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# DESIGN AND IMPLEMENTATION OF PAYROLL ACCOUNTING INFORMATION SYSTEMS IN. PLATONIKWORK

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#### **Abstract**

This study aims to determine how the payroll accounting information system that is running on PT. Platonikwork, find out if payroll accounting information system that runs on PT. Platonikwork already run effectively, and create an alternative system design effective payroll accounting information. The data used is primary data obtained from interviews with the company in the form of procedures and documents payroll. Design tools in this study using the Flowchart, Data Flow Diagrams (DFD) and Entity Relationship Diagram (ERD). Based on the results of this study concluded that the payroll system that runs on PT. Platonikwork still done manually and not well as redundancy or double job duties are in accounting and finance functions. In addition to the task redundancy, other deficiencies on PT. Platonikwork that documents used and the resulting report is not computerized. The system has not gone well can lead to fraud resulting in losses for the company.

Keywords: Analysis, Design, Accounting Information Systems, Payroll

#### INTRODUCTION

The need for information is very important for a company in running the business, in order to survive in the increasingly fierce competition. The right information can assist management in making the right decision. If the decision is correct, then the operations can be run properly and company goals can be achieved. Developments in information technology role not only in the aspect of communication, but also plays a role in other aspects such as economic, social, cultural and others. Required information quickly and accurately in order to be able to support a leader or executives to make decisions. To generate information that is accurate, relevant and timely need a good system. If the accounting system in a company is not good, it will cause an adverse, for example the case of payment of fictitious or allocation of costs is not in accordance with the conditions set. The flow of information is needed allowing the company makes sound planning as a support for a decision of the executive. It can be affected by several things, including the system used by the company itself.

Accurate accounting information systems, and effectively provide good internal control for every function in the company, so that the resulting information can support to make business decisions (Mladen, 2006). Therefore, the company was aware of and apply the accounting information system to improve company operations. Internal control is a step taken by the company to ensure reliability and protect data accounting, ensure that employees who have been following company procedures, and evaluate the performance of employees (Simamora, 2002). Internal controls can be implemented properly if there is a clear organizational structure between the separation of duties and responsibilities of each part, the systematic recording of financial transactions, routine surveillance of superiors to subordinates, policies and security procedures, capture and communicate the information required by the employees to perform their duties, also evaluations to assess all the activities that have been implemented. Internal controls in the form of payroll accounting system can be used as a tool to detect irregularities that occurred in the process of managing payroll and help businesses to operate more effectively and efficiently.

One element that is also important to improve the performance of the company is the Human Resources (HR). HR is one of the pillars of the company's main buffer to drive the organization in an effort to realize the mission and vision of the company. Therefore, HR needs to be managed properly and using a professional manner. One way to achieve this is by providing an appropriate and fair salary and timely to each employee. Salary includes the cost of labor is the largest element which require precision in You keep, classification, registration and payment. Many of the problems that often occur in the administration of salaries, one of which is the misuse by certain parties that emerged cheating and fraud resulting in losses to the company. Therefore, the implementation of the payroll and wage accounting system within the company aims to manage all transactions and activities relating to salaries. In an effort if the system is not good accounting information would cause an adverse symptoms.

Object in this research is PT. Platonikwork, is a company engaged in the field of architecture firms. The company serves the building design services to create a draft plan, either in the form of drawings, cost calculations, structural calculations and others who are planning a project. Problems faced in terms of payroll at PT. Platonikwork is still the double job on the payroll division. This increases the risk of human error and resulting in the company suffered losses. Another problem faced by the company regarding the payroll is, the absence of salary slips provided to employees, resulting in the employee does not know the details of the salary earned each month. Seeing the payroll system which has been implemented by PT. Platonikwork, then do the analysis,

## Research purposes

In accordance with the formulation of the problem that has been noted, the purpose of this study are as follows:

- 1. To find out how the payroll accounting information system that is running on PT. Platonikwork.
- 2. To implement a system of payroll information for PT. Platonikwork.

