
PROCEEDING OF RESEARCH AND CIVIL SOCIETY DESEMINATION

ISSN 3024-8426, Volume 3, No 1, Pages 43-49

DOI: <https://10.37476/presed.v3i1.116>

THE ROLE OF INNOVATION IN MEDIATING ENTREPRENEURSHIP LEARNING AND MOTIVATION TOWARDS ENTREPRENEURIAL INTEREST (CASE STUDY OF STUDENTS OF THE NOBEL INDONESIA INSTITUTE OF TECHNOLOGY AND BUSINESS)

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Abstract: This research is a quantitative research with a sampling technique using a survey method. Data was obtained by distributing questionnaires using a Likert scale. This research aims to determine the Role of Innovation in Mediating Entrepreneurship Learning and Motivation towards Entrepreneurial Interest (Case Study on Students of the Nobel Institute of Technology and Business Indonesia). The population used in this study was 100 students from the Nobel Institute of Technology and Business Indonesia. A sample size of less than 50 cannot be factor analyzed; a sample size of 100 or more is required. The data analysis method used was Partial Least Squares using the Smart PLS application.

Keywords: Entrepreneurship Learning; Motivation; Interest in Entrepreneurship; and Innovation

A. Introduction

The Industrial Revolution 4.0 has had a significant impact on the Indonesian labor market, with technical and digital skills becoming essential for competitiveness. Unfortunately, many Indonesian workers lack these skills, widening the gap between industry demand and the availability of skilled labor (Maryanti et al., 2024). This situation raises concerns that, if not addressed effectively, the demographic bonus could turn into a demographic disaster, with increased structural unemployment and economic inequality. Entrepreneurship is

an activity that has become a key focus for developing a country's economic growth (Widyawati et al., 2022). This is especially true in this era, as individuals experience ever-increasing daily needs, as humankind evolves.

Micro, Small, and Medium Enterprises or abbreviated as MSMEs are productive businesses run by small individuals or business entities that aim to grow and develop their businesses to build the national economy (Zulkarnain et al., 2024).

Innovation is considered a critical success factor in achieving their goals,



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such as promoting social and economic development, providing employment, and fostering better relationships with industry (Ahmad et al., 2023).

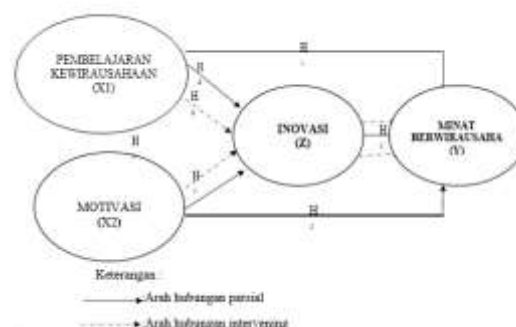
Entrepreneurship learning is expected to foster entrepreneurial energy, creativity, independence, and help the country's economy (Dewi & Subroto, 2020).

This phenomenon demonstrates the trend that higher education is not only preparing graduates to find jobs but also to create them through entrepreneurship. The Institute of Technology and Business campus has produced graduates who are ready to become entrepreneurs, with the available learning opportunities guiding students to create businesses with compelling ideas.

B. Materials and Methods

This study is intended to analyze the role of innovation in mediating entrepreneurial learning and motivation towards entrepreneurial interest (a case study of students at the Nobel Institute of Technology and Business Indonesia).

In this study, the identification of research variables can be divided into three types of variables. First, the independent variables in this study are divided into three, namely Entrepreneurship Learning (X1) and Motivation (X2), the mediating variable in this study is Innovation (Z), and the dependent variable is Entrepreneurial Interest (Y).



This study uses a quantitative approach to test hypotheses regarding the relationship between variables or causal relationships. According to (Sugiyono, 2017 in (Rupidin et al., 2023), quantitative research methods can be defined as research methods based on the philosophy of positivism, which can be used to research specific populations or samples, where data collection uses research instruments, data analysis is quantitative or statistical, with the aim of testing predetermined hypotheses.

Selection of sample techniques in this study According to (Hair et al 2010 in (Alwi et al., 2023)) the number of samples cannot be analyzed by factors if 51 is less than 50, the sample must be 100 or more. As a general rule, the minimum number of samples is at least 5 times and it will be more acceptable if the number of samples is 10 times the number of variables to be studied and analyzed, so that the sample is 100 respondents.

The technique chosen for data analysis must be appropriate to the research model and the variables being studied. The analysis used in this study was SmartPLS 4 software. PLS is a component- or variance-based Structural Equation Modeling (SEM) model.

