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DEVELOPMENT OF INDUSTRIAL WORK PRACTICES (PRAKERIN) INFORMATION SYSTEM BASED ON E-LEARNING MOODLE

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Abstract: *Industrial Work Practice (PRAKERIN), as a flagship program of vocational high schools (SMK), should be able to realize the integration between SMK and the working world. The management of PRAKERIN in SMK still encounters various problems, ranging from the gap between the competencies of students and the industry's required qualifications, to the conventional nature of PRAKERIN management. This research aims to develop an Industrial Work Practice (PRAKERIN) Information System for SMK based on E-learning Moodle, focusing on usability, validity, and practicality aspects. The research method used is Research and Development (R&D) with the waterfall model. The results of this research show that the Industrial Work Practice Information System (Simpati) meets the quality and feasibility standards, as evidenced by the testing and measurable results obtained. The development of Simpati provides a solution to the problems in PRAKERIN management in SMK and transforms conventional PRAKERIN management into a more modern approach through the implementation of technology.*

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Abstrak: *Praktek Kerja Industri (PRAKERIN) sebagai program unggulan SMK, seharusnya dapat mewujudkan integrasi antara SMK dengan dunia kerja. Pengelolaan PRAKERIN di SMK masih menemui berbagai permasalahan, mulai dari gap antara kompetensi peserta didik dengan kualifikasi industri yang cukup signifikan, maupun pengelolaan PRAKERIN yang masih bersifat konvensional. Penelitian ini bertujuan untuk mengembangkan Sistem Informasi Praktek Kerja Industri (PRAKERIN) SMK Berbasis E-learning Moodle dari aspek kegunaan, kevalidan, dan kepraktisan. Metode penelitian yang digunakan adalah Research and Development (R&D) dengan model waterfall. Hasil dari penelitian ini adalah Sistem Informasi Praktek Kerja Industri (Simpati) telah memenuhi standar kualitas dan kelayakan dibuktikan dengan adanya uji coba serta memeroleh hasil yang terukur. Pengembangan Simpati menjadi solusi bagi permasalahan pengelolan PRAKERIN di SMK serta dapat mengubah pengelolaan PRAKERIN yang konvensional menjadi lebih modern dengan adanya penerapan teknologi.*

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1. Introduction

The development of Science and Technology (IPTEK) has brought about many conveniences in various sectors of life, including the education sector. The involvement of technology in education has made the current education system increasingly modern and globally competitive, in line with the *Sustainable Development Goals (SDGs)* 2030 (Sulistiyarini & Sabirin, 2020). Numerous educational innovations incorporate technological elements, ranging from primary education to higher education, including vocational education.

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Vocational High Schools (SMK) are one of the vocational education levels that still exist and are highly sought after by the public. In line with the motto "SMK Bisa, SMK Hebat, Siap Kerja, Santun, Mandiri, dan Kreatif", the expectation is that SMK graduates can meet the qualifications of the working world. The dynamic nature of the Industry and Job World (IDUKA) demands a more modern and flexible management of SMK by the development of the times (Putri et al., 2019). This is necessary to ensure that the output of SMK does not lag behind other educational levels. SMK requires programs that can accommodate the improvement of students' soft skills and hard skills, one of which is through Industrial Work Practice (PRAKERIN).

Industrial Work Practice (PRAKERIN) is a mandatory program for vocational high school students. This program is also part of the Dual System Education (PSG) and the Link and Match 8+i program initiated by the Directorate General of Vocational Education, Ministry of Education and Culture, to realize the integration between vocational high schools (SMK) and the working world. The Dual System Education (PSG) combines educational programs in SMK with the mastery of skills obtained through direct immersion in the Industry and Job World (IDUKA) to acquire specific professional skills synchronously and systematically, as stated in the Decree of the Minister of Education and Culture of the Republic of Indonesia Number 323/U/1997 Article 1 Paragraph 1 (Rahmawati, 2021) This program consists of 30% of learning in SMK, while the remaining 70% is direct work practice in IDUKA (Novieyana et al., 2018). PRAKERIN can be interpreted as a learning process carried out in the Industry and Job World (IDUKA) intending to improve the quality of SMK graduates in their respective fields, thus reducing the gap between the competencies of SMK students and the qualifications and needs of IDUKA (Bakti et al., 2021). Additionally, PRAKERIN helps vocational high school students gain an understanding of the increasingly competitive job market.

