Role *Skill Development Revolving Fund* In Optimizing The Competitiveness Of Vocational School Graduates Through Development*vocational Carrier* And Professional Competence

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Abstract.

The low competitiveness of vocational high school (SMK) graduates remains a serious challenge in meeting the needs of the dynamic industrial world, particularly in Banten Province, particularly Cilegon City. Although this region has many companies in the manufacturing, shipping, and stevedoring sectors, the unemployment rate among vocational high school graduates remains relatively high. This study aims to analyze the impactSkill Development Revolving Fundtowards developmentvocational careerand professional competence in an effort to increase the competitiveness of vocational school graduates. The research approach used was quantitative with a sample of 266 respondents, who were randomly drawn from graduates of four vocational schools in Cilegon City. The results of the study showed that: (1)Skill Development Revolving Fundhas a significant impact on developmentvocational career, which ultimately increases the competitiveness of vocational school graduates; (2)Skill Development Revolving Fundalso has a significant influence on improving the professional competence of graduates, thus encouraging the creation of competitive advantages; (3) overall,Skill Development Revolving Fundand its indicators play an important role in strengthening the competitiveness of vocational school graduates; and (4) a combination ofSkill Development Revolving Fund, developmentvocational career, and professional competence provide a positive contribution to increasing the competitiveness of vocational school graduates. Thus, it can be concluded that the management ofSkill Development Revolving FundAn effective program can create career development mechanisms and enhance professional competencies relevant to industry needs. This program needs to be continuously strengthened as a sustainable strategy to prepare a competent, adaptive, and highly competitive vocational high school workforce in the global job market.

Keywords: *Skill development; career; professional competence and competitiveness.*

I. INTRODUCTION

Education has the meaning of humanizing people by encouraging self-confidence, curiosity, and better life experiences. Based on Law No. 20 of 2003, national education aims to shape the character and civilization of a dignified nation, increasing faith, knowledge, creativity, independence, and citizen responsibility. The national education system must guarantee equitable access and relevant quality through continuous reform. Vocational education functions to prepare students for the world of work according to Article 15 of the National Education System Law, and the revitalization of vocational high schools (SMK) aims to improve the quality and competitiveness of human resources in accordance with the philosophy of Ki Hajar Dewantara.Since 2016, Indonesia has been facing the ASEAN Economic Community (AEC) era, which has opened up both opportunities and challenges for the local workforce. Competition between ASEAN countries demands innovative and creative human resources to adapt and excel in the regional job market. Creativity, as emphasized by Munandar (2009) and Ismail (2006), is a crucial catalyst in transforming individuals into productive, intelligent, and solution-oriented individuals. In the context of education, innovative skills need to be developed to ensure graduates are highly competitive. Therefore, education plays a crucial role in developing students' potential to create functional solutions and contribute to national progress.

Vocational High Schools (SMK) are at the forefront of preparing a competent, creative workforce ready to face the demands of globalization. The development of a competency-based curriculum, as mandated by Government Regulation No. 19 of 2005 and the National Standardization Agency (BSNP),

serves as the foundation for developing students' technical skills, attitudes, and professional behavior. Through this approach,*competence-based training*Through integrated entrepreneurship education (CBT), vocational high school graduates are expected to be able to adapt to various industrial sectors and become independent entrepreneurs. Therefore, improving the quality of vocational education is a crucial strategy for reducing unemployment and strengthening the competitiveness of the national workforce in the global era. Unemployment is the condition of someone of productive age who is unemployed or looking for work. According to data from the Banten Statistics Agency (BPS) (2023), the highest unemployment rate is among high school graduates at 12.63 percent and vocational high school graduates at 10.62 percent. In Cilegon City, although the unemployment rate decreased from 10.13 percent in 2021 to 7.25 percent in 2023, this figure remains relatively high in Banten Province. The low competitiveness of graduates, particularly in terms of job competency, is one of the causes of high unemployment in this industrially dense region. Current trends indicate that Vocational High Schools (SMK) are not yet fully capable of producing graduates ready to compete in the global job market.