#### LITERATURE REVIEW

#### **Information Systems**

Rochmawati (2012) state information system is a set of related components which serves to collect, process, store, and distribute information to support decision-making and oversight within the organization. Meanwhile, According to Bodnar and Hopwood (2014), the information system is a collection of hardware and software designed to transform data into useful information form. Information system functions responsible for processing the data. Processing of the data is the application of basic accounting information system in every organization. The function of information systems in organizations has evolved. This function was originally a simple organizational structure, which only involves a few people.

#### Accounting information system

Romney and Steinbart (2004) states that the Accounting Information Systems (AIS) is a human resources and capital within the organization responsible for the preparation of the financial information and information obtained from collecting and processing various transactions of the

company. Jogiyanto (2007) SIA is a collection of activities of the organization responsible for providing financial and other information obtained from the transaction data for the purpose of internal reporting to the manager for use in controlling and planning of current and future operations and external reporting to shareholders, government, and other external parties.

## **Payroll Accounting Information Systems**

According Soemarso (2005), the salary is a reward to employees who are given administrative tasks and leadership whose number is usually fixed monthly or annual basis. Salaries generally a payment for supply of services performed by employees who have the hierarchy manager, while wages generally constitute payment for supply of services performed by employees of executing (laborers) (Mulyadi, 2016). Generally the salaries are paid regularly per month, while wages are paid by the job, working hours, or number of units of product produced by employees. Accounting Information Systems Sales

# **Systems Development Life Cycle**

According Mardi (2014), the system development life cycle consists of five (5) activities that can logically be accepted by experts in kommunitas system. According Krismiaji (2015) no matter how large a change to a system, the repair effort made permanent through a similar process called life cycle of the manufacturing system (System Development Life Cycle / SDLC). SDLC is a method of system development application that consists of several stages, system analysis, conceptual design, physical design, implementation and conversion, operation and maintenance. According Jogiyanto (2007), systems analysis (system analysis) can be defined as the separation of smaller systems of a complete information system in a company. The goal is to classify and evaluate the problems,

#### **System Development Tools**

Companies typically use a flowchart (flowchart) to describe a system and procedures that run in it. According to Romney & Steinbart (2004) Flowchart is a pictorial analytical technique used to describe the procedures that occur in the company succinctly and clearly. Before implementing the program, then the making of Data Flow Diagrams (DFD). Data Flow Diagram is a tool that shows the flow of data on the system in the form of a graph. A critical element of the DFD is the flow of data, processes, data storage and data sources. DFD based analysis system making level, a high level only identify major processes (Irwansyah, 2014). Two important tool that can be used by accountants to allow involvement in the manufacturing data model is an Entity Relationship Diagram (ERD) and data models Resource Event Agent (REA). Entity Relationships Diagram (Entity Relationship Diagram) is a graphical technique that describes the database schema. Known as the ERD as the diagram shows the various entities that are modeled, as well as the relationships between these entities (Romney and Steinbart, 2004).

#### RESEARCH METHODS

## Research Approach

The steps used in conducting the study as follows:

## 1. Survey System

The author made observations by visiting the research unit to look at the activities that take place in the company, and the author of collecting data on manual systems that lasted over payroll transactions and internal control system implemented by PT. Platonikwork.

#### 2. Description System

The author describes the payroll accounting information system that runs on PT. Platonikwork using document flowchart (flowchart).

#### Identification System

The author identifies and evaluates problems on payroll transaction information systems and internal control systems that have been implemented by PT. Platonikwork.

#### System design

The author conducted a new system design for companies using Data Flow Diagrams (DFD) and Entity Relationship Diagram (ERD), the design is expected to facilitate the activity of PT. Platonikwork for more effective and efficient.

# 5. System implementation

Writer implementing systems using tools designed by React JS, NodeJS, ExpressJS, MySQL and bootstrap.

#### Object of research

The object being studied in this paper is the accounting information system, in this case the payroll system is running at. Platonikwork, while the unit of research is PT. Platonikwork that stood since 14 January 2005. PT. Platonikwork is a company engaged in consulting services architect. The objective of establishing the company is to provide solutions or consulting services to partners in designing, building or the building is good. PT. Platonikwork located at Jalan Pramuka Raya No. 4, Matraman, RT.10 / RW.6, Paseban, East Jakarta, Central Jakarta, Jakarta Raya (13140).