Data from *the Central Statistics Agency (BPS)* in 2018 showed that unemployment in Indonesia was predominantly among vocational high school (SMK) graduates, accounting for 60.2%, which is consider to have specialized competencies or skills compared to only 39.8% of primary school (SD) graduates. The low absorption of SMK graduates is due to the mismatch between the competencies taught in SMK and the needs of the Industry and Job World (IDUKA) (Iktiari & Purnami, 2019). This is further support by data from *the World Economic Forum (WEF)* in 2019, which stated that Indonesia's Global Competitive Index in terms of skills ranked 65, far below other ASEAN countries such as Singapore (19) and Malaysia (30) (Perdana, 2019). Based on these facts, it can be seen that Indonesia's human resources lack global competitiveness. However, competent and highly productive human resources are the main assets for national progress (Setiono, 2019). Therefore, competency development programs for human resources such as PRAKERIN in SMK must continue to be maintained and exist.

In its implementation, the management of PRAKERIN in vocational high schools (SMK) is not free from various issues, starting from the main issue related to the significant gap between the competencies or skills of students and the qualifications required by the Industry

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and Job World (IDUKA) (Aurum & Surjono, 2021). The desired skill composition by industries consists of 80% soft skills and 20% hard skills, which include (1) communication skills; (2) critical and creative thinking; (3) inquiry/reasoning skills; (4) interpersonal skills; (5) multicultural/multilingual literacy; (6) problem-solving; (7) information/digital literacy; and (8) technological skills (Sutrisno, 2019). Based on these eight competencies, points 1-6 represent the aspects of soft skills, while points 7-8 represent the aspects of hard skills. However, the reality found in the field is that most SMKs in Indonesia only provide their students with 10% soft skills and 90% hard skills (Hidayati et al., 2021). Furthermore, other issues include the lack of an information system that facilitates data collection, manual data collection and processing activities, and other problems (Sriwahyuni & Dewi, 2018).

The management of PRAKERIN can be done through two methods, namely the conventional method and the more modern approach by integrating IT. However, the conventional method is considered outdated and inefficient for management purposes, resulting in obstacles in the PRAKERIN recapitulation process and the possibility of human errors during the management process. Therefore, the management of PRAKERIN can be carried out by integrating IT, including using information systems. According to the website of *The Bureau of Labor Statistics (BLS) or the U.S. Department of Labor* in 2019, the demand for IT professionals is projected to increase by 11% from 2019 to 2029 (Dito & Pujiastuti, 2021). This indicates that the future demand for information systems will be directly proportional to the need for skilled professionals in the industry. In line with this, (Handayani, 2018) states that the presence of information systems accompanied by technological advancements will bring about significant changes. This means that the more digitization and automation of tasks with information systems, the effectiveness and efficiency of companies or industries will also increase (Oktika, 2022). Therefore, it can be concluded that the presence of information systems can enhance the performance of companies.

Based on the observations and interviews conducted with the Vice Head of the Industrial Relations Division (Hubin), Student Affairs Division, and Curriculum Division of SMK Saintren Al-Hasan, it is known that the management of PRAKERIN in SMK Saintren Al-Hasan Surabaya is still done conventionally or manually. All information related to PRAKERIN is only conveyed orally or posted on notice boards. Consequently, the students lack up-to-date information and understanding of the PRAKERIN implementation mechanism. Furthermore, before the implementation of PRAKERIN, the students are only equipped with knowledge of the hard skills aspect, while knowledge of the soft skills aspect has not been provided. This can indicate that the competencies of the students are not aligned with the competencies expected by the industry. During the PRAKERIN implementation, the students also receive inadequate guidance and monitoring due to diverse industrial locations, a limited number of supervisors, and the absence of a supportive information system for monitoring. Additionally, there is no decision support system regarding the appropriate placement of PRAKERIN locations based on the students' competencies, rather the placement is only adjusted based on quotas and the number of available industries. Based on the collected data and information above, the

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researcher is interested in developing an Industrial Work Practice (PRAKERIN) Information System based on E-learning Moodle for SMK that fulfills the aspects of usability, validity, and practicality, especially for the students. The development of the PRAKERIN information system is necessary. In addition to addressing the issues in the implementation of PRAKERIN, this development can also be a tangible step for Vocational High Schools (SMK) in achieving quality education as stated in the *Sustainable Development Goals (SDGs)* 2030 in Indonesia (Ghufron, 2018).