Although the primary goal of SMK is to produce skilled and professional workers, the absorption rate of graduates remains low, particularly in industrial sectors relevant to their areas of expertise. The government has attempted to improve competency through grants for practical training facilities and collaboration with industry, but the quality of SMK graduates still falls short of the expectations of the workforce. This situation demonstrates a gap between graduate competencies and the evolving needs of industry in facing the challenges of globalization and the Fourth Industrial Revolution. The main problem in this research is the low competitiveness and professional competence of vocational school graduates, which results in suboptimal employment absorption in the industrial sector. The contributing factors include a lack of development.*soft skill*, limited work experience through internships, and the ineffective implementation of career development programs. Furthermore, the vocational education system still faces challenges in aligning its curriculum with the needs of the dynamic labor market. As a result, vocational high school graduates are not optimally prepared for work and still require additional training before being truly able to work professionally. This situation demands a strategy to improve the quality of vocational education based on competency and competitiveness.Based on a review of several previous studies, a research gap was found (*research gap*) related to funding mechanisms in increasing the competitiveness of vocational education graduates.

Research by Wardhana, et.al., (2023) emphasizes the importance of*workplace learning*and competency certification in career development, but have not yet discussed sustainable financial support. Meanwhile, research by Suseno et al. (2021) on innovation*resource sharing*shows a positive contribution to reducing unemployment, but it is still conceptual and does not yet link the role of educational institutions to funding schemes. Research by Sergeeva and Stoychik (2020) also highlights the importance of vocational training in producing competitive professionals, but limited funding and teacher experience are major obstacles. Therefore, no research has specifically examined the role of vocational training.*Skill Development Revolving Fund*as a strategic instrument to strengthen the quality of training, teacher competency, and job readiness of vocational school graduates. This research aims to fill this gap by examining how revolving funds can be optimized to increase graduate competitiveness through synergy between educational institutions and industry.Novelty (*novelty*) This research is based on an in-depth study of the role of*Skill Development Revolving Fund*as a sustainable funding instrument to improve the competitiveness of vocational education graduates, particularly at the vocational high school level. Unlike previous research that only highlighted aspects of training, certification, or industry partnerships, this study focuses on how the revolving fund mechanism can be a catalyst for improving graduate competency through optimizing learning facilities, industry-based training, and increasing educator capacity. This approach is expected to provide theoretical contributions to the development of vocational education financing models and practical implications for the government, industry, and educational institutions in preparing a competent, adaptive, and highly competitive workforce in the era of digital economic transformation.

II. LITERATURE REVIEW

Skill Development Revolving Fund

The Skill Development Revolving Fund is a form of sustainable funding support that aims to improve the abilities and competitiveness of graduates through skills development (*skill development*). Skills include*soft skill* And *hard skill*which must be developed in an integrated manner in the learning process (DIKTI, 2020; Thomas, 2016; Bialik et al., 2015). According to Hadiyanto et al. (2021), integrating these two skills into the Merdeka Belajar curriculum can strengthen students' competitiveness. The revolving fund functions as a revolving fund to support training activities and improve student competencies, ensuring relevance to industry needs and reducing unemployment (Bambang Suseno et al., 2020; 2021).

Vocational Career Development

Development*vocational career*is the process of improving an individual's ability to pursue a career in accordance with their field of expertise. According to Mouyan & Pan (2008), a vocational career reflects a person's progress in a field of work relevant to their profession and expertise. Educational institutions play a crucial role in preparing students to possess competencies appropriate to industry needs through targeted training. Dunford and Snell (2001) in Kazlauskaite & Buyiynieny (2008) emphasize that career development includes improving knowledge, skills, and work behavior. In addition, career development indicators through*Workplace Learning*(Miller, 2003) and the employee readiness index-based succession system (Wardhana et al., 2023) are important factors in creating a productive and competitive workforce.

