| INO3       | 0.826           | 0.425                 | 0.413              | 0.471          | 0.572  |
| INO4       | 0.803           | 0.487                 | 0.427              | 0.516          | 0.552  |
| INO5       | 0.822           | 0.446                 | 0.370              | 0.404          | 0.544  |
| INO6       | 0.771           | 0.446                 | 0.342              | 0.421          | 0.560  |
| KB2        | 0.526           | 0.430                 | 0.893              | 0.551          | 0.509  |
| KB3        | 0.419           | 0.381                 | 0.883              | 0.538          | 0.347  |
| KB4        | 0.408           | 0.567                 | 0.797              | 0.500          | 0.466  |
| KBS1       | 0.437           | 0.718                 | 0.395              | 0.626          | 0.551  |
| KBS2       | 0.504           | 0.727                 | 0.317              | 0.530          | 0.596  |
| KBS3       | 0.425           | 0.908                 | 0.531              | 0.596          | 0.450  |
Based on Table 2, above, it shows that each indicator on the latent variable has the greatest cross loading value compared to the cross loading value for other variables. As an illustration, the cross loading value on INO1 (the first statement indicator for the Innovation variable) is 0.756 which is greater than the cross loading value for other variables, namely Business Skills (0.317), Business Performance (0.466), Business Knowledge (0.415) and Confidence (0.552). The same thing is seen in other indicators of latent variables. Thus it can be said that the Discriminant Validity in this study is good.

### Table 3. Average Variance Extracted (AVE)

| Source: Output SmartPLS 3.0, 2020 |
|-----------------------------------|
| **Average Variance Extracted (AVE)** |
| Innovation | 0.605 |
| Business Skill | 0.609 |
| Business Performance | 0.738 |
| Business Knowledge | 0.572 |
| Self Confidence | 0.626 |

The SmartPLS output results in Table 3 show the AVE values of all latent variables above 0.5. Thus it can be stated that each latent variable has a good Validity value.

b. Composite Realibility Test and Cronbach Alpha Test

### Table 4. Composite Reliability

| Source: Output SmartPLS 3.0, 2020 |
|-----------------------------------|
| **Composite Reliability** |
| Innovation | 0.902 |
| Business Skill | 0.861 |
| Business Performance | 0.894 |
| Business Knowledge | 0.842 |
| Self Confidence | 0.833 |
Based on table 4 above, it is known that the composite reliability value of all research variables is > 0.7. These results indicate that all variables have a high level of reliability.

**Table 5. Cronbach Alpha**

| Cronbach's Alpha |  |
|------------------|--|
| Innovation       | 0.869 |
| Business Skill   | 0.784 |
| Business Performance | 0.821 |
| Business Knowledge | 0.749 |
| Self Confidence  | 0.706 |

*Source: Output SmartPLS 3.0, 2020*

A variable can be declared reliable or fulfills Cronbach Alpha if it has a Cronbach alpha value > 0.7. The results of Cronbach alpha in table 5 show that all variables have a Cronbach Alpha value above 0.7. For the Innovation Variable the value is 0.869, Business Skills is worth 0.784, the Business Knowledge Variable is worth 0.749, and the Confidence Variable is worth 0.706. Thus all variables are said to be reliable.

c. Inner Model and Q-square test

**Table 6. R-Square**

| R Square | R Square Adjusted |
|----------|-------------------|
| Kinerja Bisnis | 0.443 | 0.425 |

*Source: Output SmartPLS 3.0, 2020*

Based on the results of data processing the R-square value listed in table 6, it is explained that the R-Square in the Business Performance variable is 0.443 or 44.3% which is explained by the Business Knowledge, Business Skills, Confidence and Innovation variables and the remaining 0.557 or 55.7% is explained by other variables outside the model in this study. Q-Square measures how well the observed value is generated by the model. A Q-square value greater than 0 (zero) indicates that the model has a predictive value, while a Q-square value less than zero (0) indicates that the model has less relevant predictive value.

**Table 7. Nilai Q-Square**

|       | SSO   | SSE   | Q² (=1-SSE/SSO) |
|-------|-------|-------|-----------------|
| Innovation | 780.000 | 780.000 |                |
| Business Skill | 520.000 | 520.000 |                |
| Business Performance | 390.000 | 272.367 | 0.302          |
| Business Knowledge | 520.000 | 520.000 |                |
| Self Confidence | 390.000 | 390.000 |                |

*Source: Output SmartPLS 3.0, 2020*
Based on table 7 above, it is known that the Q-Square value is 0.302 which means Business Knowledge, Business Skills, Confidence and Innovation in predicting business performance are classified into the moderate category, which means that the model has very good predictive relevance.

