Evaluation on implementation of quality management system in vocational high schools with CIPP approach

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Abstract. This study aims to find out: (1) the results of implementing ISO 9001: 2008 Quality Management System in terms of context, (2) input, (3) process, (4) and product in Vocational Schools in Bali. This research is an evaluation research with the Context Input Process Product model. The place for this research is SMKN 1 Kuta Selatan and SMKN 3 Singaraja. The research subjects were principals, vice principals, representative quality management teams, teachers, and students. The instrument of data collection is a questionnaire with scale 2. Data analysis techniques with percentage techniques. The results of the study can be seen: (1) the implementation of ISO 9001: 2008 QMS in Vocational High Schools in Bali in terms of context is categorized as "very good", (2) in terms of inputs included in the "very good" category, (3) in terms of the process is included in the "very good" category, (4) and in terms of the products included in the "very good" category.

1. Introduction

Vocational High School is one of the levels of formal secondary education in Indonesia [1]. Vocational High School is an advanced secondary education which has the main objective of preparing a skilled, professional and highly disciplined workforce in accordance with the demands of the work-force which has the aim of preparing graduates to work in certain fields that are in line with market needs in this case the business world and the world work.

The implementation of vocational secondary schools is one of the efforts made by the Indonesian government to improve and improve existing human resources. The needs of the work world for quality human resources and skilled forcing and encouraging an educational institution is no exception, namely vocational high schools to conduct a quality assurance of the educational process held, it is done in the hope of getting positive values and customer satisfaction can be fulfilled.

Quality graduates are printing by schools that have quality assurance as well. With the demands of glob-alization, schools that have quality assurance will continue to improve the existing education services. Improve aspects that support a school to improve the quality of school education services. ISO 9001 (2008) Implementing an ISO quality management system is one of the efforts that can be done to carry out quality assurance in violating the educational process in an educational institution [2]. The implementation of ISO quality management system as an international quality standard will consistently improve efficiency in managing school resources and school quality.

In addition, it is hoped that there will be a continuous improvement process for school performance so that the quality and output/outcome of schools as an educational institution always gets better over time. ISO based quality management system aims to improve the competitiveness of an institution in this case educational institutions in order to improve the process of providing education to ensure
customer satisfaction. One focus of the ISO principle is the customer focus or focus on the customer [3]. Customers of educational institutions internally are teachers and staff in schools, while externally customers of educational institutions are parents of students and the community.

Lack of consistency in the performance of internal vocational high schools, this is characterized by the ups and downs of the performance of educators and education personnel, besides that vocational secondary schools find it difficult to focus their work in accordance with ISO demands because there are many jobs in each vocational high school work unit. And the most important thing that is an obstacle in the application of ISO quality management systems in vocational high schools is the difficulty of adaptation of teachers or employees to the development of information and technology [4]. Common constraints experienced by vocational high schools are the problem of school culture.

The implementation of the ISO quality management system will be better and success will be achieved if it is accompanied by a school vision that is the overall responsibility of the school community and not only the responsibility of individuals, especially leaders. On the other hand, the success of vocational high schools in obtaining ISO certificates requires high quality culture in the management of leadership organizations in a vocational high school. The ISO certificate that has been obtained must be maintained with the acculturation of the quality must be integrated in all policy actors in the organization within the school itself. Considering this, the commitment of vocational secondary schools in implementing the ISO quality management system in ensuring customer satisfaction needs evaluation.

The evaluation of the implementation of the ISO quality management system aims to provide benefits in the application of a quality culture in vocational secondary schools so as to produce quality learning to prepare vocational high school graduates to work in certain fields that are in line with the needs of the workforce [5]. One factor in the success of vocational education is an absorption of graduate to the World of Industries. It is important to study the World Development Quality in the vocational high school as a means of improving the partnership that produces vocational relevance of education to the labor market [6]. The evaluation process requires a suitable method to evaluate a program to produce maximum evaluation [7]. Project quality management is the process required that ensures that the project meets requirements and expectations of the beneficiary involved in the project. Thus this study aims to find out: (1) the results of implementing ISO 9001: 2008 Quality Management System in terms of context, (2) input, (3) process, (4) and product in Vocational Schools in Bali.