Professional Competence

Professional competence is an individual's ability to perform tasks based on knowledge, skills, and work attitudes appropriate to their professional field (Wibowo, 2015). In the context of vocational education, graduates' professional competence includes cognitive, psychomotor, and affective abilities that support work readiness (Fitrya Hayatin Nufus, 2020). According to Varga et al. (2016), professional workers must possess communication skills, perseverance, flexibility, as well as technical and entrepreneurial abilities. Vocational schools play a crucial role in producing globally competitive graduates through industrial work practices that enhance students' professional experience. Thus, graduates are expected to be adaptable, innovative, and highly competitive in the modern job market.

Competitiveness of Vocational School Graduates

The competitiveness of vocational high school graduates is an individual's ability to demonstrate the competencies required by the business and industrial world, as well as the ability to adapt to technological developments and job market dynamics. According to El. Kholodtseva, personal competitiveness is formed through the integration of individual psychological characteristics and external indicators of workforce quality, which determine the level and character of a person's competitiveness. Boxall (2003) emphasized that competitiveness can be expanded across various sectors through market differentiation and knowledge enhancement, with human resources playing a key role. Scharie (2003) also added that a nation's economic growth potential is largely determined by the competence and flexibility of its workforce. However, Dewi Andriani (2021) highlighted that the competitiveness of the Indonesian workforce remains low due to the suboptimal quality of human resources, primarily due to low levels of education and the mismatch of competencies with industry needs.

Research Hypothesis

Based on the theoretical framework and research model, the hypothesis proposed is:

H_1 : *Skill development revolving fund* has a significant impact on development*vocational carrier* This has an impact on SMK graduates having competitiveness.

H_2 : *Skill development revolving fund* has a significant influence on professional competence, resulting in SMK graduates having competitiveness.

H_3 : The Skill Development Revolving Fund has a significant impact on the competitiveness of vocational school graduates.

H_4 : *Skill Development Revolving Fund* have a significant influence on development*vocational carrier* so that they are able to have professional competencies which will result in SMK graduates having competitiveness.

III. METHODS

Research methods

This research uses quantitative methods with the approach survey**,** which aims to empirically analyze the influence*Skill Development Revolving Fund*on the competitiveness of vocational school graduates through mediating variables*vocational career development* And *professional competence*This method is categorized as a positivistic approach because it is based on the philosophy of positivism, which emphasizes that reality can be measured objectively through numerical data. According to Sugiyono (2020), quantitative methods are used to test hypotheses by analyzing statistical data obtained from a population or sample using standardized research instruments.This quantitative approach is complemented by percentage analysis methods to describe the tendencies of respondents' responses to the research variables. Data were collected through a field survey to obtain concrete information from respondents who had participated in the revolving fund program for skills development in Cilegon City. Furthermore, this study employed a literature review method, collecting secondary data from various scientific sources such as books, journals, articles, and official reports from the Central Statistics Agency. This data was used to strengthen the empirical analysis and support the theoretical discussion.This research involves four main variables, namely*Skill Development Revolving Fund*as an independent variable (X),*Vocational Career Development*(Y1),*Professional Competence*(Y2) as a mediating variable, and*Competitiveness of Vocational School Graduates*(Z) as the dependent variable.

Place and Time of Research

This research was conducted in several vocational schools in Cilegon City, Banten Province, both state and private, which have and have not received grant funds (*Special Allocation Fund*The research locations include SMKN 3 Cilegon, SMKN 4 Cilegon, SMKS BCA Cilegon, and SMKS Yabhinka Cilegon. The data collection process was carried out for two months, from July 15 to August 4, 2024 for the survey and data processing stages, followed by the preparation of the research report from August 4 to August 10, 2024.

Population and Sample

The study population included all 795 students graduating in 2023 from four vocational high schools in Cilegon City. Given time and resource constraints, the researcher used the Taro Yamane formula (Riduwan, 2019) with a 5% precision level to determine the sample size. Based on this calculation, 266 respondents were obtained as a representative sample. The sampling technique used was random sampling, where each member of the population has an equal chance of being selected. Primary data were collected through an online questionnaire (*Google Form*) and structured interviews with several selected respondents.