d. Hypothesis Test
To assess the significance of the model in testing this structural model, it can be seen from the t-statistic value between the independent variable and the dependent variable in the Path Coefficient table below:

| Source: Output SmartPLS 3.0, 2020 |
|-----------------------------------|
| Innovation > Business Performance |
| 0.193                             |
| Sample Mean (M)                   |
| 0.206                             |
| Standard Deviation (STDEV)        |
| 0.107                             |
| T Statistics (|O/STD EV)|        |
| 1.797                             |
| P Values                          |
| 0.073                             |
| Business Skill > Business Performance |
| 0.117                             |
| Sample Mean (M)                   |
| 0.120                             |
| Standard Deviation (STDEV)        |
| 0.111                             |
| T Statistics (|O/STD EV)|        |
| 1.051                             |
| P Values                          |
| 0.294                             |
| Business Knowledge > Business Performance |
| 0.365                             |
| Sample Mean (M)                   |
| 0.361                             |
| Standard Deviation (STDEV)        |
| 0.101                             |
| T Statistics (|O/STD EV)|        |
| 3.610                             |
| P Values                          |
| 0.000                             |
| Self Confidence > Business Performance |
| 0.102                             |
| Sample Mean (M)                   |
| 0.105                             |
| Standard Deviation (STDEV)        |
| 0.110                             |
| T Statistics (|O/STD EV)|        |
| 0.927                             |
| P Values                          |
| 0.355                             |

4. Conclusion
Based on the results of hypothesis testing, Business Knowledge has a direct and significant effect on Business Performance. Based on the results of data analysis using SmartPLS 3.0 where the Original Sample (O) is a path coefficient of 0.361 and a T statistic to show the significance of the effect, namely 3.610 which is greater than 1.96, or from a P value of 0.000 which is smaller than 0.05. Thus this hypothesis is proven, namely Business Knowledge has a significant positive effect on Business Performance. The higher the Business Knowledge, the higher the perceived Business Performance.
Next, the results of data analysis using SmartPLS 3.0 where the Original Sample (O) is a path coefficient of 0.117 and a T statistic to show the significance of the effect, namely 1.051 which is less than 1.96, or from a P value of 0.294 which is greater than 0.05. Thus this hypothesis shows that Business Skills have a positive but insignificant effect on Business Performance. The insignificance of Business Skills on Business Performance is caused by a phenomenon where most business actors in the City of Bukittinggi are business actors who continue their family business from generation to generation, so that they naturally have knowledge, self-taught due to environmental forces. So that in continuing their business they only need to have knowledge about the business in running their business without the need for skills, because they can employ employees with the skills they need. This is evident if they are involved in skills training activities by related institutions, IKM leaders rarely participate in these activities, they are more likely to send their employees to participate in these activities, because employees will work and they just monitor it.

Based on the results of the hypothesis testing, Confidence has a positive but insignificant effect on business performance. Based on the results of data analysis using SmartPLS 3.0 where the Original Sample (O) is the path coefficient of 0.102 and the T statistic to show the significance of the effect is 0.927 which is less than 1.96, or from a P value of 0.355 which is greater than 0.05. Thus this hypothesis is proven, namely Self-Confidence has a positive but insignificant effect on Business Performance. The insignificance of Self-Confidence on Business Performance is caused by a phenomenon in which the spirit of the Minang Kabau people in general and the people of Bukittinggi City in particular have been embedded with a trading spirit / entrepreneur that causes them have high self-confidence in doing business. Small and Medium Industries (IKM) in the City of Bukittinggi have the confidence to become business actors but do not feel confident when faced with making important decisions in developing their businesses. They are satisfied if their business is sufficient to meet their economic needs, but are not ready to move forward and develop.

Furthermore Based on the results of the hypothesis testing, innovation has a positive but insignificant effect on business performance. Based on the results of data analysis using SmartPLS 3.0 a Original Sample (O) is a path coefficient of 0.193 and T statistic to show the significance of the effect, namely 1.797 which is greater than 1.96, or from a P value of 0.073 which is greater than 0.05. Thus this hypothesis is proven, namely innovation has a positive but insignificant effect on business performance. The insignificance of innovation on business performance is due to the superior products of the city of Bukittinggi which are dominated by handicraft products and food and beverage products which have their own characteristics. So that innovation is not really needed, because they maintain the authenticity of the products they make. The more original (original) their product, the higher the selling price.

Last but least, based on the test results using SmartPLS 3.0, it is known that the 4 variables, namely Business Knowledge, Business Skills, Confidence and Innovation simultaneously have a positive effect on Business Performance with a percentage of the effect of 0.443 or 44.3% which is explained by the Business Knowledge variable, Business Skills, Confidence and Innovation and the remaining 0.557 or 55.7% is explained by other variables outside the model in this study.

From this research it can be seen that the higher the Business Knowledge, Business Skills, Confidence and Innovation of a business actor will increase the business performance of a business. In this study, business knowledge is the main determinant of the performance of a business. Based on the results of the hypothesis as a whole, it is known that the variable that has the strongest influence on business performance is work ability which has a P-value of 0.000.

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