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Design Of Control Information System Web Based 5R Action Plan (Case Study: PT. Bima Sakti Karya Prima)

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Abstract

The 5R Action Plan is a method for organizing, managing, and scheduling activities as a whole. To help do this, we need an application that is able to help the company control the workplace conditions. PT Bimasakti Karya Prima intends to update the 5R repair control system application more specifically in the action plan application, where they were previously still computerized to become a computerized application because the reasons for the old system of the 5R Action Plan activities can only be done by certain parties financing and scheduling that have not been certainly. a long time to send information. This study aims to analyze the problems that occur and then propose a system design at PT Bimasakti Karya Prima. Researchers collect data by observing, interviewing, and studying literature. The analytical method used by researchers is the PIECES analysis. Researchers use the Unified Modeling Language (UML) as a tool for creating model designs and system designs. The results of this study are a repair control application system that is created using the Codeigniter framework with PHP as the programming language and MySQL as the database. Finally, researchers use (QA) Quality Assurance Testing to test the functionality of the application system that researchers created.

Keywords: 5R action plan, Cost, Control Applicationd

1. Introduction

At present, PT Bimasakti Karya Prima uses a 5R work culture consisting of concise, neat, clean, caring and diligent, which work culture is an adaptation of 5S work culture originating from Japan. To monitor the current work culture, PT Bimasakti Karya Prima created a 5R action plan control system, which contains a schedule of activities and action plans to be carried out on the company.

The 5R action plan control system that runs on PT Bimasakti Karya Prima is currently semi-computerized and even neglected, because it is still being worked on in a template using a data processing application. Here the researchers assume that there

needs to be an update on the current system, because if the control system is done using templates in a word processing application then not many people can do the Control and 5R action plan on the existing work environment, and again the lack of control data maintenance 5R action plan that is on a computer

2. Research Method

In collecting data of PT. Bimasakti Karyaprima researchers used three approaches of research method. among others :

1. Observation Research
In this method the researcher analyzes the problem by observing the source and procedures for managing the 5R action plan control data so that the researcher gets the data needed.
2. Interview Research
Researcher in this method are tries to obtain data by asking questions directly to the parties concerned, as well as trying to understand and develop information relating to the problem to be compiled.
3. Library Research
Apart from the two data collection methods that have been mentioned, the researchers also conducted a literature study wich is method of data collection which is done by searching for information through various internet sites, journals, and also articles. In this case the researchers trying to complete the data that has been obtained by searching for articles as reference material or references related to making the 5R action plan control application.

The following is a list of literature reviews used in this study :

1. Research in a journal conducted by Oesman Raliby at the Faculty of Engineering Muhammadiyah University, Magelang in 201, entitled "ANALYSIS OF APPLICATION OF 5R METHODS IN THE NATURAL FIBER CRAFTS INDUSTRY TOWARD ACHIEVMENTS OF CE MARK CERTIFICATION" on the acquisition of certification. The result of the analysis have several thing that cause the 5R program doesn't work well. Among them, the lack of understanding of the 5R concept, the lack o support from all related elements, the implementation was carried out partially. So that the effort to improve the quality and safety of a company's products it will be difficult to achieve.
2. Research in a journal conducted by Herriyan Tri Wibowo, Rizkiyah Nur Putri in the Mechanical Engineering Study Program of the Indonesian Academy of Community Gresik in 2018 entitled "APPLICATION OF 5R HOUSEKEEPING IN THE SEMEN COMMUNITY ACADEMY WORKSHOP" This study used an interview and observation method. Based on the results of the study, the application of the 5R Program at SCAI Workshop can be beneficial for improving the quality of students, increasing the positive habits of students. In implementing the 5R Program there are several things that become obstacles, namely human resources and management. From human resource factors are influenced by bad habits, saturated, and training. Meanwhile, the management factor is influenced by supervision.
3. Research in a journal conducted by Fega Belindasari Nasution, Wibowo Arninputranto, Rina Sandora in the Study of Occupational Safety and Health Engineering Program, Department of Ship Engineering Engineering, Shipbuilding Polytechnic, Surabaya, Surabaya 60111 in 2018 entitled "CHECKLIST INSPECTION OF INFORMATION SYSTEM OF IMPLEMENTATION OF 5R BASED ON WEB RESPONSIF ENGINEERING (PD). CASE STUDY: SUGAR COMPANY) "In this study the researchers used the Xampp application and also Notepad ++ to make it easier to make this application. Where the work process of this checklist is carried out by the user both user and admin as the person in charge. Registered users can immediately start the inspection using the laptop, PC, tablet or smartphone starting from the main menu stage, the Plan stage, the Do, Check stage, and the ACT stage or follow up on the results that have been made at the Check stage. When a discrepancy is found with the initial plan, re-inspection is carried out. Where this application is carried out in the work area both in the office area and the production area in the Sugar Company. The