The Measurement Model in the PLS test is conducted to test internal validity and reliability. This Outer Model analysis

will specify the relationship between latent variables and their indicators, or it can be said that the outer model defines how each indicator relates to its latent variable.

Inner model analysis, also known as a structural model, is used to predict causal relationships between the variables tested in the model. Testing of this structural model is done by examining the R-square value, which is a test of the model's goodness of fit. The structural model is evaluated using the R-square for the dependent construct, the Stone-Geisser Q-square test for predictive relevance, and the t-test and significance test for the structural path parameter coefficients.

The significance test in the SEM model with PLS aims to determine the effect of exogenous variables on endogenous variables. Hypothesis testing using the SEM PLS method is performed by bootstrapping with the help of the smart PLS computer program. This study used the PLS (Partial Least Squares) data analysis method. In addition to measuring the strength of the relationship between two or more variables, it also shows the direction of the relationship between the dependent and independent variables.

The variance accounted for (VAF) method was used to test SEM-PLS mediation. This method is considered more appropriate because it does not require any assumptions about the distribution of the variables, allowing it to be applied to small sample sizes. Therefore, this approach is most appropriate for SEM-PLS, which requires resampling and has higher statistical power than the Sobel method.

C. Result and Discussion

Result

1. Research result

The Nobel Indonesian Institute of Technology and Business established 2 (two) Faculties, namely the Postgraduate Faculty and the Faculty of Technology and Business. Currently, the Faculty of Technology and Business fosters 7 (Seven) Study Programs, namely Management (S1), Accounting Study Program (S1), Information Systems and Technology Study Program (S1) which was born simultaneously with the change in form from a College to an Institute in 2021. Then in 2023, the Nobel Indonesian Institute of Technology and Business succeeded in adding 4 (four) new Study Programs, undergraduate programs at the Faculty of Technology and Business, namely (1). Information Technology Education Study Program (S1); (2). Fishery Product Technology Study Program (S1); (3). Mining Engineering Study Program (S1), and (4). Industrial Engineering Study Program (S1).

A. Outer model analysis test

According to (Wiyono 2011:403 in (Alwi et al., 2023)), validity can be determined by convergent validity (outer model) with a loading factor value of 0.50 to 0.60 which is considered sufficient and for Average Variance Extracted (AVE) with an AVE value of > 0.50 . In this study, the researcher used a loading factor value of > 0.50 and an AVE value of > 0.50 . Then it was stated that all were validated.

Another method for assessing discriminant validity is by comparing the square root of the average variance extracted (AVE) from the data calculations performed in Smart PLS.

Table 1. Discriminant validity value

| Nilai Discriminant Validity | | | | |
|-----------------------------|--------------------|----------------------------|----------|---------|
| | Minat Berwirausaha | Pembelajaran Kewirausahaan | Motivasi | Inovasi |
| Minat Berwirausaha | | | | |
| Pembelajaran Kewirausahaan | 0,879 | | | |
| Motivasi | 0,762 | 0,722 | | |
| Inovasi | 0,893 | 0,821 | 0,921 | |

Sumber : Data diolah peneliti tahun 2024 menggunakan Smart PLS

The status variable is reliable with a composite reliability value > 0.80 . The lowest composite reliability value was 0.841 for the innovation variable, and the highest value was 0.918 for the entrepreneurship learning variable. A composite reliability value > 0.9 is categorized as having a high level of reliability.

Table 2. Table 2. Composite reliability values

| Nilai Composite Reliability | | | |
|-----------------------------|----------------------------|-----------------------|----------|
| No | Variabel | Composite Reliability | Status |
| 1. | Pembelajaran Kewirausahaan | 0,918 | Reliabel |
| 2. | Motivasi | 0,933 | Reliabel |
| 3. | Minat Berwirausaha | 0,897 | Reliabel |
| 4. | Inovasi | 0,841 | Reliabel |

umber : Data diolah peneliti tahun 2024 menggunakan Smart PLS

B. Inner model analysis test

Structural model testing is conducted to examine the relationship between latent constructs, including using the R-Square test. The R-Square value is the coefficient of determination for endogenous constructs. R-Square is used to measure the level of variance in changes in the independent variable on the dependent variable. According to Chin (1998) in (Kosasi, 2021), an R-Square value of 0.67 is considered strong, 0.33 is considered moderate, and 0.19 is considered weak. The following are the R-Square values used to measure the level of variance change:

Table 3. R square test results

| Nilai R-Square | | |
|--------------------|----------|-------------------|
| | R-square | R-square adjusted |
| Minat Berwirausaha | 0,733 | 0,724 |
| Inovasi | 0,723 | 0,717 |

The R-Square value for the innovation variable is 0.723. This means that 72.3% of the innovation variable can be explained by the variables of entrepreneurial learning, motivation, and interest in entrepreneurship, while the remaining 27.7% is explained by other variables outside this research model.