2. Method

This research adopts the Research and Development (R&D) approach with the Waterfall software development model. The Waterfall model is one of the approaches in the Software Development Life Cycle (SDLC) developed by Winston Royce (1970) (Aroral, 2021). This model emphasizes systematic and sequential stages or phases, meaning that each stage in the development process starts only after the completion of the previous stage. The stages of the waterfall model used by the researcher are depicted in the diagram below

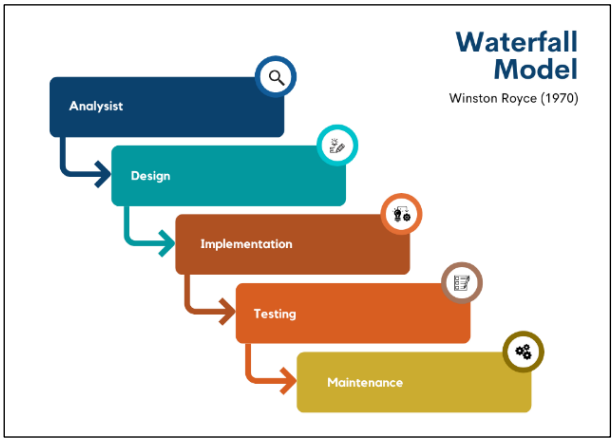

Figure 1. Waterfall Model Winston Royce

The developed product is website-based software. The PRAKERIN information system integrates e-learning Moodle using the profile matching method. Data collection is conducted through observation, interviews, and the development of instruments for system testing. Data analysis techniques in this research are categorized into several types according to the aspects of system testing. The system testing is carried out at SMK Saintren Al-Hasan Surabaya. The aspects of system testing include functionality, reliability, usability, and efficiency. Data analysis for the functionality aspect is performed using descriptive analysis techniques on the results of functionality testing conducted with two (2) media experts. Data analysis for the reliability aspect is conducted using parameters provided by the Selenium IDE tool. Data analysis for the usability aspect is performed by calculating the percentage of usability using the Alpha Cronbach method through the SPSS tool. Data analysis for the efficiency aspect is carried out using basic parameters provided by the PageSpeed Insight tool. The following table presents the scale conversion of the data analysis results from the system testing.

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Table 1. Conversion Scale of Data Analysis on Reliability and Efficiency Aspects

Percentage Scale	Interpretation
0% - 20%	Very Low
21% - 40%	Low
41% - 60%	High Enough
61% - 80%	High
81% - 100%	Very High

Table 2. Conversion Scale of Data Analysis on Usability Aspect

R Value	Interpretation
R > 0.9	Excellent
0.9 > R > 0.8	Good
0.8 > R > 0.7	Acceptable
0.7 > R > 0.6	Questionable
0.6 > R > 0.5	Poor
R < 0.5	Unacceptable

3. Result

Analysis

Regarding the process of developing the PRAKERIN information system, the system requirements analysis conducted by the researcher is divided into two types: functional requirements analysis and hardware and software requirements analysis (Abubakar et al., 2019). Functional requirements analysis is conducted to determine the necessary features or menus in the PRAKERIN information system, while hardware and software requirements analysis is carried out to identify the tools needed during the development process of the PRAKERIN information system.

Table 3. Functional Requirements Analysis

Users	Required Menu
Administrator	9 Items
School Mentor/Industry Mentor	4 Items
Student	5 Items

Based on the analysis of functional requirements in Table 3 above, it is known that there are specific features or menus required by each user in the PRAKERIN information system based on e-learning moodle. The details are as follows: the school administrator requires 9 items, the school mentor or industry mentor requires 4 items, and the students require 5 items.

Design

In the design stage, the system is designed through the creation of diagrams and system prototype design. The designed diagrams are divided into two types: use case diagrams and activity diagrams. A use case diagram depicts the steps or actions performed by users on the system or vice (Setiyani, 2021), while an activity diagram illustrates the sequence of activities and the workflow of the developed system (Kurniawan et al., 2020). The system prototype design aims to provide an initial overview of the interface of the developed PRAKERIN

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information system (Arroyan & Subekti, 2021). The following is a use case diagram of the PKL application developed by the researchers to explain the menu access rights for each user.