2. Research Method

This research is evaluation research. The evaluation model used for evaluating the ISO 9001: 2008 Quality Management System implementation program is the CIPP evaluation [8]. CIPP evaluation model which includes four stages in context, input, process, and product. The evaluation model with the CIPP approach was chosen because this model has a more holistic approach so that it can provide a more detailed and broader picture of the object being evaluated in this case the implementation of the Quality Management System with ISO 9001: 2008 standards in Vocational Schools. In context evaluation is limited to Customer Focus and leadership. The evaluation of inputs is limited to teacher involvement, and the system approach to management. Process evaluation includes a process approach and a factual approach to making decisions. And on product evaluation is limited to mutually beneficial relationships, and continuous improvement.

This evaluative research was carried out at the State Vocational Schools that held the Electricity Engineering Expertise Program in Bali Province which had implemented a Quality Management System with ISO 9001: 2008 standards, namely SMKN 1 Kuta Selatan and SMKN 3 Singaraja. The key informants were the principal, vice principal, quality management representative (QMR), head of the Electricity Engineering Skills Program, teachers and students. Data collection techniques in this study used questionnaires. The data analysis technique used in this study is descriptive analysis, namely by describing and interpreting the data and each component evaluated. In analyzing the collected data, several steps are taken, namely:
• Provide respondent answers to each item
• Add the total score of each components, variables, indicators, and do the percentage of achievement in each components, variables, and indicators by summing the performance carried out, then divided by the total criteria for implementing the program according to the standard, then convert to percentage. Calculations are carried out with the help of Microsoft Excel computer programs with the percentage formula as follows.

\[ P = \frac{\text{Total Achievement Score}}{\text{Maximum Score Amount}} \times 100\% \]  

(1)

• Grouping scores obtained by respondents With the help of computers, the total score of each respondent component, variables, and indicators, mean value (Mi), and standard deviation (Sdi) are obtained. Furthermore, it gives meaning to the following chest guidelines in table 1.

Table 1. Criteria and meaning of effectiveness of application of quality management

| Category Score | Range        |
|----------------|-------------|
| (X + 1,8*SB) s.d Max. | Very good   |
| (X + 0,6*SB) s.d (X + 1,8*SB) | Well       |
| (X - 0,6*SB) s.d (X + 0,6*SB) | Pretty good |
| (X - 1,8*SB) s.d (X - 0,6*SB) | Not good   |
| Min. s.d (X - 1,8*SB) | Very Poor  |

(Djatmiko, 2018:110)[9]

• Do the analysis with the following steps: 1) organizing the data, 2) revealing the condition of the evaluation component and variables, and 3) taking conclusions on the conditions found.

3. Results and Discussion

3.1. Data Descriptions

General Recapitulation of Data Descriptions Evaluation of the Implementation of the ISO 9001: 2008 Quality Management System Standardized Electricity Engineering Skills at the Bali Provincial Vocational School are carried out by combining the research data in SMKN 1 Kuta Selatan and SMKN 3 Singaraja. The data is presented in the form of tables and diagrams in each of the evaluation components, and the variables of the Standard Quality Management System principles ISO 9001: 2008.

Data recapitulation Evaluation of the Implementation of ISO 9001: 2008 Quality Management System Standards Electrical Engineering Expertise in Bali Province Vocational School is reviewed each evaluation component can be attached to the following table.

Table 2. General Data Description Recapitulation

| Evaluation Component | Variable                                  | Maximum Score | Achievement Score | Achievement |
|----------------------|-------------------------------------------|---------------|-------------------|-------------|
| Context              | Customer Focus                            | 987           | 864               | 87.54%      |
|                      | Leadership                                | 480           | 428               | 89.17%      |
| Sub Total            |                                           | 1467          | 1292              | 88.07%      |
| Input                | Employee Participation                    | 2053          | 1792              | 87.29%      |
|                      | System Approach to Management             | 56            | 49                | 87.50%      |
| Sub Total            |                                           | 2109          | 1841              | 87.29%      |
| Process              | Process Approach                          | 28            | 25                | 89.29%      |
|                      | Factual Approach in Decision Making       | 68            | 59                | 86.76%      |
| Sub Total            |                                           | 96            | 84                | 87.50%      |
| Product              | Continuous Improvement                    | 289           | 230               | 79.58%      |
|                      | Mutually beneficial supplier relations     | 136           | 115               | 84.56%      |
| Sub Total            |                                           | 425           | 345               | 81.18%      |
| Total                |                                           | 4097          | 3562              | 86.94%      |
From the table above, it can be seen that each component has two variables, the ISO 9001: 2008 Quality Management System. The results of collecting data from all respondents in SMKN 1 Kuta Selatan and SMKN 3 Singaraja about Evaluating the Implementation of ISO Standard Quality Management Systems 9001: 2008 Electricity Engineering Expertise at the State Vocational School of Bali Province is as follows. In the Context component which consists of the Customer Focus variable and the Leadership variable, the maximum score is 1467 and the achievement score is 1292 with the achievement percentage of 88.07%.

