The Influence of Organizational Learning and Innovation on Competitive Advantage at SMK in West Java Province

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ABSTRACT
The establishment of Vocational Schools at this time is not yet capable of making the greatest contribution to the provision of excellent human resources. As a result, continual learning and innovation are required in order to improve its competitive edge. The purpose of this study was to investigate the impact of Organizational Learning and Innovation on Competitive Advantage in Indonesian Vocational High Schools (SMK). The partial least squares analysis approach was applied in this study (PLS-SEM). This study's population consisted of SMK (Vocational High School) students from West Java Province, Indonesia. The intended response was the SMK's Principal. The findings of this study show that the factors analyzed had a beneficial influence on competitive advantage.

Keywords: Organizational Learning, Competitive Advantage, Vocational High School.

1. INTRODUCTION

In today's fast-paced and dynamic world, business competition is getting tougher. Companies are competing to find the best strategy to improve their performance. One of the important issues that the company pays attention to is qualified human resources. The company only looks for the best candidates to work for the company to fulfill this. Although there are many job vacancies available, the unemployment rate in Indonesia is still relatively high. Based on the Central Statistics Agency data, the number of unemployed in August 2019 reached 7.05 million people, with an Open Unemployment Rate (TPT) of 5.28 percent in August 2019. In addition, in August 2019, TPT for Vocational High School education took the highest position. That is equal to 10.42 percent, while the lowest TPT is found in elementary education level and below that is equal to 2.41 percent [1]. Judging from the data above, Vocational High Schools (SMK) occupy the highest position for the open unemployment rate. At the same time, SMK is expected to be a "shortcut" for the lower-middle-class people to be able to work immediately after completing high school.

To overcome these problems, the government has started to run various programs such as vocational training or competency-based apprenticeships in companies to conduct competency certification to improve the skills and competitiveness of human resources in Indonesia. In addition, the government is also trying to improve the quality of human resources to move from middle-income countries to high-income countries. One of the steps taken by the government to realize the vision and mission above is to improve the quality of education, especially at the secondary vocational level. The education sector must also have a competitive strategy to survive in the competition in education. Vocational High School, apart from being an educational institution that develops human resources in improving skills and abilities, is also an institution that provides public services, such as public service companies in general [2]. The existence of Vocational High Schools (SMK) is the front line in welcoming the era of the industrial revolution that we are facing. As a result, numerous procedures must be planned for present vocational students, such as strengthening the quality or aptitude of vocational school graduates to handle industry 4.0 difficulties. As a formal educational institution intended to help the acceleration of national development, SMK must be aware of its potential.
At present moment, the establishment of Vocational Schools has not been able to give the greatest contribution in the creation of excellent human resources. As a result, continual learning and innovation are required in order to improve its competitive advantage. Organizations are always seeking for methods to gain a competitive advantage [3]. Standardized procedures, division of work, and management controls all contribute to efficiency in a stable setting [4]. It is believed that in order to deal with current external opportunities and dangers, companies must learn, that is, gain new knowledge and skills that will improve their present and future performance [5] [6] [7] [3]. It is argued that a company's only competitive advantage in the future will be its managers' capacity to learn quicker than competitors [8]. The application of the essential components of learning organization in vocational institutions, among others: building a shared vision (shared vision), developing systems thinking (systems thinking), developing a learning team (team learning), develop personal mastery (personal mastery), changing mental models (mental models), developing learning (learning), developing knowledge, organizing people/people, developing technology, improving organizations need to be realized [9].

From a historical standpoint, organizational learning is acknowledged as an essential component of the paradigm of long-term competitiveness [10]. Management literature stresses the critical role that organizational learning and innovation play in increasing a company's competitive advantage [11]. Organizational Learning (OL) is a notion in a dynamic organizational context, and it is an organizational success approach. Organizations must be able to expand their learning capacity in order to attain and retain a competitive advantage in a fast changing business environment, and the ability to innovate is critical to creating a competitive advantage [12]. Innovation may be defined as a series of actions that include responding to dynamic changes and upgrading current goods, services, competences, business models, and so on [10]. The same innovation might be regarded a result, i.e., responding to intense competition by producing new goods, services, and technology, as well as generating new business models and markets [11]. Innovation is also often used to refer to changes that are perceived as new by the people who experience them. Innovation may be defined as a set of actions that include responding to dynamic changes and upgrading current goods, services, capabilities, business models, and so on [10]. The same innovation might be regarded a result, i.e., responding to increased competition by producing new goods, services, technology, creating new business models, markets, and so on [11].

