DESIGN AND IMPLEMENTATION OF PAYROLL INFORMATION SYSTEM IN PT. KARYA TAMA RIMBA CEMERLANG

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Abstract
PT. Karya Tama Rimba Cemerlang has a traditional accounting system thus the payroll also done manually by HRD. The payroll system is calculated based on the attendance list which is obtained from the manual machine. Everyday the workers have to register their attendance and leave so that it can be traced by the company in order to determine the monthly salary. Then the data will be processed by using Microsoft Excel. However, this system has several disadvantages such as the high processing time and the possibility of incorrect input. Thus, in this research, a computerized system is very crucial for the development of the company. In creating the new payroll system, first we do an observation in the company internal system. From the internal data, then the company will be able to design the new payroll system that can be customized based on the needs of the company through a more structurized DFD, ERD, and tables. However, the new system is the integration of payroll and administration modul. Parts of the payroll system are basic salary, munch money, bonuses, taxation, Jamsostek, THR and cash bonus. The administration process comprises the workers’ personal data, absenteeism, permission and leave, violation of rules and firing.

Based on the payroll application, the satisfaction level of PT. Karya Tama Rimba Cemerlang as the user is 76%, thus as a conclusion, the application process of the new payroll system has fulfilled the target and has the suitable system. In fact, this systemable to support the company with a faster payroll report yet accurate.

Keywords: Basic Salary, Payroll system, Taxation.

1 INTRODUCTION

One function of HRD (Human Resource Department) on a company is calculating salary for each employee to the company. There are various ways calculation process employee payroll, depending on the policies implemented by the company.

PT. Tama Rimba Karya Cemerlang is a company which is engaged in wood drying. Every division in the company has a payroll system that is not the same with each other. This is because of differences in company tenure, job type and the needs of the company (to save on expenses).

The process of calculating employees salaries are still done manually by Human Resources Manager. The Process is calculated by counting the number of the days of each company's employee presence for a certain period. The data has been obtained is then processed and entered manually into Microsoft Excel program one by one. Then the input data is processed in a table that had contained the variables in the form of salary deductions, allowances, basic salary, and others. The result is total salary of employees in a certain period.

Manual accounting system is certainly has some shortcomings that led to HRD experiencing difficulties, such as requiring a long time in getting data on the company's employees. Currently the number of employees at the company is approximately 55. For the time being to process the data takes about two hours. In addition, the possible risk of error (human error) that such a high frequency of errors in input data by HR employees. HRD is often difficult to classify the data of employees of different divisions.

Therefore, with the advances in information technology that existed at the moment, is expected to be created an information processing system using a computer system to help overcome the weaknesses of the manual system faced by PT. Karya Tama Rimba Cemerlang.

This can be realized by designing an application that can perform calculation of employee salaries of PT. Tama Rimba Karya Cemerlang automatically so that counting can be produced more quickly and accurately.

2 PAYROLL SYSTEM

Payroll system is a set of business activities and implementation of data processing related continuously. Payroll information system is able to perform automatic payroll calculation process in which salary components such as basic salary, allowances, commissions, bonuses, overtime, leave, calculation of income tax, Jamsostek and others are included to facilitate the calculation of wages [6].

2.1 PAYROLL SYSTEM ACTIVITIES

There are several important activities in the human resources department, began recruiting and hiring, training, assignments, compensation (payroll), employee performance and termination of the relationship between companies and employees. For compensation subsystem, there are seven events, namely: [7]
1. Update master payroll file
2. Update tax rate and deductions
3. Validate time and attendance data
4. Prepare payroll
5. Disburse payroll
6. Calculate employer-paid benefits and taxes
7. Disburse payroll taxes and other deductions

2.2 Pph 21

PPh 21 is the income tax imposed on income in the form of salary, honorarium, wages, allowances, pensions, and compensation activities with respect to employment, services or activities performed by an individual taxpayer in the country. PPh 21 is reported and paid correctly by the taxpayer on income received or accrued in connection with the employment of one employer (Peraturan Direktur Jenderal Pajak, 2010).