Figure 2. Use Case Diagram of PRAKERIN Information System

The results of the use case diagram, activity diagram, and system prototype design are translated into programming language code in the system implementation stage.

Implementation

The implementation stage is the realization of the previously designed requirements analysis, product specifications, and system design into a database, website, and other software components through programming and software deployment processes (Haq et al., 2023). The programming language used in the development of the PRAKERIN information system is Hypertext Preprocessor (PHP), with the Laravel framework, and MySQL as the database. The PRAKERIN information system developed by the researcher is named Simpati. Simpati can be accessed at the website address https://simpati.saintren.com/. The following is the homepage view of Simpati.

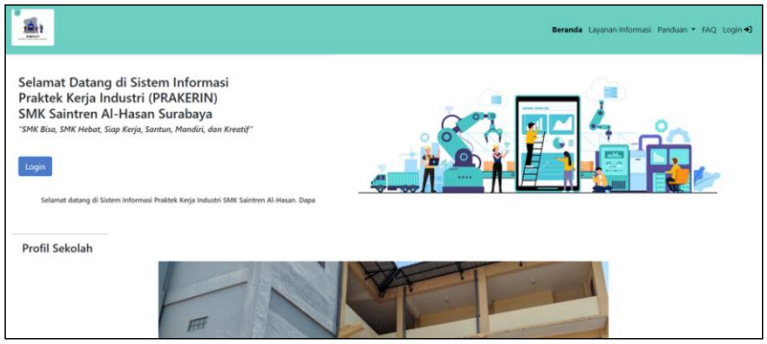

Figure 3. Homepage Simpati

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Testing

System testing is a stage to check whether the developed software meets the requirements analysis, product specifications, and aligns with its development objectives. This stage aims to minimize errors that may occur when the system is running so that they can be fixed and improved accordingly (Machmud, 2018). There are several aspects in testing this PRAKERIN information system, namely functionality, reliability, usability, and efficiency testing. Each test has different test subjects. The following are the results of the Simpati testing at SMK Saintren Al-Hasan Surabaya.

a. Testing the Functionality Aspect

The functionality aspect testing was conducted using a checklist test case with two media experts. The scale used to collect data was the Guttman scale with the categories of "Yes" or "Successful" valued as 1, and "No" or "Failed" valued as 0. The following are the results of the functionality aspect testing on 40 system functions in Simpati.

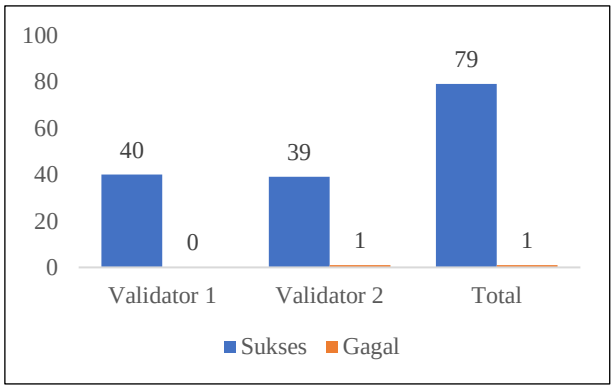

Figure 4. Functionality Aspect Test Results

The results of the functionality aspect testing in Figure 4 shows that there are 79 successful system functions and 1 failed system function. The level of functionality of Simpati is as follows:

$$X = 1 - \frac{A}{B} = 1 - \frac{1}{80} = 0{,}9875$$

Based on the calculation, it can be determined that the functionality score of Simpati is 0.9875 or 98.75%. Simpati has good functionality and meets the standards because the value of X approaches 1 and satisfies the equation (0 < x < 1).

b. Testing the Reliability Aspect

The reliability aspect testing was conducted using Selenium IDE as the tool. The results obtained from the system testing were in the form of stress testing. Through stress testing, the success rate and failure rate can be determined. The following are the results of the reliability testing of Simpati using Selenium IDE.