#### Types and Sources of Data

Author Data used in this study is primary data. Data are obtained from interviews with the PT Platonikwork about payroll system that is running on the company.

#### Data collection technique

Data collection procedures or techniques that are used to collect data is very important for the author in order to obtain the required data. The data collection technique is the most strategic step in the research, because the main goal of the study is to collect data. Procedures or techniques used Authors in this study consisted of data collection techniques and interview methods.

## **Analysis and Design Tools**

The analytical tool used by the author is a flowchart document (flowchart). Flowchart is the analytical technique used to describe some aspects of the system information in a clear, concise, and logical. Flowchart using standard symbols to describe in pictures transaction processing procedures used by the company and the data flow through the system. In implementing the system design, the author makes Data Flow Diagrams (DFD) used to describe the flow of data within the enterprise and Entity Relationship Diagram (ERD) that is used to describe the design of the database used in the company.

#### RESULTS AND DISCUSSION

#### **Payroll Accounting Information Systems Analysis**

After conducting research at PT. Platonikwork, the authors analyze and propose accounting information system of internal control as follows.

- 1. The absence of competent HR functions as payroll calculation list maker, for the HRD has data on employees working in the company.
- 2. The finance department has the dual duties are as a maker of lists of salary, as the party who pays employee salaries and carry out accounting functions.
- 3. The author proposes the addition of a document on payroll accounting information system of PT. Platonikwork ie salary payment slip. This document is used to verify the correctness and accuracy in the calculation of the salary will be given to employees so that there is no doubt on the part of employees. This document is very important because as evidence that the employee can check whether a given salary is appropriate or not, so there is no loss received by the company and its employees.



4. The authors propose additional accounting records used in recording the salaries applied by PT. Platonikwork namely Employees Income Card. This document is used as a record of employees' income to be received by the employees working at PT. Platonikwork.

Proposed procedures payroll accounting information system can be seen in the flowchart in Figure 1 and Figure 2.