Several studies have shown that organizational learning improves organizational performance (e.g., [13] [14]). According to other studies, organizational learning is a successful technique for sustaining and improving competitive advantage and firm performance (e.g., [15] [16] [17]). Experts also reveals that new information and skills gained via learning improve the company's inventive capacities, enhancing competitiveness and performance [18] [19] [20] [21]. Organizational learning, innovation, and performance all have a beneficial relationship. However, research on the interrelationships between the three notions at the same time is still uncommon [11]. So in this study, the authors are interested in examining the effect of these three variables on SMK in West Java province.

1.1. Literature Review

1.1.1. Organizational Learning

According to the level of analysis, as well as the complexity and context in which organizational learning is applied, the literature has many distinct definitions of organizational learning. There is no widely accepted standard definition of organizational learning. This is due to the effect of different views and disciplines, which results in a lack of understanding [3]. Organizational learning is described as an organization that can continually improve its performance because its members are devoted and competent individuals who can learn and share information at both a superficial and substantive level for the organization [11]. Organizational learning is the fundament for achieving long-term competitive advantage and a major factor in increasing organizational performance [22] [23] [24] [25] [26]. Companies that can learn have a greater probability of detecting market events and trends [27] [17] [28]. As a result, learning companies are more adaptable and quick to respond to new problems than rivals [27] [29], allowing businesses to sustain long-term competitive advantages [30]. The acquisition of technology, the process of new development, learning something new, management and organizational knowledge and abilities, expanding knowledge for efficiency, and the ability to identify solutions are the measuring markers of organizational learning [2].

1.1.2. Innovation

Organizational innovation is studied in many disciplines, such as management/strategy, entrepreneurship, and marketing [3]. Innovation is an idea or new item/thing that does not yet exist or already exists but is not yet known by the adopters [2]. Innovation is the ability to apply creativity to solve problems and opportunities to improve the welfare of both individuals and organizations. Innovation can be measured through the innovation of product, process, and management. Innovation supports businesses in dealing with a volatile external environment and, as a
result, is one of the primary drivers of long-term corporate success, particularly in dynamic markets [31] [32] [33] [34]. Organizations must be able to cope with increased complexity and rapid change in order to exist in a dynamic environment [5]. Enterprises with the ability to innovate will be able to adapt to difficulties faster and take advantage of new goods and market possibilities better than non-innovative firms in this setting [5].

1.1.3. Competitive Advantage

A long-lasting competitive advantage is an organization's ability to learn faster than its competitors [16]. Competitive Advantage as a situation where a company can do something, and other companies cannot do it or have the desired competitor. Competitive advantage can be measured by differentiation, cost advantage, and level of reach.

1.1.4. Conceptual Framework and Hypotheses

Organizational learning is critical to innovation [16]. Because of the necessity to innovate continually in order to thrive in a competitive environment, organizational learning is a strategic variable for organizations attempting to develop new goods or establish new markets. As a result, it is critical to encourage the development of variables that lead to innovation and enable the introduction of new ideas, goods, services, and systems ahead of other competing companies. Meanwhile, the organizational learning process is a way to develop the innovation process within the company. Therefore, in this study, the authors make a hypothesis:

H1: Organizational Learning has a positive effect on innovation

In a continually changing environment, the organizational learning process is a process in which companies employ current information and create new knowledge to shape the creation of new competencies. Organizational learning also positively affected competitive competence. Therefore, in this study, the authors expect the relationship:

H2: Organizational Learning has a positive and significant effect on Competitive Advantage

Because of the evolution of the competitive environment, the dissemination of innovation literature validates the idea that innovation is the most significant factor of company performance. Innovation can increase market share, greater production efficiency, higher productivity growth, and increase revenue. To achieve a competitive advantage, innovation must always focus on creating something new in the world. Therefore, in this research, the writer expects the relationship:

H3: Innovation has a positive and significant impact on Competitive Advantage

Figure 1. Conceptual framework

Based on the explanation that has been described previously regarding the variables that affect competitive advantage, this study wants to prove whether there is a positive and significant relationship between Organizational Learning and Innovation on Competitive Advantage in Vocational High Schools (SMK) in the province of West Java, Indonesia.

2. METHODS

This study aims to prove whether there is a positive and significant relationship between Organizational Learning and Innovation on Competitive Advantage in Vocational High Schools (SMK) in the province of West Java, Indonesia. This study's population is SMK in West Java Province, Indonesia. The Principal of the SMK is the intended responder.

To assess organizational learning, an indicator derived from [11] was employed, which consists of four dimensions and thirteen indicators. Using five Likert scales, respondents were asked to rate their degree of agreement with 30 statements.