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Table 4. Reliability Aspect Test Results

Page	Success	Failure
Homepage	4	0
Administrator	10	0
School Mentor/Industry Mentor	7	0
Student	8	1
Total	29	1

From the results of the reliability testing of Simpati in Table 4 above, it is known that out of 30 tests or scenarios conducted, there were 29 successful runs (success rate) and 1 failure (failure rate). The following is the reliability level of Simpati:

$$R = 1 - \frac{f}{n} = 1 - \frac{1}{30} = 0{,}967 \text{ dan } r = \frac{f}{n} = \frac{1}{30} = 0{,}033$$

Based on the calculation above, it is known that the reliability level of Simpati is 0.967 or 96.7% with an error rate of 0.033 or 3.3%. These results are then interpreted using the value conversion scale in Table 1. The conversion results indicate that the reliability of Simpati falls into the category of very high.

c. Testing the Usability Aspect

The usability aspect testing was conducted on several Simpati users, including students, school principals, supervising teachers, and industry mentors. The testing for this aspect was done by distributing questionnaires. The questionnaires were prepared using the USE Questionnaire with three main indicators: usefulness, satisfaction, and ease of use. The assessment in the questionnaire was done using a Likert scale consisting of five answer categories: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD). The following is the questionnaire instrument for testing the usability aspect.

Table 5. Usability Aspect Testing Questionnaire Instrument

Indicators	Questions
Usefulness	6 Items
Satisfaction	6 Items
Ease of Use	8 Items
Total	20 Items

The results of the testing from several Simpati users are presented in Figure 5 below.

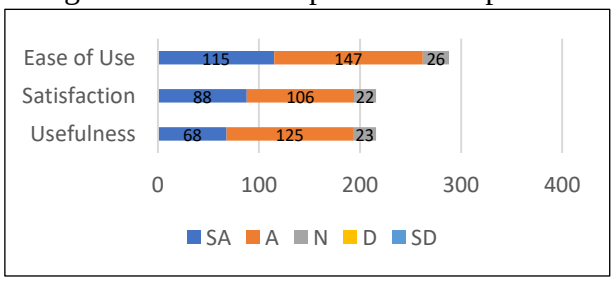

Figure 5. Usability Aspect Test Results

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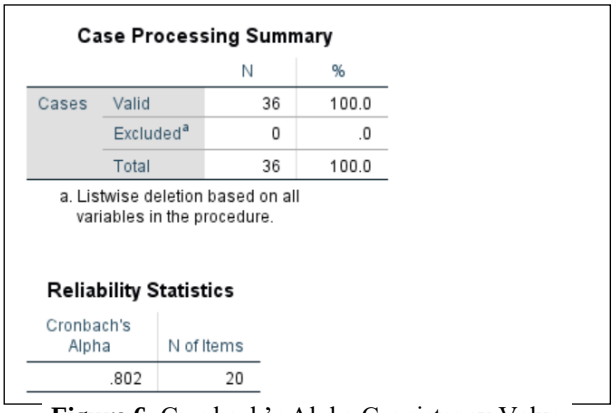
Based on the results of the usability aspect testing, it is known that the percentage of Simpati's quality based on the indicators of usefulness, satisfaction, and ease of use is as follows: 37.64% of users strongly agree, 52.5% of users agree, 9.86% of users are neutral, 0% of users disagree, and 0% of users strongly disagree. The value of Cronbach's Alpha coefficient is as follows.



Case Processing Summary

		N	%
Cases	Valid	36	100.0
	Excluded[a]	0	.0
	Total	36	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.802	20

Figure 6. Cronbach's Alpha Consistency Value

From the calculation results of the Cronbach's Alpha consistency above, it can be concluded that Simpati meets the usability aspect with a Cronbach's Alpha consistency value of R = .802, which falls into the Good category according to the value conversion scale in Table 2.

d. Testing the Efficiency Aspect

The testing for the efficiency aspect was conducted using the PageSpeed Insight tool. The purpose of this testing is to measure the loading speed of Simpati in a web browser. Table 6 below shows the level of Simpati's efficiency.

Table 6. Efficiency Aspect Test Results

Page	Number of Page Tested	Grade
Homepage	5	485
Administrator	22	2110
School Mentor/Industry Mentor	6	581
Student	8	772
Total	41	3948

Based on the above testing results, it can be observed that out of 41 pages of Simpati that were measured for their loading speed, it obtained a grade of 3948 out of the maximum score of 4100. The following is the percentage of Simpati's efficiency:

$$Percentage\ Score\ (\%) = \frac{Total\ grade}{Score\ max} x\ 100\% = \frac{3948}{4100}\ x\ 100\% = 96{,}29\%$$

With an efficiency level of 96.29%, it can be concluded that the loading speed of Simpati falls into the category of Very High according to the value conversion scale in Table 1.