In the Input component which consists of Employee Participation variables and System Approach to Management variables, the maximum score is 2109 and the achievement score is 1841 with an achievement percentage of 87.29%.

In the Process component which consists of Process Approach variables and Factual Approach variables in Decision Making the maximum score is 96 and the achievement score is 84 with an achievement percentage of 87.50%.

In the Product component which consists of Continuous Improvement variables and the mutually Beneficial Supplier Relations variable, the maximum score is 425 and the achievement score is 345 with an achievement percentage of 81.18%. And the overall total of all evaluation components obtained the maximum score was 4097 and the achievement score was 3562 with an achievement percentage of 86.94%. The data if depicted in the form of a diagram will look like the following diagram (Fig. 1).

Figure 1. Data Recapitulation Diagram

3.2. Discussion

3.2.1. Implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in the Bali Province State Vocational School in terms of the Context Component

In evaluating the application of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational School reviewed from the context there are two variables that become principles in the ISO 9001: 2008 Quality Management System, namely focusing on customers and leadership. Overall the achievement score of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational School reviewed from the context was 1292 from a maximum score of 1467 with an achievement percentage of 88.07%. This value indicates that in general the effectiveness of the implementation of the Quality Management System is ISO 9001: 2008 Electricity Expertise in the State Vocational School of Bali in terms of the context is in the criteria of "Very good".

3.2.1.1. Implementation of the Focus on Customer Principles

Customer focus, this principle is expressed as follows. Organizations depend on their customers and therefore should understand current and future customer needs, meet customer requirements and strive to exceed customer expectations [10]. Basically, quality management focuses on continuous improvement to meet customer satisfaction. [11] argues that the main goal and universal quality
management is to achieve a high level of customer satisfaction by building competitive strength through continuous quality improvement. Customer satisfaction is the ultimate goal and quality management, therefore customer focus is the first principle in the ISO 9001: 2008 Quality Management System.

Overall the achievement score principle focuses on customers on the implementation of the ISO 9001: 2008 Standard Quality Management System. The Electrical Engineering Expertise in the State Vocational School of Bali is 864 from a maximum score of 987 with an achievement percentage of 87.54%. This value indicates that in general the effectiveness of applying the principle of focus on customers in the ISO 9001: 2008 Quality Management System in the Province of Bali Vocational High School is in the criteria of "Very good". The highest achievement value is in the material suitability indicator, which is 95.90%. The lowest achievement value for the principle of focus on customers is on the indicators of customer needs and satisfaction, which is 79.51%.

The effectiveness of applying the principle of customer focus in the two Vocational High Schools that are the research sites shows that the same criteria are very good. It's just that the value of achieving the principle of focus on customers in SMKN 1 Kuta Selatan is higher than SMK Negeri 3 Singaraja. The value of the principle achievement of focus on customers at SMK Negeri 1 South Kuta is 89.10%, while SMK Negeri 3 Singaraja scores 86.41%. So, based on the results of data analysis, it is known that SMKN 1 Kuta Selatan has the value of the effectiveness of applying the principle of customer focus which is higher than that of SMK Negeri 3 Singaraja.

3.2.1.2. Implementation of the Application of Leadership Principles

Leadership commitment is the first step in improving quality [12]. Peters & Austin's research in his book A Passion for Excellence ensures that "what determines quality in an institution is leadership" [3]. Principles of leadership in the ISO 9001: 2008 Quality Management System include indicators of leader commitment, communication, acceptance of input, maintenance of systems, determination of quality policies, fulfillment of quality objectives, and enforcement of discipline.