C. PLS Mediation Testing with VAF Method

1. Mediation Test with VAF 1

The mediation test of the entrepreneurial learning variable through innovation on entrepreneurial interest produced a VAF value of 19.5%, or fell into the category of a VAF value of less than 20% so that it was stated that there was almost no mediation effect.

2. Mediation Test with VAF 2

The mediation test of the motivation variable through innovation on entrepreneurial interest produced a VAF value of 69.5%, or fell into the VAF value category ranging from 20% to 80% so that it was stated in the partial mediation category.

Discussion

1. The Influence of Entrepreneurship Learning on Entrepreneurial Interest

The test obtained based on the path coefficient table provides a P Value of 0.000 so that the P Value < 0.05 is classified as a significant category with a t statistics value of $4.125 > 1.984$ (t table), with an influence of 0.305 in other words H_0 is rejected and H_a is accepted.

2. The Influence of Motivation on Interest in Entrepreneurship

The test obtained based on the path coefficient table provides a P Value of 0.411 so that the P Value <0.05 is classified as an insignificant category with a t statistics value of $0.822 > 1.984$ (t table), with an influence of 0.093 in other words H_0 is accepted and H_a is rejected. This means that Motivation has no effect on Entrepreneurial Interest (Case Study of Students of the Nobel Institute of Technology and Business Indonesia), motivational factors may not be enough to encourage students to start their businesses, even though they may have an internal drive for entrepreneurship.

3. The Influence of Innovation on Interest in Entrepreneurship

The test results obtained based on the path coefficient table provide a P Value of 0.018 so that the P Value <0.05 is classified as a significant category with a t statistics value of $2.374 > 1.984$ (t table), with an influence of 0.357 in other words H_0 is rejected and H_a is accepted. This means that innovation has a positive and significant effect on Entrepreneurial Interest (Case Study of Students of the Nobel Institute of Technology and Business Indonesia).

4. The Influence of Entrepreneurship Learning on Innovation

The test results obtained based on the path coefficient table provide a P Value of 0.005 so that the P Value > 0.05 is classified as a significant category with a t statistics value of $2.838 < 1.984$ (t table), in other words, H_0 is rejected and H_a is accepted. This means that entrepreneurship learning has a positive and significant effect on Innovation (Case

Study on Students of the Nobel Institute of Technology and Business Indonesia),

5. The Influence of Motivation on Innovation

The test results obtained based on the path coefficient table provide a P Value of 0.000 so that the P Value <0.05 is classified as a significant category with a t statistics value of $5.217 > 1.984$ (t table), with an influence of 0.594 in other words H_0 is rejected and H_a is accepted. This means that motivation has a positive and significant effect on Innovation (Case Study on Students of the Nobel Institute of Technology and Business Indonesia).

6. The Influence of Entrepreneurship Learning through Innovation on Entrepreneurial Interest)

The test results obtained are based on the path coefficients value at the t value between entrepreneurial learning and entrepreneurial interest from 1.778 remains to 1.778 in specific indirect effects, so that the t statistics value is $1.778 < 1.984$ (t table). Then the relationship between entrepreneurial learning through innovation and entrepreneurial interest remains significant with a P Value of 0.075 so that the P Value <0.05 is classified as a significant category, then H_a is accepted and H_0 is rejected, with no mediation or Partial mediation.

7. The Influence of Entrepreneurship Learning through Innovation on Entrepreneurial Interest)

The test results obtained are based on the path coefficient table on the t value between motivation and interest in entrepreneurship from 2.208 remains to 2.208 on specific indirect effects, so that

the t statistics value is $2.208 > 1.984$ (t table). Then the relationship between motivation through innovation and interest in entrepreneurship remains significant with a P Value of 0.027 so that the P Value value

D. Conclusion

1. Entrepreneurship learning influences interest in entrepreneurship
2. motivation does not influence interest in entrepreneurship
3. Innovation has a positive and significant influence on interest in entrepreneurship.
4. Entrepreneurship learning has a positive and significant influence on innovation.
5. motivation positively influences innovation significantly
6. Entrepreneurship learning can have a direct and significant influence on entrepreneurial interest, but indirectly if mediated by innovation there is no influence on entrepreneurial interest (case study on students of the Indonesian Nobel Institute of Technology and Business).
7. Motivation can have a direct and indirect influence on interest in entrepreneurship, but indirectly, if mediated by innovation, there is an influence on interest in entrepreneurship (case study of students at the Nobel Institute of Technology and Business Indonesia).

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