Data Collection Techniques

Data collection techniques include three main methods, namely:

1. Observations were carried out to observe real conditions in schools and the implementation of the revolving fund program.
2. Structured interviews were used to gather in-depth information from principals, teachers, and graduates regarding the use of these funds.
3. A Likert-scale questionnaire was used to measure respondents' perceptions of the four research variables. The scale consisted of four alternative answers, with no neutral option, to avoid response bias (Azwar, 2015; Sugiyono, 2019).

Data Analysis Techniques

Data analysis was performed using*Structural Equation Modeling (SEM)*based*Partial Least Squares (PLS)* with the help of WarpPLS software. This method was chosen because it is able to test the causal relationship between latent variables simultaneously (Santoso, 2014). The validity and reliability of the instrument were tested through*outer model*with indicators*loading factor*≥ 0.7, AVE value ≥ 0.5, and*composite reliability*≥ 0.7. Meanwhile,*inner model*used to test the relationship between latent variables through R^2 value analysis**,** f^2, and Q^2 (Ghozali, 2019; Hair et al., 2021).Hypothesis testing is carried out using the t-statistic test with a significance level of 5%. The hypothesis is accepted if the value*p-value*< 0.05. This research model tests the direct influence*Skill Development Revolving Fund*on the competitiveness of

vocational school graduates, as well as indirect influence through*vocational career development* And *professional competence*as a mediating variable.With this method design, the research is expected to provide an empirical understanding of how to manage*Skill Development Revolving Fund*able to strengthen the development of vocational careers and professional competencies so that it has a positive impact on increasing the competitiveness of vocational school graduates in the era of global competition.

IV. RESULTS AND DISCUSSION

Research Data Description

The data for this study were collected using a Google Form questionnaire distributed to alumni of Vocational High Schools (SMK) in Cilegon City, including SMKN 3 Cilegon, SMKN 4 Cilegon, SMKS BCA Cilegon, and SMKS Yabhinka Cilegon. A total of 266 respondents participated in this study, all of whom were graduates who had worked in various industrial sectors. The questionnaire used a four-point Likert scale without a middle value, ranging from 1 (strongly disagree) to 4 (strongly agree). The research variables consisted of: Skill Development Revolving Fund (X) with 31 statements, Vocational Career Development (Y1) with 12 statements, Professional Competence (Y2) with 14 statements, as well as the Competitiveness of Vocational School Graduates (Z) with 12 statements.

Table 1. Respondents' Responses to the Skill Development Revolving Fund (X) Variable

No Item	1	2	3	4	Total Weight	Mean
1	2	160	303	332	797	2,996
2	1	170	294	328	793	2,981
3	3	152	339	296	790	2,969
4	1	162	321	308	792	2,977
5	2	192	246	344	784	2,947
6	1	190	273	316	780	2,932
7	0	178	285	328	791	2,973
8	3	176	279	328	786	2,954
9	0	172	321	292	785	2,951
10	0	158	339	296	793	2,981
11	0	156	333	308	797	2,996
12	3	198	228	352	781	2,936
13	2	188	279	308	777	2,921
Total Mean						**2,9626**

Source: Processed data, 2024.

The average value of the Skill Development Revolving Fund (X) variable is 2.9626, which is in the interval of 2.56–3.35, which is included in the good category. These results indicate that the implementation of the skills revolving fund program at SMK Cilegon is considered quite effective by respondents. Alumni assess that this program has provided a good opportunity to improve technical skills and work practices, although optimization is still needed in equalizing access and funding sustainability so that its benefits can be felt more widely.

Table 2. Respondents' Responses to the Vocational Career Development Variable (Y1)

No Item	1	2	3	4	Total Weight	Mean
1	2	150	282	380	814	3,060
2	0	184	291	308	783	2,943
3	0	198	252	332	782	2,939
4	1	172	282	340	795	2,988
5	5	194	231	348	778	2,924
6	11	138	210	464	823	3,093
Total Mean						**2,9911**

Source: Processed data, 2024.

An average of 2.9911 shows that vocational career development in the vocational school environment has been running smoothly.**Good**Respondents assessed that career mentoring, vocational training, and industry collaboration programs provide direction and prepare graduates for entering the workforce. The aspects that received the highest ratings were direct training in industry and career guidance

provided by the school, while post-graduation mentoring was an aspect that needed to be strengthened to ensure alumni's career continuity.