Overall the achievement score of the leadership principle on the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in the State Vocational School of Bali is 428 out of a maximum score of 480 with an achievement value of 89.17%. This value shows that in general the effectiveness of the application of leadership principles to the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational High Schools are in the criteria of "Very good". The highest achievement value is in the quality management system maintenance indicator, which is 96.67%. The lowest achievement value is in the leadership communication indicator, which is equal to 78.33%.

The effectiveness of the leadership principle in the two schools where research is conducted shows the same criteria, which is Very good. It's just that the value of achievement of the principle of leadership in SMKN 1 Kuta Selatan is higher than SMKN 3 Singaraja. The value of the achievement of the principle of leadership in SMKN 1 Kuta Selatan is 90.32%, while SMKN 3 Singaraja scores 88.21%.

3.2.2. Implementation of the ISO 9001: 2008 Quality Management System in Electrical Engineering Expertise in the Bali Province Vocational School in terms of Input components

In evaluating the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational Schools in terms of input there are two variables that become principles in the ISO 9001: 2008 Quality Management System, namely employee participation and systems approach to management. Overall the achievement score of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali State Vocational High Schools in terms of input is 1841 from a maximum score of 2109 with an achievement percentage of 87.29%. This value shows that in general the effectiveness of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in the State Vocational School of Bali in terms of input is in the criteria of "Very good".
3.2.2.1. Implementation of the Application of the Principles of Employee Participation

Employee Participation, A. El-Morsy the vocational high school institutions should take full advantage of the staff’s knowledge and experience. Overall performance scores applying the principle of employee participation in the ISO 9001: 2008 Quality Management System Electricity Engineering expertise in the State Vocational School of Bali is 1792 from a maximum score of 2019 with an achievement percentage of 87.29%. This value shows that in general the effectiveness of the application of the principle of employee participation in the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in the State Vocational School of Bali are in the criteria of "Very good".

The highest achievement value for the principle of employee participation is in the indicator of employee involvement, which is 96.94%. The lowest achievement value for the principle of employee participation is in the indicator of service speed, which is 77.05%. The effectiveness of the principle of employee participation in the two schools where research is conducted shows the same criteria which are very good. It's just that the value of the principle achievement of employee participation in SMKN 3 Singaraja is higher than in SMKN 1 Kuta Selatan. The value of the principle achievement of employee participation in SMKN 3 Singaraja is 90.28%, while SMKN 1 Kuta Selatan scores 83.04%.

3.2.2.2. Implementation of the Application of the Principles of the System Approach to Management

The system approach to management will contribute to the effectiveness and efficiency of the organization in achieving its objectives [13]. The criteria for the success of the system approach to management in implementing the ISO 9001: 2008 Quality Management System Electricity Engineering Skills at the Bali Province Vocational School have three success indicators. The three indicators of success include: 1) setting standard operating procedures (SOP), 2) documenting the system, and 3) establishing quality manuals. Overall the performance score of the system approach to management in the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in the State Vocational School of Bali is 49 of the maximum score of 56 with an achievement percentage of 87.50%. This value indicates that in general the effectiveness of the application of the system approach principle to management in the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in Bali Province Vocational High Schools are in the criteria of "Very good".

The highest attainment of the principle of the system approach to management lies in the standard operating procedure (SOP) determination indicator, which is equal to 100%. The lowest achievement value of the system approach to management principles is in the indicator of quality manual determination, which is 78.57% with. The effectiveness of the principles of the system approach to management in the two schools where research is conducted shows that the same criteria are very good. It's just that the value of achieving the principle of a system approach to management at SMKN 1 Kuta Selatan is higher than that of SMKN 3 Singaraja. The value of the system principle approach to management at SMKN 1 Kuta Selatan is 90.63%, while SMKN 3 Singaraja scores 83.33%. The value of the effectiveness of the implementation of the system approach to higher management in SMKN 1 Kuta Selatan is influenced by achievement of indicators of SOP determination and system documentation that achieve the ideal, which is equal to 100%.