2.3 JAMSOSTEK

Jamsostek is a public program that provides protection for workers to overcome the risk of certain socioeconomic and operate using the mechanism of social insurance. As public programs, Social Security provides the rights and obligations for certain overloads (compulsory) for employers and workers under the Act No.3 of 1992 which set the type of Program Jaminan Kece lakaan Kerja (JKK), Jaminan Hari Tua (JHT), Jaminan Kematian (JKM) and Jaminan Pemeliharaan Kesehatan (JPK), while the obligations of the participants is the orderly administration and pay dues (PT JAMSOSTEK, 2010, par. 1-2)

2.4 TUNJANGAN HARI RAYA (THR)

In addition to benefits of existing payroll taxes, businesses will be charged in return other substantial remuneration. THR is one type of benefit that is often used by some companies in Indonesia. According to Permen 04/1994, which meant THR is the income of workers must be paid by employers to workers or their families before the religious holiday in the form of money or other forms. THR is probably due to additional income, people call it "Gaji ke-13".

According to Permen 04/1994, any person who employs another person referred to employers and payers to pay THR. Legislation does not question whether an employer is an individual, a limited liability company, foundation, or association. In essence, every person who employs another person obliged to pay wages in return for THR. Employers must pay workers who had worked successively for 3 months or more. This regulation does not distinguish the status of workers, whether permanent employees, contract employees, or part-time employees. Originally a worker has worked for 3 consecutive months, he is entitled to THR.

2.5 SERIKAT PEKERJA SELURUH INDONESIA (SPSI)

One of tools to realize the industrial relations was the establishment of trade unions. The establishment of the union is expected to absorb the aspirations of workers and bridge the interests of employers and workers so that the goal, ideally, the harmonious relationship between employers and workers can be achieved [5].

3 ANALYSIS AND DESIGN SYSTEM

In any information system application development is always going through the stages of analysis and design. [1].

3.1 Problem Analysis

The process of manually calculating salary causes some problems in the company of PT. Tama Rimba Karya Cemerlang. Problems faced by companies today are:

- A large number of company employees who constantly growing raises wage calculation process becomes longer and not effective.
- The possibility of human error in the calculation of salaries
- To search for data takes a long time because data is not stored properly.

3.2 Requirement Analysis

Based on the existing problems, companies need a computerized system, especially in calculating the employee's salary that can support the development of the company, such as:

- Computerized system for employee absences that can be integrated with existing systems (fingerprint attendance machine) with an employee salary calculation software.
- Computerized system to process employee payroll calculation, so that the counting process can be conducted faster, precise, and accurate.
- Computerized system for data storage in order to minimize the risk of data loss.
- Computerized system that can perform a search employee data quickly and easily.

3.3 DATA FLOW DIAGRAM

The design stage begins with the design Data Flow Diagrams (DFD). Data flow diagram of the system to be developed can be seen in Figure 1.
3.4 ENTITY RELATIONSHIP DIAGRAM
Entity relationship diagrams are used to describe the relationship of each table exists on the system. ERD consists of two pieces: the conceptual and physical.

4 RESULTS AND DISCUSSIONS
The results of the analysis and design that has been done before is as follows:

4.1 Form Login
Form login is used to differentiate access rights of each user. Form Login can be seen in Figure 2.

4.2 Form Master
All menus and facilities that exist in the main menu page can be accessed by company directors. Before the input data of employees, directors are encouraged to check and input data as well as the position the employee's basic salary in advance. Form base salary and position contained in the master menu. Display the program can be viewed as in Figure 3.

4.3 Form Insert Data
Form Insert data is used to input data and their employee base salary and information about the position. Form insert data can be seen in figure 4.