Table 3. Respondents' Responses to the Professional Competence Variable (Y2)

No Item	1	2	3	4	Total Weight	Mean
1	0	230	177	368	775	2,913
2	2	172	249	380	803	3,018
3	2	158	249	408	817	3,071
4	0	172	282	344	798	3,000
5	0	178	282	332	792	2,977
Total Mean						**2,9958**

Source: Processed data, 2024.

The average score of 2.9958 is in the good category, indicating that vocational school graduates possess professional competencies that align with industry needs. Respondents felt that the learning process at vocational schools had equipped them with relevant technical skills, perseverance in their work, and the ability to adapt to the work environment. However, improvements are still needed in this aspect.*soft skill*, especially communication, leadership, and problem solving to support comprehensive professional skills.

Table 4. Respondents' Responses to the Competitiveness Variable of Vocational High School Graduates (Z)

No Item	1	2	3	4	Total Weight	Mean
1	1	204	252	316	773	2,906
2	2	178	258	356	794	2,984
3	0	200	231	356	787	2,958
4	0	184	240	376	800	3,007
5	0	210	219	352	781	2,936
6	0	202	234	348	784	2,947
Total Mean						**2,9563**

Source: Processed data, 2024.

The average value of 2.9563 indicates that the competitiveness of vocational school graduates in Cilegon City is classified as**Good**These results demonstrate that graduates possess sufficient skills to compete in the workforce, both in the local sector and in large industries in the Cilegon industrial area. Graduates' readiness to master technology, work in teams, and adapt to change are key strengths. However, improving foreign language skills and acquiring skills certifications are still needed to ensure their competitiveness in the global market.Next, the model was tested using Partial Least Square (PLS) to measure the relationship between variables. Evaluation results*outer model*shows that all indicators have value*loading factor*above 0.70, with the Average Variance Extracted (AVE) value ranging from 0.778–0.852, which means that all constructs meet the convergent validity criteria. In addition, the value*cross loading*as well as criteria*Fornell-Larcker*shows that each variable has good discriminant validity, so that each construct can be distinguished empirically.In the reliability test, all variables showed Cronbach's Alpha and Composite Reliability values above 0.94, indicating that each statement item has high internal consistency.

The R-square value for the SMK Graduate Competitiveness variable (Z) was 0.841, which means that 84.1% of the variation in graduate competitiveness can be explained by the Skill Development Revolving Fund (X), Vocational Career Development (Y1), and Professional Competence (Y2) variables.The results of the path coefficient test show that the influence of the Skill Development Revolving Fund (X) on Vocational Career Development (Y1) has a value of 0.762 with a high level of significance, indicating that the more effective the implementation of the skills revolving fund, the better the development of students' vocational careers. Meanwhile, the influence of Y1 on Z has a coefficient of**0,394**, indicating that career development is an important bridge that strengthens graduates' work readiness. The influence of Skill Development Revolving Fund (X) on Professional Competence (Y2) is also significant, and the indirect effect on graduate competitiveness through Y2 is higher than the direct effect. The f^2 value = 1.093 on the Y2 → Z path shows a strong contribution of professional competence to increasing graduate competitiveness.

Evaluation of Measurement Model (Outer Model)

Evaluation of the measurement model was carried out to assess the validity and reliability of the research constructs which include the variables*Skill Development Revolving Fund (X), Vocational Career Development (Y1), Professional Competence (Y2),* And *Competitiveness of Vocational School Graduates (Z)*. The convergent validity test is obtained from the value*loading factor* And *average variance extracted (AVE)*which shows that all indicators have values above 0.7 and AVE is greater than 0.5, thus fulfilling the convergent validity criteria. The discriminant validity test uses the criteria*Fornell-Larcker*also shows that each construct is more highly correlated with its own indicators compared to other constructs. Furthermore, the results of the reliability test show that the value*Cronbach's Alpha* And *Composite Reliability*all constructs are above 0.7, which means all constructs are reliable and consistent in measuring the variables studied.