To measure innovation also adapted from [11], consisting of 3 dimensions with nine indicators. Respondents were asked to fill in their level of agreement with each indicator using a 5 Likert scale.

The competitive advantage consists of 3 dimensions: Open-internal model results, Rational model results, and Human relations model results, which are also adapted from [11]. Respondents were asked to compare the position of SMK compared to other SMKs in West Java province, ranging from decreasing (1) to increasing (5) in the last three years.
3. RESULTS AND DISCUSSION

3.1. Result

3.1.1. Outer Model Evaluation

The relationship between variables and their indicators are examined in the outer model. The outer model analysis is tested using convergent validity, composite reliability, Average Variance Extracted (AVE), and Cronbach's Alpha. At this point, testing is done with the SmartPLS version 3.0 application. Construct validity testing may be performed by observing whether or not there is a significant connection between the construct and the indicators that comprise the construct, as well as whether or not there is a weak link with other constructs. Construct validity is divided into two parts: convergent validity and discriminant validity.

Figure 2. Direct Influence (Path Coefficient Model I)

3.1.2. Validity test

Validity of Convergence When each build indicator is tested according to [35], an indicator is considered to be legitimate if its value is more than 0.5. The loading factor for each concept indicator demonstrates convergent validity. The loading factor value must be more than 0.7 in order to establish convergent validity. Based on the author's data processing, it is known that all loading factor values are more than 0.7, implying that all indicators in this study are legitimate.

The AVE value and AVE square value were 0.603, 0.592, and 0.573, consecutively, based on the results of calculations performed by the PLS Algorithm for organizational learning, innovation, and competitive advantage indicators. From these results, it can be seen that the AVE value for all variables meets the value of the requirements, which is above 0.5. The lowest AVE value is in the Competitive Advantage variable, with 0.573. The results from this study can be considered to have satisfied the standards of the convergent validity test by paying attention to the loading factor and AVE values.

Another method for assessing discriminant validity is to contrast the value of cross-loadings for each construct with the correlation between the construct and the other constructs in the discriminant validity model. According to the data processing findings, each item's cross-loading value on its construct is bigger than the value of loading with other constructions. Based on these findings, it is possible to conclude that discriminant validity is not a problem.

3.1.3. Reliability Test

Composite Reliability (CR)

After the construct validity test, the construct reliability test is done, which is evaluated by two criteria: Composite Dependability (CR) and Cronbach's alpha (CA) from the indicator block that evaluates the CR construct used to exhibit outstanding reliability. If the composite reliability value is more than 0.7, the construct is considered to be dependable. Based on the data processing findings, it is known that the composite reliability test results indicate a value of > 0.7, indicating that the value of each instrument is reliable.

Cronbach’s Alpha

If the composite reliability and Cronbach’s Alpha values are more than 0.6, a construct is considered reliable. Based on the data processing findings, it is known that the Cronbach alpha test results reveal a value of > 0.7, indicating that the value is trustworthy on each instrument.

3.1.4. Evaluation of Structural Model (Inner Model)

Following the evaluation of the model and the discovery that each construct was suitable for Convergent Validity, Discriminant Validity, and Reliability Composite Index, the structural model is evaluated, which involves testing path coefficient and R2.

Substantive theory is used by inner models (inner relations, structural models, and substantive theory) to define the relationship between latent variables. R-square was used to evaluate the structural model for the dependent construct and the Stone-Geiser Q-square test for the relevant predictive construct. R2 may be used to assess the influence of several independent latent variables. Latent variables influence whether or not the dependent is significant. The stronger the R2 value, the better the capacity of in-dependent latent variables to explain dependent latent variables. R2 values of 0.67, 0.33, and 0.19 suggest that the model is "excellent," "moderate," and "weak."

Based on the data processing results, the R-Square value for the Innovation variable is 0.600. This means
60% of the variation or change in innovation is influenced by Organizational Learning, while the remaining 40% is explained by other reasons. Based on this, the final result of R2 indicates that R2 includes moderate. Next, R-square values obtained for the variable Competitive Advantage of 0.342 means that 34.2% of the variation or change Competitive Advantage is influenced by Organizational Learning and Innovation, while the remaining 65.8% is explained by other causes. Based on this, the final result of R2 indicates that R2 includes moderate.

In addition to the R-square value, the model is assessed using the predicted Q-square relevance for the constructive model. Q-square assesses how effectively the model and estimated parameters create the observed values. The magnitude of Q2 ranges from 0 to 1, with one indicating that the closer the model, the better. Q2 has the same magnitude as the overall coefficient of determination on the route analysis (path analysis). Q2 > 0 shows that the model is predictively relevant. Otherwise, a score of Q2 0 shows that the model is not predictive.