author focuses on the 5R method using the PDCA approach is a method that is quite effective in reducing time efficiency to reduce the intensity of workplace accidents in the company.

4. Research in a journal conducted by Herriyan Tri Wibowo, Rizkiyah Nur Putri in the Mechanical Engineering Study Program of the Indonesian Academy of Community Gresik in 2018 entitled "APPLICATION OF 5R HOUSEKEEPING IN THE SEMEN COMMUNITY ACADEMY WORKSHOP" This study used an interview and observation method. Based on the results of the study, the application of the 5R Program at SCAI Workshop can be beneficial for improving the quality of students, increasing the positive habits of students. In implementing the 5R Program there are several things that become obstacles, namely human resources and management. From human resource factors are influenced by bad habits, saturated, and training. Meanwhile, the management factor is influenced by supervision.

3. Results and Analysis

3.1 Problem Analysis

Based on the results of the analysis carried out on the running system can be seen that there are several problems encountered. These problems include the following:

1. The current system cannot yet be used to provide information related to the condition of the existing space in the company quickly, precisely and accurately because there are still many shortcomings and weaknesses in the system.
2. 5R financing activities or control of the room only carried out by certain parties and at certain times.
3. Often there are delays in making improvements to the condition of the room due to frequent delays in the report and the number of parties involved in the late information that must be received related to the condition of the room.

3.2 Problemshooter

From all analyzes and researches an alternative solution to the problem faced by a running system is as follows:

1. Design an online repair control application system that can be used as a medium to send room condition information to the parties concerned quickly.
2. By using the proposed system, the activity of making a room condition report can not only be done by the 5R leaders but officers and employees, but can be done by anyone in the company environment.
3. The proposed system can also help in reducing the risks that might occur due to the reason for the late improvement of room conditions that must be done by Officers.

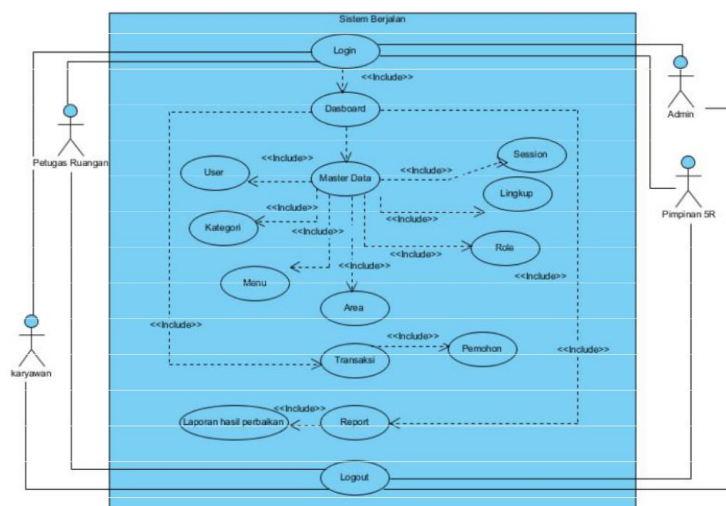


Figure 1. Use Case Proposed System Diagram

3.3 Implementantation

The following is an overview of the interface display of sales accounting information systems can be seen in the following figure:

1. Page Display Login

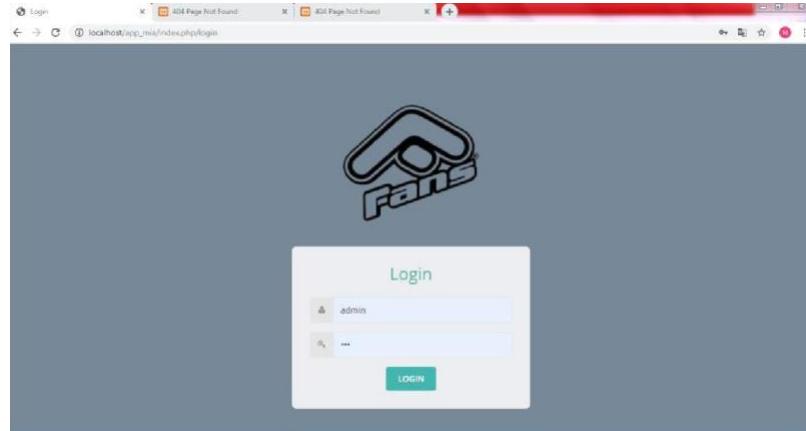


Figure 2. Page Display Login

The above display is the initial display before entering the system, each user must log in by entering the correct username and password in order to enter the system.

2. Page Display Dashboard

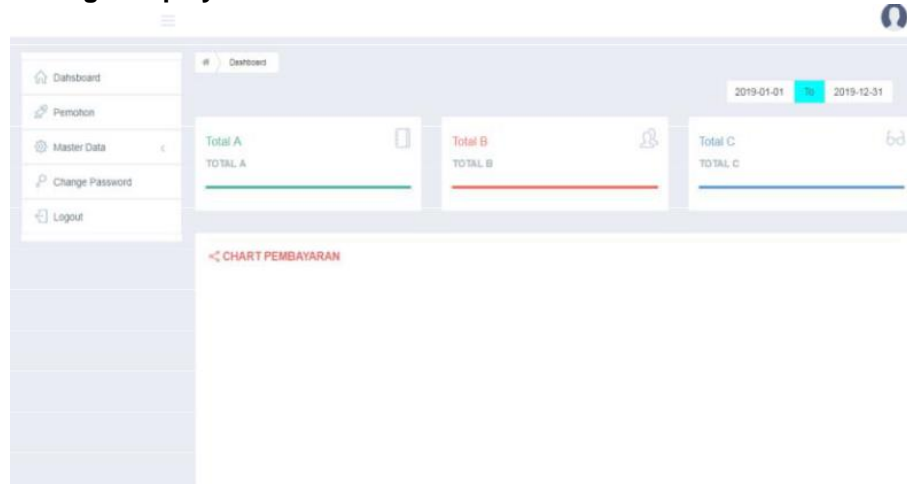


Figure 3. Display Dashboard

After the user has logged in correctly, a dashboard will appear in which the value of each transaction will appear, can see the value and details of the data when clicking on one of the charts.

3. Page Display Area Data

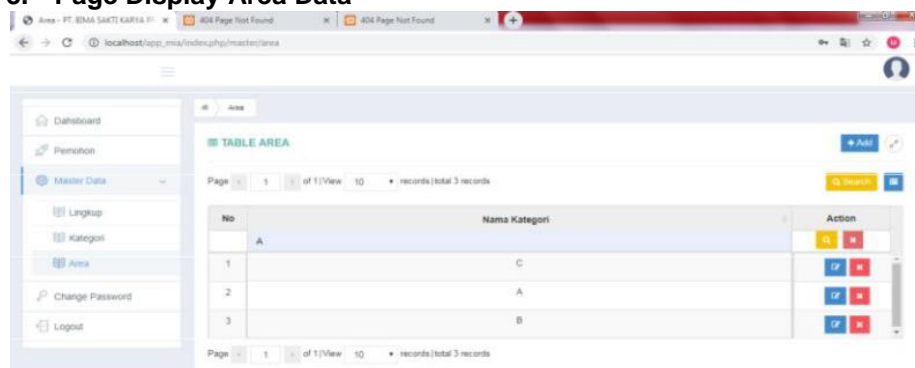
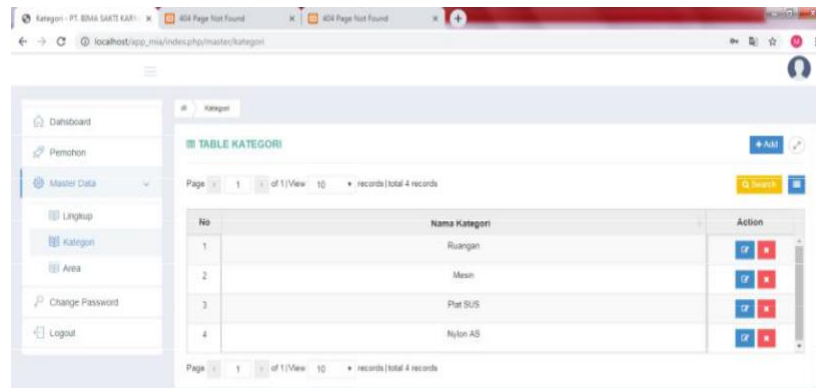