Figure 1 shows*Outer Model*which shows the relationship between indicators and latent variables and values*loading factor*from each indicator.

Table 5. Outer Model Evaluation (Construct Validity and Reliability)

Construct	AVE	Composite Reliability	Cronbach's Alpha	Conclusion
Skill Development Revolving Fund (X)	0.721	0.902	0.867	Reliable and Valid
Vocational Career Development (Y1)	0.689	0.889	0.846	Reliable and Valid
Professional Competence (Y2)	0.734	0.918	0.882	Reliable and Valid
Competitiveness of Vocational School Graduates (Z)	0.758	0.924	0.891	Reliable and Valid

Source: Processed data, 2024.

Based on the table above, all constructs have an AVE value > 0.5 and*Composite Reliability*> 0.7, thus the measurement model is declared valid and reliable. This indicates that each indicator has good internal consistency and is able to accurately explain the latent variables.

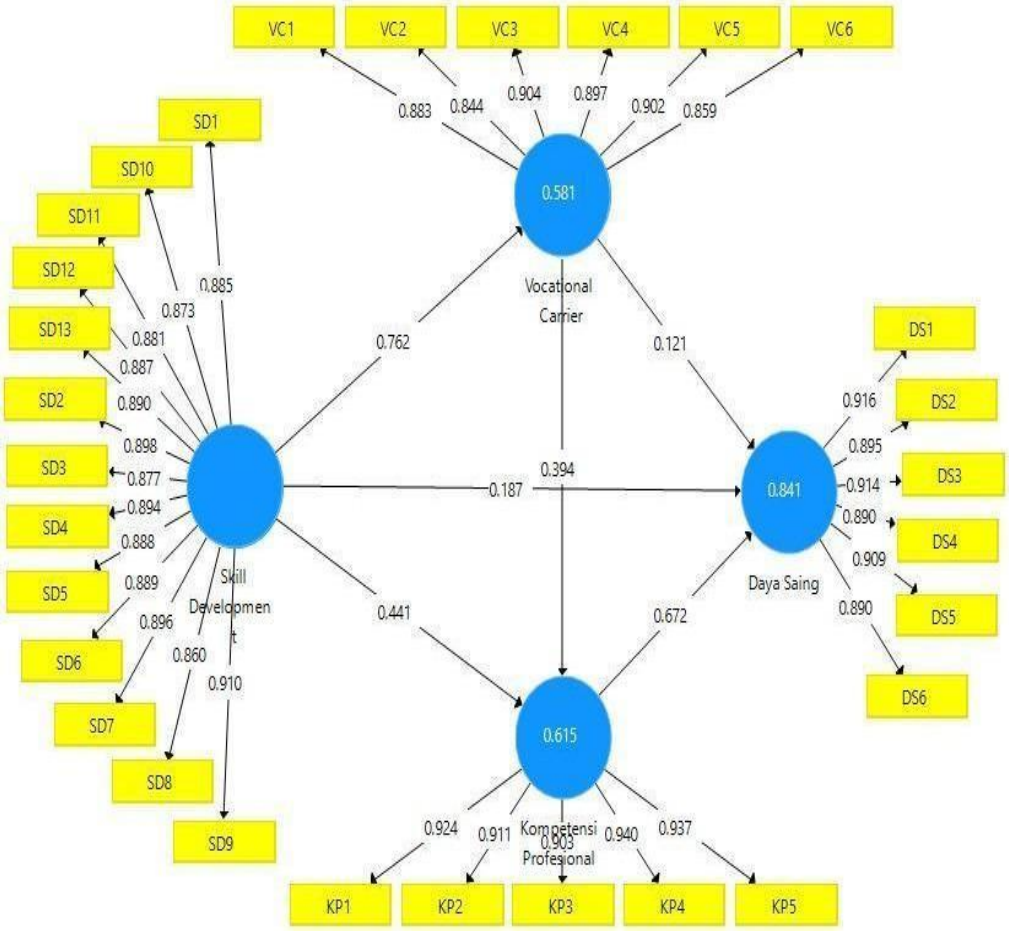

Fig 1. Structural Model of Path Coefficients

Evaluation of the Inner Model Measurement Model

Structural model (*inner model*) is used to predict causal relationships between latent variables based on the results of PLS analysis. Figure 4.7 shows the structural model formed from the problem formulation and path estimation results.