The calculation of Q2 total variable Competitive Advantage done by the formula:

\[ Q_2 = 1 - [(1 - R^2) \times (1 - R^2)] \]

\[ Q_2 = 1 - [(1 - 0.600) \times (1 - 0.342)] \]

\[ Q_2 = 1 - 0.263 \]

\[ Q_2 = 0.737 \]

This value indicates that the information contained in the data, 73.7%, can be explained by the model, while 26.3% is explained by other variables (which are not contained in the model) and elements of error.

3.1.5. Direct Influence Analysis

### Table 1. Direct Effect

|                      | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDDEV) | T Statistics (|O/S TDEV|) | P Value |
|----------------------|---------------------|-----------------|-----------------------------|-----------------------------|---------|
| Organizational Learn | 0.775               | 0.777           | 0.033                       | 23.40                         | 0.000   |
| Ing - > Innovation   |                     |                 |                             |                             |         |
| Organizational Learn | 0.303               | 0.303           | 0.085                       | 3.572                        | 0.000   |
| Ing - > Competitive  | 0.318               | 0.321           | 0.084                       | 3.777                        | 0.000   |
| Advantage            |                     |                 |                             |                             |         |

Source: SmartPLS output data processing

Table 1 shows the results of the PLS calculation, which states the direct influence between variables. It is said that there is a direct effect if the T Statistics value is > 1.96, and it is said not to affect if T Statistics < 1.96.

Based on table 1, it can be stated as follows:

- The organizational learning variable significantly affects the Innovation variable with a T Statistics value of 23.401 > 1.96.
- The Organizational Learning variable has a significant effect on the Competitive Advantage variable with a T Statistics value of 3.572 > 1.96.
- Variable Innovation significant effect on the variable Competitive Advantage with value of T Statistics for 3.777 > 1.96.

3.1.6. Hypothesis Test

Hypothesis testing is done by looking at the probability value and its t-statistics. In terms of probability values, the t-table value for 5% alpha is 1.96. So the hypothesis is accepted when the t-statistics exceed the t-table. This test is designed to put to the test the hypothesis, which consists of three hypotheses:

Hypothesis Test 1

H1: Organizational Learning has a positive effect on innovation.

Based on table 1 with a T-statistics value of 23.401, which means > 1.96, then H1 is accepted, which means that Organizational Learning has a positive and significant influence on innovation, meaning that changes in the value of Organizational Learning have a unidirectional effect on changes in innovation or other words if Organizational Learning is running. There will be an increase in innovation and statistically has a significant effect. Based on the results of data processing by SmartPLS version 3.0, the path coefficient value of Organizational Learning on Innovation by 0.775, which means that the Organizational Learning positively related to innovation with the degree of closeness of the relationship is strong.

Hypothesis Test 2

H2: Organizational Learning has a positive and significant effect on Competitive Advantage.

Based on table 1 with a value of T - statistics 3.772, which means > 1.96, then H2 is received, which means that Organizational Learning has a positive and significant impact on the Competitive Advantage. It means that changes in the value of Organizational Learning influence the direction of the change Competitive Advantage. In other words, if Organizational Learning goes well, there will be an increase in Competitive Advantage and statistically has a significant effect. Based on the data processing results by SmartPLS version 3.0, the path coefficient
Organizational Learning to Competitive advantage for 0303. It means that Organizational Learning positively related to Competitive Advantage with the degree of closeness of the relationship is.

Hypothesis Test 3

H3: Innovation has a positive and significant impact on Competitive Advantage.

Based on table 1 and a value of T - statistics 3777, which equals< 1.96, H3 is obtained, indicating that innovation has a positive and substantial influence on competitive advantage. It indicates that changes in the value of innovation impact the direction of change in Competitive Advantage; in other words, when innovation is successful, there is a rise in Competitive Advantage, which statistically has a significant effect. Based on SmartPLS version 3.0 data processing results, the route coefficient Innovation of Competitive Advantage is 0318. Thus, the degree of closeness of connection y and medium was positively connected to competitive advantage.