3.2.3. Implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province State Vocational School in terms of Process Components

In evaluating the application of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational School reviewed from the process there are two variables that become principles in the ISO 9001: 2008 Quality Management System, namely process approach and factual approach to decision making. Overall the achievement score of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational School in terms of the process is 84 of the maximum score of 96 with an achievement percentage of 87.50%. This value indicates that in general the effectiveness of implementing the Quality Management System is ISO 9001: 2008 Electricity Expertise in the State Vocational School of Bali reviewed from the process is in the criteria of "Very good".
3.2.3.1. Implementation of the Implementation of the Process Approach Principles

Process approach is the integration between people, materials, methods and machines or equipment in schools to improve quality [14] argues that, "A process can be defined as sequential integration of people, material, methods, design, and neutrality in an environment in order to produce added value for customers." The process approach to the quality management system concerns the efficiency and effectiveness of the work mechanism. This work mechanism is the main indicator in the principle of the process approach.

Overall, the achievement score of the principle approach to the process of implementing the ISO 9001: 2008 Quality Management System The expertise of Electricity Engineering in Vocational High Schools in Bali Province is 25 from a maximum score of 28 with an achievement percentage of 89.29%. This value shows that in general the effectiveness of the application of the process approach principle in the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in Bali Province Vocational High Schools are in the 'Very good' criteria. This shows that the school has determined the maximum working mechanism. The Quality Management Representative Team (QMR) / School Development Team has effectively established actions and relationships / interactions in the work mechanism. The Quality Management Representative Team (QMR) has also outlined the duties of all employees to the fullest.

The effectiveness of the process approach principle in the two schools where the research shows the same criteria, which is very good. It's just that the value of achieving the principle of the process approach at SMKN 1 Kuta Selatan is higher than that of SMKN 3 Singaraja. The value of the principle approach to the process approach at SMKN 1 Kuta Selatan was 93.75%, while SMKN 3 Singaraja obtained a value of 83.33%.

3.2.3.2. Implementation of the Principal Implementation of the Factual Approach in Decision Making

Reliable information, data and analysis are the basis and process of school management to achieve the quality set. Reliable information, data and analysis are the core and principles of the factual approach in decision making. Criteria for the success of the principle of the factual approach in making decisions on the implementation of the ISO 9001: 2008 Quality Management System Electrical Engineering Skills at the State Vocational School of Bali have two indicators of success. The two indicators are: 1) data determination and 2) data analysis.

Overall, the achievement score of the factual approach to decision making on the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in the State Vocational School of Bali is 59 of the maximum score of 68 with an achievement percentage of 86.76%. This value shows that in general the effectiveness of the application of the principle of the factual approach in decision making on the ISO 9001: 2008 Quality Management System Electrical Engineering Expertise in Bali Province Vocational High Schools is in the criteria of "Very good". The highest achievement value is in the data determination indicator with an achievement value of 94.12%. The lowest achievement value is in the data analysis indicator is 79.41%.

The effectiveness of applying the principle of the factual approach in decision making in the two schools where research is conducted shows the same criteria which are very good. It's just that the value of achieving the principle of the factual approach in decision-making at SMKN 3 Singaraja is higher than in SMKN 1 Kuta Selatan. The value of achieving the principle of the factual approach in decision making at SMKN 3 Singaraja is 87.50%, while SMKN 1 Kuta Selatan is 86.11%.

3.2.4. Implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in the Bali Province State Vocational School in terms of Product Components

In evaluating the application of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational Schools in terms of products there are two variables which become principles in the ISO 9001: 2008 Quality Management System, namely continuous improvement and mutually beneficial supplier relations. Overall the achievement score of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in
Bali Province State Vocational Schools reviewed from the product were 345 from a maximum score of 425 with an achievement percentage of 81.18%. This value shows that in general the effectiveness of the implementation of the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali State Vocational High Schools is viewed from the product as being in the "Very good" criteria.

3.2.4.1. Implementation of the Principles of Continuous Improvement

[15] that the main objective and quality management is to achieve a high level of customer satisfaction by building competitive strength through continuous quality improvement. Quality management focuses on continuous improvement to meet customer satisfaction. Customer satisfaction is the ultimate goal and quality management, but customer satisfaction can be achieved by either continuous improvement or continuous improvement. The critical success of the principle of continuous improvement in the implementation of the Quality Management System is ISO 9001: 2008 Electricity Expertise in the State Vocational School of Bali has five success indicators. The five indicators are: 1) ISO awareness, 2) teacher and employee competencies, 3) training implementation, 4) review of question texts, and 5) implementation of additional lessons.