# 1. Flowchart Document Proposed Payroll System

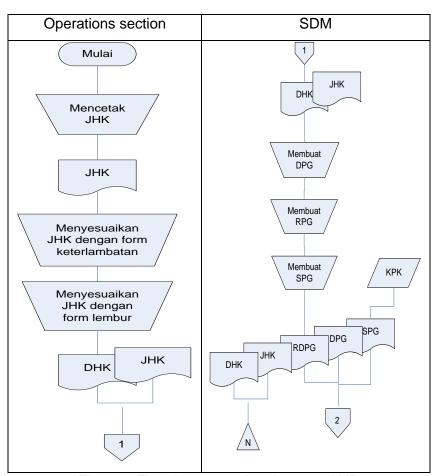


Figure 1 Flowchart operational part and HR

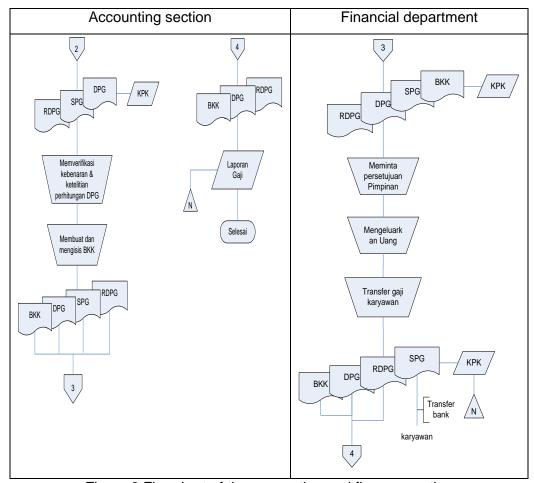


Figure 2 Flowchart of the accounting and finance section

# 2. Data Flow Diagram (DFD)

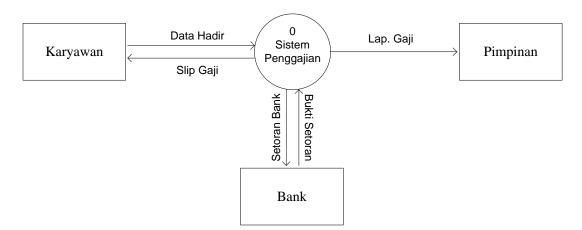


Figure 3 (a) Diagram Context System Proposal

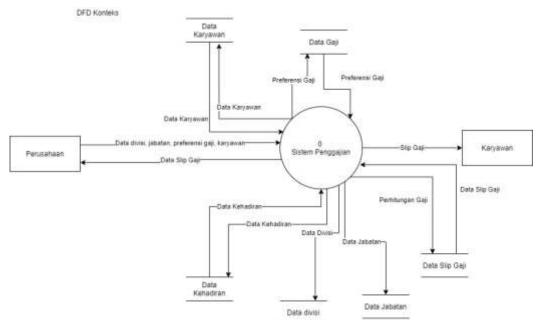


Figure 3 (b) Diagram Context System Runs

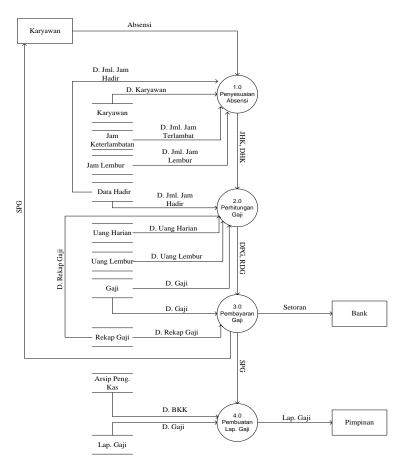


Figure 4 Diagram of the Proposed Zero

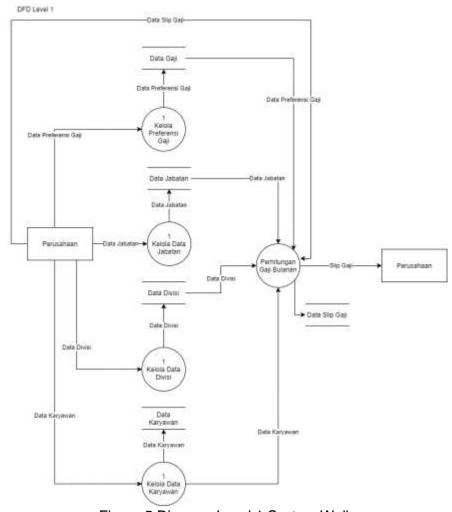


Figure 5 Diagram Level 1 System Walk

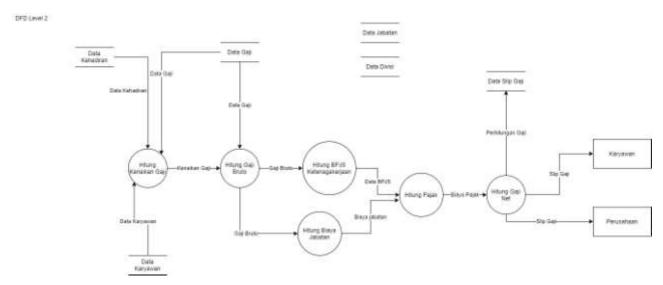


Figure 6 Diagram Level 2 System Runs

# 3. Entity Relationship Diagram (ERD) Proposed Credit Sales System

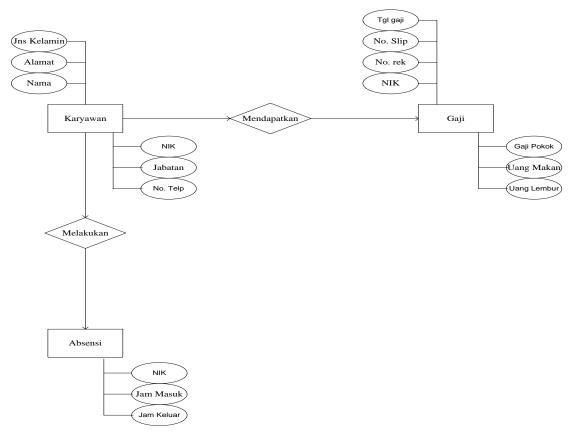


Figure 7 (a) Entity Relationship Diagram Proposed System

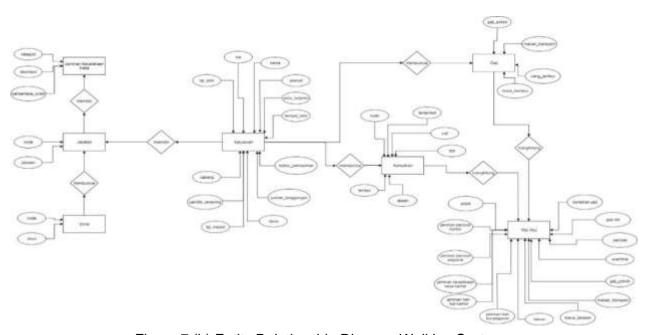


Figure 7 (b) Entity Relationship Diagram Walking System

# 4. Payroll System Design

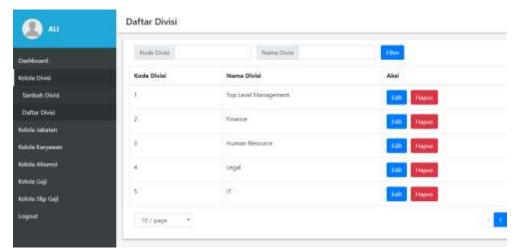


Figure 8 Manage Display Division

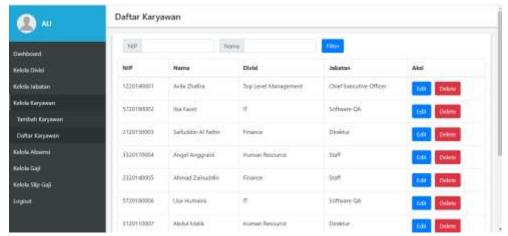


Figure 9 Input Form Employee List

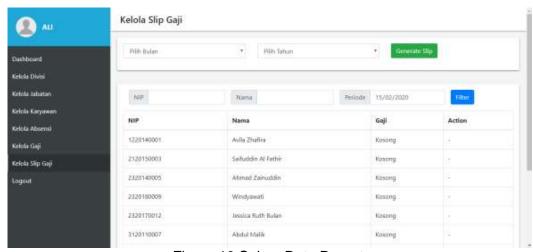


Figure 10 Salary Data Report

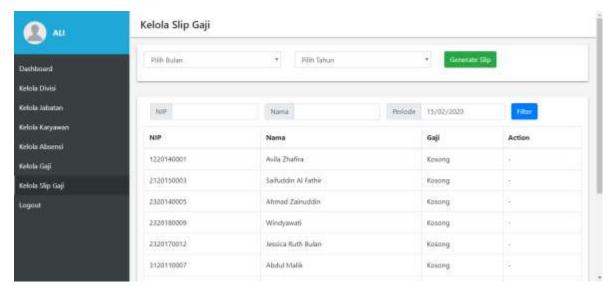


Figure 11 Output Slip Form Payroll

#### CONCLUSION

From the research that has been done can be concluded that the payroll accounting information system at PT. Platonikwork has not gone well. From the research, the associated function in the payroll system consists of two parts, namely the operational and financial sections. Their redundancy in functions related task is making a list of salary and payroll calculation is still done by the finance function. Then the lack of accounting functions that are authorized to verify the truth and accuracy in calculating your salary calculation. Therefore we need the addition of a function in the payroll system which accounting functions. In addition to the payroll function, this study also found that the system has not gone well, namely the documents used, recording transactions, and the reports generated are not computerized or still done manually. The system has not gone well can cause inaccuracy committed by employees or certain parties that could hurt the company, it is proposed to apply to the company's payroll system to reduce errors that hurt the company.

#### SUGGESTIONS

The company should make a separation of duties and responsibilities between the functions of making payroll and payroll function so that no more redundancy of function related tasks. The process of making a list of employees' salaries should be done using a computerized system that generated payroll data can be justified. The company should maximize the application of Accounting Information Systems (AIS) in order to produce reliable and accurate information that will be used as a basis for making the right decision. The author expects this research has been done to help the company to improve the work performance of PT. Platonikwork.

This study can be used as a reference for further research so that reference can be made in more detail, reduce inaccuracy and better in designing and implementing information systems, especially in terms of payroll accounting.

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