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Maintenance

Maintenance is aimed at improving the performance of the information system to meet user requirements (Quach et al., 2022). After conducting testing in the previous stages, the involvement of the researcher is limited to providing temporary training and guidance to the administrators. Therefore, after the completion of training and guidance, the overall system maintenance will be carried out by the school's IT Support team. The system maintenance activities performed by the IT Support team include accommodating the needs of new users and enhancing software reliability.

4. Discussion

This research focuses on the development of Industrial Work Practice (PRAKERIN) information system based on e-learning moodle for vocational high schools (SMK) using the profile matching method. E-learning moodle was chosen because this LMS is developed based on social constructionist pedagogy principles, which can generate interactive learning. Furthermore, in terms of usability, e-learning moodle is very user-friendly (Setyawati et al., 2020). The implementation of e-learning moodle in the PRAKERIN information system can provide materials that support the improvement of students' soft skills and hard skills in vocational high schools. To facilitate decision-making, the profile-matching method was chosen. Profile matching is one of the most widely used decision-making methods by companies when recruiting new employees. This method assumes that there is a minimum level that must be met by someone who wants to work in a particular company (Samudro et al., 2022). Therefore, the profile matching method is suitable to be integrated with the PRAKERIN information system in vocational high schools, making it easier for the Industrial Work Practice Coordination Agency (IDUKA) to make decisions regarding vocational high school students who qualify to carry out PRAKERIN in those companies or industries. Through this method, the problems related to PRAKERIN, such as the mismatch between the competencies of vocational high school students and the qualifications of IDUKA, can be reduced.

Regarding the integration between vocational high schools and the world of work, PRAKERIN is part of the Dual System Education (PSG) that aims to realize the link and match between competent human resources and the labor market. Therefore, the main objective of implementing PRAKERIN is to bridge and reduce the gap between the competencies of vocational high school students and the needs of the industry (Ashari et al., 2021). Similarly, the Directorate General of Vocational Education of the Ministry of Education, Culture, Research, and Technology asserts that the development of a vocational high school curriculum cannot be separated from the link and match concept, which includes the 8+i formula. According to the 8+i concept in the vocational high school curriculum, which states that work practice or internship should be conducted for at least one semester, vocational high schools have implemented this concept in the Industrial Work Practice (PRAKERIN) program. However, unfortunately, there are still many problems encountered in the implementation of PRAKERIN. This is what hinders the formation of a link and match between vocational high

schools and IDUKA. One of the efforts that can be made to realize the link and match between vocational high schools and the industry is through the development of an information system.

The need for fast and accurate information is crucial, especially in an era of rapid change that demands security, speed, and precision. The process of digitization and automation in the education sector can indeed transform the world (Lucya & Anis, 2019). Therefore, it can be interpreted that the integration of technology in education can optimize the delivery of education. A good information system is required for the realization of this integration (Mulyani & Haliza, 2021). Concerning the need for an information system, the development of the Industrial Work Practice Information System (Simpati) in this research aims to address the issues related to the mismatch between the competencies of vocational high school students and the needs of IDUKA, to achieve a link and match between vocational high schools and the industry. The development of Simpati starts with conducting functional requirement analysis and device requirement analysis. The results of the requirement analysis are then packaged in the form of a system prototype, providing an initial overview and workflow of the developed information system. The designed prototype is then translated using programming language code and system configuration. To assess the quality and feasibility of the system, testing is conducted. The system testing aims to determine whether the developed product aligns with the desires and needs of the users. If the testing score is low, it indicates a low-quality system, and vice versa. The initial testing phase is carried out by media experts to validate Simpati, making it suitable for user testing. The subsequent testing phase involves multiple users providing assessments regarding the usability of Simpati. Additionally, other tests are performed using Selenium IDE and PageSpeed Insight tools to assess the reliability and loading speed of Simpati.