Overall the achievement score of the principle of continuous improvement in the implementation of the ISO 9001: 2008 Quality Management System The Electrical Engineering Expertise in the State Vocational School of Bali is 230 of the maximum score of 289 with an achievement percentage of 79.58%. This value shows that in general the effectiveness of the application of the principle of continuous improvement in the ISO 9001: 2008 Quality Management System Electricity Engineering Skills in Bali Province Vocational High Schools are in the criteria of "Very good". The highest achievement value for the principle of continuous improvement is in the indicators of teacher and employee competence, which amounted to 98.53%. The lowest achievement value for the principle of the system approach to management is in the indicators of teacher and employee training, which is 67.23% with.

The effectiveness of the principle of continuous improvement in the two schools where research is conducted shows that the same criteria are very good. It's just that the value of achieving the principle of continuous improvement at SMKN 3 Singaraja is higher than SMKN 1 Kuta Selatan. The value of the achievement of the principle of continuous improvement at SMKN 3 Singaraja is 82.35%, while SMKN 1 Kuta Selatan is 77.12%.

3.2.4.2. Implementation of the Principles of Mutually Beneficial Supplier Relations

Criteria for the success of the principle of mutually beneficial supplier relations in the implementation of the Quality Management System standard ISO 9001: 2008 Electrical Engineering Expertise in the State Vocational School of Bali has three indicators. The three indicators are: 1) criteria setting, 2) product suitability, and 3) supplier selection.

Overall the performance score of the principle of supplier relations that is mutually beneficial in the implementation of the ISO 9001: 2008 Quality Management System The expertise of Electricity Engineering in the State Vocational School of Bali is 54 of the maximum score of 64 with an achievement percentage of 83.00%. This value shows that in general the effectiveness of the application of mutually beneficial supplier relations principles in the ISO 9001: 2008 Quality Management System Electricity Engineering Expertise in Bali Province Vocational High Schools is in the criteria of "Very good".

The highest achievement value in the supplier selection indicator which is equal to 94.12%. The lowest achievement value in the principle of mutually beneficial supplier relations is in the product suitability indicator, which is equal to 76.47%.

The effectiveness of the principle of mutually beneficial supplier relations in the two schools where research is conducted shows that the same criteria are very good. It's just that the value of achieving the principle of supplier relations that is mutually beneficial at SMKN 1 Kuta Selatan is higher than SMKN
3. Singaraja. The value of the achievement of the principle of mutually beneficial supplier relations at SMKN 1 Kuta Selatan is 84.72%, while SMK N 3 Singaraja scores 84.38%.

4. Conclusion

Implementation of a Quality Management System with the ISO 9001: 2008 Electrical Engineering Expertise Program in Vocational High Schools in the Province of Bali in terms of context is categorized as Very Good with a percentage of achievement of 88.07%. Implementation of a Quality Management System with the ISO 9001: 2008 Electrical Engineering Expertise Program in Vocational High Schools in the Province of Bali in terms of input entered the category of Very good with a percentage of achievement of 87, 29%. Implementation of ISO 9001: 2008 Quality Management System standards for the Electrical Engineering Expertise Program in Vocational High Schools in the Province of Bali in terms of entry into the category of Very good with a percentage of achievement of 87, 50%. Implementation of ISO 9001: 2008 Quality Management System standards in the Electrical Engineering Expertise Program at the Vocational High School in the Province of Bali in terms of products categorized as Very good with a percentage of achievement with an achievement percentage of 81, 18%.

The implementation of ISO 9001: 2015 quality management system is not limited only to service companies or manufacturers, but the implementation of ISO 9001 can also be done in the world of education. The requirements are not only to prepare quality management system documents, but also how to prepare human resources to make a mindset change. Therefore, by changing the mindset of all school residents to have a vision of the quality of the school, the school can improve the quality of school education in a sustainable manner. Vision is a mental insight, an ideals and desires of the future that can be achieved by the school. This vision is very necessary because school activities are a form of educational services and services that must be carried out and must be of continuous quality.

Like the implementation of ISO 9001: 2008, the steps for implementing ISO 9001: 2015 are also almost the same, the difference is that there are only a few additions and minor adjustments to the ISO 9001: 2015 clause with the existence of risk management.

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