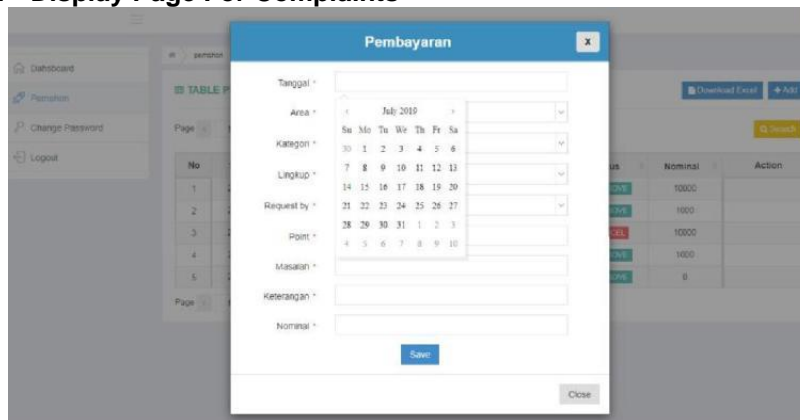
Figure 4, Page Display Area Data

On this page the user can process the area data by using the menu provided. This page can only be accessed by the admin.

4. Page Display Category

**Figure 5. Page Display Category**

5. Display Page For Complaints

**Figure 6. Display Page For Complaints**

On this page the user can make a 5R complaint about the condition of the room which he considers problematic by filling out the form on this page.

6. Page Display Approval

No	Tanggal	Area	Kategori	Lingkup	Request by	Status	Nominal	Action
1	2019-07-03	B	Mesin	B	petugas	Waiting Head SR	10000	
2	2019-07-05	B	Mesin	Kantor	petugas	APPROVAL	10000	
3	2019-05-17	A	Mesin	Area luar	petugas	APPROVAL	1000	
4	2019-07-31	B	Nylon AS	B	petugas	CANCEL	10000	
5	2019-07-11	B	Nylon AS	B	admin	APPROVAL	1000	
6	2019-07-04	B	Nylon AS	B	admin	APPROVAL	0	

Figure 7. Page Display Approval

The display of this approve page can only be accessed by pic 5R and the leadership of 5R to approve the complaints plan action plan.

4. Conclusion

Based on the discussion that has been described in the previous chapter of the current system in the sales and finance departments at PT Arbunco Wira Pandega, especially in the process of preparing sales reports and financial statements, then researchers can draw conclusions that:

1. In designing a web-based 5R repair control application system, researchers use visual paradigm software to create UML diagrams consisting of Use Case Diagrams, Activity Diagrams, Sequence Diagrams and Class Diagrams. The programming language used to build this system is PHP using the Ci framework, Xampp as a web server, Mysql as a database.
2. In testing researchers use the method of Quality Assurance (QA). In the Quality Assurance (QA) method, the focus is on functional software (software), in accordance with the requirements of the software (software), more than that, the Quality Assurance (QA) method is a complementary approach in covering errors.

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