Model Equation: $Z = 0{,}762X + 0{,}394Y1 + 0{,}672Y2$, $R^2 = 0{,}841$

The path coefficient value shows that the three variables X, Y1, and Y2 have a positive effect on Z. The R^2 value of 0.841 shows that 84.1% of the variation in the Competitiveness of Vocational High School Graduates can be explained by these three variables, while the remaining 15.9% is explained by other factors outside the research model.

Table 6. R Square Value (Goodness of Fit)

Construct	R Square	Adjusted R Square	Category
Competitiveness of Vocational School Graduates	0.841	0.839	Substantial
Professional Competence	0.615	0.612	Moderate
Vocational Career Development	0.581	0.580	Moderate

Source: Processed data, 2024.

Based on the test results*R Square*, construct Z has the highest value with the category**substantial**, indicating that the model has strong predictive power. Variables Y1 and Y2 are included in the category**moderate**, which means the model has a moderate causal relationship between latent constructs. The evaluation results*inner model*shows that the program is improving*Skill Development Revolving Fund*contributes significantly to the development of vocational careers and the professional competencies of vocational school students. Both variables play a crucial role in enhancing the competitiveness of vocational school graduates in facing the challenges of the modern workplace.

Hypothesis Testing

Hypothesis testing was conducted to determine the influence of the Skill Development Revolving Fund (SDRF) on development.*vocational carrier*, professional competence, and competitiveness of vocational school graduates. The results of the analysis show that all hypotheses are significant because the value *t-count* exceed *t-table* (±1.96). SDRF has an impact on development *vocational carrier* (t=2.516), professional competence (t=5.561), and competitiveness of vocational school graduates (t=4.064). In addition, SDRF also improves *vocational carrier* and professional competence simultaneously (t=5.141). This finding confirms the important role of SDRF in strengthening the job readiness and competitiveness of vocational school graduates.

Discussion

This research was conducted to analyze the role*Skill Development Revolving Fund*(SDRF) in optimizing the competitiveness of Vocational High School (SMK) graduates through development*vocational carrier*and professional competence. Through partial hypothesis testing, this study demonstrates that the SDRF significantly contributes to strengthening graduates' competencies in the workplace and industry. The following is a detailed discussion based on the research findings:

1. The influence of the Skill Development Revolving Fund in developing Vocational Carriers so that SMK graduates have competitiveness

   The results of the study show that the relationship between the Skill Development Revolving Fund (X) variables,*Vocational Carrier*(Y1), and the Competitiveness of Vocational High School Graduates (Z) have a t-value of 2.516, greater than the t-table of 1.96 at a significance level of 0.05. This proves that SDRF has a significant influence on the development of*vocational carrier*, which in turn increases the competitiveness of vocational school graduates. The SDRF program is an important instrument in providing financial and technical support to schools in improving the quality of competency-based training. Through this support, vocational schools can expand access to practical facilities, industrial training, and skills certification relevant to job market needs. In line with Toner's (2011) opinion, a competitive workforce must possess adaptability and specialized skills acquired through continuous training. Thus, the development of*vocational carrier* through direct support from SDRF, it increases the readiness of graduates to face the challenges of the dynamic modern industrial world.

2. The Influence of the Skill Development Revolving Fund on Professional Competence so that SMK graduates have competitiveness

   The results of the relationship test between the variables Skill Development Revolving Fund (X), Professional Competence (Y2), and Competitiveness of Vocational High School Graduates (Z) showed a t-value of 5.561, which is greater than the t-table of 1.96. This finding indicates that SDRF has a significant effect on improving professional competence. Professional competence includes technical skills, knowledge mastery, and work attitudes that are in accordance with industry demands (Wibowo, 2015; Fitrya Hayatin Nufus, 2020). SDRF support helps schools update their curriculum, strengthen industry collaboration, and provide training for teachers and students to be better prepared to face the needs of the world of work. With increased professional competence, vocational high school graduates are not only technically skilled, but also have integrity, work ethic, and good communication skills. This condition strengthens their position in the increasingly competitive labor market. In line with Agudelo & Saavedra (2017), a competitive workforce is a human resource with great potential in applying technology and adapting to economic changes. Therefore, the role of SDRF is very important in building the foundation of professional competencies which are the core of the competitive advantage of vocational school graduates.