4.4 Form Setting UMR
Form setting UMR is used to incorporate the large amount of current minimum wage. The benefits of this form is to note any changes that occur UMR. Form setting UMR can be seen in figure 5.
4.5 Form Master Employee
Form Master Employee is used to enter information related to employee data that existed at the company. Form master employee can be seen in figure 6.

4.6 Form Setting Tax
Form Setting tax is used to enter data relating to taxation. Form Setting tax can be seen in figure 7.

4.7 Form setting THR
Form setting THR, is used to determine the amount of THR for the current period. This helps companies to keep records of payments THR employees automatically. Form setting THR can be seen in figure 8.

4.8 Form Jamsostek
Form Jamsostek is used to determine the amount of the percentage of jamsostek paid by the employee and the company. Form Jamsostek can be seen in figure 9.

4.9 Form Bonuses
Form bonuses are used to determine the amount of bonus for each employee. Form bonuses can be seen in figure 10.

4.10 Form Setting Hari Libur
Form Setting Hari Libur is used to define holidays that apply to the company. The Benefit of the form is that it can help the calculation of employee absences automatically. Form Setting hari libur can be seen in figure 11.
4.11 Form Cuti
Form Cuti is used to enter employee data that was taking off. Form Cuti can be seen in figure 12.

![Figure 12. Form Cuti](image)

4.12 Form Salary Report
Form salary report, is used to see each employee's salary report. Form salary reports can be seen in figure 13.

![Figure 13. Form Salary Report](image)

4.13 Form JamSostek Report
Form JamSostek Report is used to view detailed reports for each employee JamSostek. Figure 14 displays the JamSostek Report Form.

![Figure 14. Form JamSostek Report](image)

4.14 Form Taxation Report
Taxation Report Form is used to display the tax paid by employees. Form taxation Report can be seen in Figure 15.

![Figure 15. Form Taxation Report](image)

4.15 Form Employee Data Report
Employee Data Report Form is used to display employee data reports is currently active. Figure 16 displays the Employee Data Report Form.

![Figure 16. Form Employee Data Report](image)

4.16 Evaluation System
Evaluation system is using a scale of one to five, in which the value of one is the lowest value as representative of the answer to the question A. The value of five is the highest value as a representative of the response of E. The results of the evaluation assessment system can be seen in Table 1.

<table>
<thead>
<tr>
<th>Questions</th>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
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<td>I II</td>
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<td>4 3</td>
<td>4 4</td>
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<tr>
<td>Ponidi</td>
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<td>4 3</td>
<td>4 4</td>
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<tr>
<td>TOTAL</td>
<td>21 20 18 19</td>
<td>19 15</td>
<td>22 19</td>
</tr>
</tbody>
</table>

Tabel 1. Evaluation System
Explanations of table 1 are as follows:
- Question A consists of 4 questions related to the display and ease of application. Based on the questions according to table 1, for assessment in terms of look and ease of use application, the percentage obtained is 78%.
- Question B consists of two questions related to the assessment of accuracy and speed of application. Based on the questions according to Table 1, the assessment of accuracy and speed of the percentage obtained 68%.
- Question C consists of two questions related to the feasibility of the application. Based on the questions according to table 1, for assessment of eligibility was 82%.

5 CONCLUSIONS
- Absenteeism in a computerized system can improve the time efficiency of data process, because the data is directly stored in the database so that the process of calculating pay and leave of employees can be done more quickly.
- Applications are made to overcome the damage or loss of data caused by human error, because the application is made accompanied by backup facility. The entire data of employees who are in the database can be backed up into a single backup file.
- This application makes payroll reporting process becomes easier and faster.
- Application is user friendly enough.
- From the results of a questionnaire about the testing system, found that in terms of appearance and ease of use application by 78%, in terms of accuracy and speed of application by 68%, as well as in terms of eligibility by 82%. From these percentages can be concluded that the application meets and in accordance with the needs of enterprise systems and can be understood by the user.

6 REFERENCES