Based on the conducted system testing, it is found that the Industrial Work Practice Information System (Simpati) has a functionality score of 98.75% and meets the standards for testing with potential users. In terms of reliability testing, Simpati demonstrates a reliability score of 96.7%, indicating that the Simpati website remains dependable even with multiple accesses. Regarding usability testing, it is revealed that 52.5% of users agree with Simpati, which means that the development of Simpati aligns with the desires and needs of the users, as well as meeting the indicators of usefulness, satisfaction, and ease of use. Furthermore, the reliability testing yields a score of 96.29%, indicating a high loading speed of Simpati, thus ensuring effective and efficient management of PRAKERIN in vocational high schools.

The test results indicate that the development of an information system can provide information services for an institution, one of which is to facilitate the management of PRAKERIN in vocational high schools. There are several relevant research findings regarding the development of PRAKERIN information systems and the positive impacts obtained. A study by (El Fauzi & Adri, 2021) titled "Design and Development of Web-Based Industrial Work Practice (PRAKERIN) Information System" was conducted at SMK Negeri 2 Padang Panjang. This research aimed to facilitate the management of PRAKERIN at SMK N 2 Padang Panjang, which was still done manually at that time. The research results showed that the

developed PRAKERIN information system could be computerized effectively and deemed feasible, resulting in a more effective and efficient process of reporting the vocational high school students' grades at SMK N 2 Padang Panjang. (Baiduri & Susilawati, 2019) their research titled "Design of Industrial Work Practice Information System at SMK Bakti Nusantara 666 Cileunyi" explains the need for an information system that can facilitate the implementation of PRAKERIN and overcome the delay in document processing and PRAKERIN grades. Similar research was also conducted (Wulandari & Riyanto, 2021) titled "Design and Development of Web-Based E-PRAKERIN at SMK Bhakti Mejayan." The research began with a need assessment conducted at SMK Bhakti Mejayan, revealing the school's need for an information system that supports data management and monitoring of PRAKERIN. After the development of E-PRAKERIN, the management of PRAKERIN at SMK Bhakti Mejayan became more effective and efficient, benefiting the school, students, and industrial partners. Consistent with the aforementioned research, (Murdiyanto et al., 2021) through their research titled "Development of Management Reporting Information System for Industrial Work Practice (PRAKERIN): A Case Study of SMK Negeri 5 Malang," explains that the management of PRAKERIN in hardcopy format can lead to a suboptimal implementation of PRAKERIN. This research, developed using the waterfall model, aims to address the issues of activity journaling and manual monitoring of PRAKERIN. The system testing using Black Box revealed that the system is 100% valid in terms of functional requirements. Furthermore, the User Acceptance Testing yielded a score of 86.66%, indicating the smooth operation of the system.

The implication of this research is to modernize the management of PRAKERIN in vocational high schools through the implementation of technology, thereby achieving a link and match between vocational high schools and the industry. Conventional management of PRAKERIN leads to inefficient data management, especially in an era that demands security, speed, and precision. The novelty of this research, compared to previous studies, is that the development of the Industrial Work Practice Information System (Simpati) is not limited to PRAKERIN data management, as in previous studies, but also includes a learning module containing materials on soft skills and hard skills that can be accessed independently by students. There is a skill assessment to determine the readiness of vocational high school students before carrying out PRAKERIN activities. Through this skill assessment, it can also be determined whether students meet the qualifications required by the industry to carry out PRAKERIN in their company or organization. Simpati is also integrated with a profile matching method to provide PRAKERIN placement recommendations based on the results of the student's skill assessments. However, the researchers are aware that this study has limitations, such as a limited sample size and a limited testing location at one vocational high school. Therefore, this research can be further developed with a larger scope to achieve quality education as envisioned in the Sustainable Development Goals (SDGs) 2030.

5. Conclusion

The development of an information system is necessary to facilitate data management and provide information services for an institution. This research aims to develop an Industrial Work Practice (PRAKERIN) Information System for vocational high schools based on the E-Learning Moodle platform, focusing on usability, validity, and practicality aspects. The research results indicate that Simpati has met all three aspects, as evidenced by the conducted trials and measurable outcomes. The development of Simpati serves as a solution to the challenges of PRAKERIN management in vocational high schools and transforms conventional PRAKERIN management into a more modern approach through the implementation of technology. Although this research and development have yielded positive results, continuous monitoring in terms of usage and management is still necessary. For future research, it may be more optimal to integrate the industrial work practice information system with other information systems such as the school's website, online report information system, and alumni information system.

6. References

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