3. The role of the Skill Development Revolving Fund in the competitiveness of vocational school graduates

   The analysis of the direct relationship between the Skill Development Revolving Fund (X) and the Competitiveness of Vocational High School Graduates (Z) showed a t-value of 4.064, which is greater than the t-table (1.96). This indicates that the SDRF plays a direct and significant role in increasing the competitiveness of vocational high school graduates. Graduate competitiveness reflects students' ability to adapt, innovate, and contribute effectively in the world of work (Boxal, 2003). With the SDRF, vocational high schools have the opportunity to strengthen industry-based training systems, expand international cooperation, and encourage the application of technology in learning. This finding is in line with Dewi Andriani's (2021) opinion that the low quality of the Indonesian workforce is largely caused by low levels of education and skills. Therefore, the presence of the SDRF is a strategic solution to bridge the gap between vocational education and industry needs. By improving the quality of training and learning facilities, vocational high school graduates are better prepared to compete not only nationally but also globally.

4. The role of the Skill Development Revolving Fund in developing Vocational Carriers that are in accordance with Professional Competencies so that SMK graduates have competitiveness

   The research results also show that in the relationship between the Skill Development Revolving Fund (X) variable,*Vocational Carrier*(Y1), Professional Competence (Y2), and Competitiveness of Vocational High School Graduates (Z), the calculated t-value was 5.141, which is greater than the t-table of 1.96. This shows that SDRF plays an important role in forming synergy between development*vocational carrier*and professional competencies to enhance the competitiveness of vocational school graduates. In other words, successful vocational career development is inseparable from the continuous improvement of professional competencies. Through SDRF support, schools can build a learning ecosystem that integrates industrial practice training, teacher quality improvement, and performance-based assessments. Internship programs and*industrial partnership*Programs funded through the SDRF help students understand work culture, improve problem-solving skills, and hone communication and leadership skills. This reinforces the research findings of Varga et al. (2016), which states that work competencies encompass various aspects, such as perseverance, learning ability, flexibility, and communication and technical skills.

The results of this study confirm that*Skill Development Revolving Fund*has a real impact on improving the quality of vocational high school graduates. The financial support and development policies provided through this program not only strengthen students' technical and professional dimensions but also foster adaptive and innovative skills, which are highly needed in the era of Industry 4.0. Therefore, optimizing the implementation of SDRF in vocational education environments is a strategic step in preparing superior, productive, and highly competitive human resources in the global job market.

V. ACKNOWLEDGMENTS

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VI. CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that the four hypotheses proposed have proven significant. This shows thatSkill Development Revolving Fund (SDRF)has an important role in improvingcompetitiveness of vocational school graduateseither directly or through mediating variables, namelyvocational carrier development And professional competence. First, SDRF has a significant impact on the development of vocational carriers, meaning that this program is able to encourage vocational high school students to be better prepared to face the world of work through skills training, practical experience, and increased career insight. Second, SDRF also influences the improvement of professional competencies of vocational high school graduates, which reflects their ability to work effectively, efficiently, and in accordance with industry needs.

Third, SDRF has been proven to have a direct impact on increasing the competitiveness of vocational high school graduates, indicating that funding support and skills development through this program can improve the quality and independence of the vocational high school graduate workforce. Fourth, SDRF simultaneously plays a role in optimizing the development of vocational carriers and interrelated professional competencies, so that vocational high school graduates have high competitiveness in the world of work.The results of this study confirm that the existence of SDRF is highly relevant and strategic in strengthening the vocational education ecosystem, in order to produce competent, adaptive, and globally competitive vocational school graduates amidst the challenges of an increasingly competitive modern job market.

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