3.2. Discussion

3.2.1. The Effect of Organizational Learning on Innovation

Based on the calculation results, the t-statistic value is 23.401, which means > 1.96, and the value of sig. 0000 below 0.05 then H1 accepted, which means that Organizational Learning has a positive and significant impact on innovation, meaning that changes in the value of the Organizational Learning influence the direction of the change in innovation or if the Organizational Learning increases, there will be an increase in the level of innovation and statistically have a significant influence. Based on the data processing results by SmartPLS version 3.0, the path coefficient value of Organizational Learning on Innovation by 0775, which means that Organizational Learning positively related to innovation in vocational schools (SMK) in West Java, Indonesia. This is in line with [36] research, which states that the formation of learning teachers in schools is currently being promoted. Learning teachers are teachers who are constantly learning and developing their potential and capacity as professional teachers. Teacher development for teachers associated with their potential and capacity as professional teachers. Teacher development for teachers associated with their potential and capacity as professional teachers.

3.2.2. Influence of Organizational Learning Against Competitive Advantage

Based on the statistical results, the t-statistical value is 3.572, which means greater than 1.96, and the value of sig. 0000 is less than 0.05, indicating that Organizational Learning has a positive and significant impact on Competitive Advantage. Thus, when organizational learning improves, so does competitive advantage, which has a statistically significant effect. According to the results of SmartPLS version 3.0 data processing, the route coefficient Organizational Learning to Competitive advantage for 0303, which suggests that Organizational Learning is positively associated to Competitive Advantage in West Java Vocational High School (SMK).

3.2.3. The Effect of Innovation on Competitive Advantage

Based on the statistical findings, the t-statistical value is 3.777, which indicates greater than 1.96, and the value of sig. 0000 is less than 0.05, indicating that innovation has a positive influence on competitive advantage. Thus, changes in the value of innovation have an impact on the direction of change in Competitive Advantage. If a result, as innovation increases, there will be a rise in Competitive Advantage, which will statistically have a substantial effect. Based on SmartPLS version 3.0 data processing results, the route coefficient Innovation of Competitive Advantage is 0318. In other words, innovation was positively associated to Competitive Advantage in Indonesia's West Java province's Vocational High School (SMK). The findings of this study are consistent with the findings of [15]'s research. According to their study paradigm, social media influences purchasing interest, which is carried out through customer perceptions of items. On principle, social media is a vital communication medium that plays a significant impact in customer purchasing intentions.

4. CONCLUSIONS

This study aims to understand the relationship between Organizational Learning, Innovation, and Competitive Advantage in vocational high schools in West Java province. From the two factors studied, it is evident that both influence competitive advantage. The model in this study proved to be good based on the value of Q2 amounted to 73.7%. Organizational learning and innovation are shown to influence the competitive advantage of 34.2%. Both of these variables in explaining the substantial Competitive Advantage, or in the case of this study, is a competitive advantage in...
the vocational school in West Java, Indonesia. This finding has a significant contribution in efforts to increase competitive Advantage in Vocational High Schools. These findings can be used as a further step for the secondary education sector to in-crease competitive advantage through the two variables studied in this research. This finding supports the research conducted by [13], who showed that organizational learning plays a vital role in improving their performance in higher education institutions.

Further research conducted by [2] also states that Overall Organizational Learning has a positive and significant effect on Competitive Advantage mediated by innovation at universities in Padang. Based on the results obtained in this study, competitive advantage will be achieved by a study program if the study program innovates. The study program will achieve innovation if the study program always carries out organizational learning.

This research contributed to the existing of knowledge regarding organizational learning by providing an updated theoretical contribution. This research contributes to the business literature in education by providing further scientific research on the secondary school sector, particularly in Indonesia, where little is known about the impact of organizational learning and innovation.

Organizational Learning and Innovation is one of the critical factors that can increase Competitive Advantage. Both of these factors have been shown to influence increasing competitive advantage in SMK in Indonesia, so these two factors must receive more attention from SMK managers and the government, both central and regional, to be applied to SMK so that they can contribute positively to increasing competitive ability. The model utilized in this study has been shown to be highly predictive. According to the findings of hypothesis testing, the most important element impacting competitive advantage was innovation. Based on these findings, the managerial implication that can be improved is that the innovation process itself needs to be carried out by the secondary school sector, primarily vocational high schools, in order to increase competitive advantage optimally, which in turn can make students ready to work and have the ability to think. Being creative and innovative means that there are still spaces that can be improved or improved to con-trIBUTE to the ability of competitive advantage in the future.

The findings of this study give a practical contribution as a guide for SMK managers in Indonesia to strengthen their competitive advantage by focusing on organizational learning and innovation elements.

One of the research’s limitation is that it only obtained samples from vocational schools in the West Java region, thus further research is needed to investigate this problem. Secondly, the phenomenon of organizational learning has not been studied broadly by Vocational High Schools in Indonesia, so further research is needed to examine this subject in the future.

REFERENCES


