ANDROID-BASED EMPLOYEE DATA INFORMATION AND SALARY VERIFICATION SYSTEM

Gina Nurdhini [1] [*] , Andri Sukma Indrayana [2,] Anggit Wirasto [3]

[1.2] Informatics Management Study Program, STMIK DCI,
[3]Informatics Study Program, universitas harapan bangsa
Correspondence: E-mail: ginanurdhini@gmail.com

A B S T R air conditioning T

Piranti Teknik Indonesia is engaged in manufacturing which produces wiring harnesses for motorcycles and others. This company is one of the companies that joined the Banshu Group or known as Banshu Electric Indonesia. PT. Piranti Teknik Indonesia is one that uses a computerized but simple payroll system, but in the salary complaint system it is still done manually, so the data processing is experiencing obstacles. If this problem is allowed to continue it will result in the work system being less effective.

So we need a system that is able to provide convenience in managing salary data efficiently. For this reason, the author will design an android-based information system that will facilitate the process of complaining about salary data by using a computerized system and data base as storage media, so that data will not be lost or damaged. With the construction of an Information System, the payroll process will no longer be hampered, because this system is designed to build a work system that is more effective, fast and accurate.

If this research is successful, it will produce a system that is able to help provide convenience for both parties, so that it can be expected that later it will simplify and speed up the service process, data storage and, as well as the restatement of the data.

1. Introduction

PT. Piranti Teknik Indonesia is one of the company from Banshu Group. Indonesian Engineering Devices operates in the field of manufacturers that produce *wiring harness* for motorcycles and others. This company is one of the merged companies in Banshu Group or known with Banshu Electric Indonesia, among others There is a number of company other like PT.Askara , PT.Kinenta , and others. These companies Already stand about 5 years . In addition to producing cable body For motorcycle , company it also produces cable For motorcycle lights.

Related with development technology and information are increasingly fast , many company need system more payroll Can optimize salary data processing its employees in a way fast and accurate . However Not yet all company apply system computerized payroll , one of which is PT. Piranti Teknik Indonesia which uses system payroll computerized However simple that is using a pay slip then sent via email but in system complaint wages Still done manually , namely use paper and written manually, so There is the possibility of lost data and in processing the data experience obstacles . This is very inhibiting in the delivery process report complaint salary . If the problem This left alone continue so will result in system Work become not enough effective.

For that , the writer will designing system information android based which will make things easier in the process of complaining about salary data with use system computerized and database as storage media , so that the data is not will lost, or damaged . With construction System Information then the complaint process wages No will Again hampered , because system This made For build system more work effective, fast and accurate . 15

Excess from application This that is existence feature Verification and Complaints . If the user has accept wages from admin and not There is lack , then the user can verify wages said , however If There is lack salary , then the user can submit complaint on the form provided provided in system.Then information complaint the will sent direct to admin. If admin has accept information complaint from the user, then the admin will check and verify complaints filed .

2. Theoretical basis

2.1 Definition of Management

Management according to the Big Indonesian Dictionary it means use source Power in an effective way To reach targets .

Definition of management that Stoner explained, can We Look directly What only becomes a function of management. Stoner said that "Management is the process of planning, organizing, leading, and controlling the efforts of organizational members and use all sources

of organizational power to achieve goals that have been set." Now it is clear that function management according to Stoner there are four that are planning, organizing, leading, and controlling. Management is prerequisite for organization To achieve A purpose. In general terms, management is something *the process* where someone can arrange everything done by an individual or group. From the understanding said, science management can be interpreted as the ability to arrange something to achieve the desired goal can be achieved. Management can also be interpreted as business planning, coordination, and arrangement of sources of existing power to achieve objectives in an effective and efficient way.

2.2 Definition of Tools

Tools or tools are objects used To make things easier work We daily .

2.3 Purpose of Borrowing Equipment

1. Fulfill needs.

2. Make it easier to work.

3. Doing work to be done using certain tools.

2.4 Definition of Borrowing

Borrow use or borrowing is handover use of goods / assets to some government agency or other parties.

2.1 System Information

According to (Nugroho et al., 2020) System information is something The system is made by people who are element in organization so that Can reach the goal that is presenting A information from part system information covering *hardware, software* data procedures .

System Information is something system inside organization that brings together need processing transaction daily , support operations , are managerial and strategic activities , from something organization and provide party outside certain with the necessary reports . (Tata Sutarbi, 2012:38) in Wili Wildaningsih , Aneu Yulianeu, ST. , SE., MM . (2019).

Based on description on can concluded that , the System information is gathering from interconnected sub - systems integrated and collaborative For finish problem certain with method process data with a tool whose name is computer so that own mark additional and useful for user .

2.2 Data and Verification

According to John J. Longkutoy in his book Introduction Computer define that the term data is something term compound meaning fact or part from facts that contain connected meaning

with facts , symbols , pictures , numbers , letters , or symbols that indicate an idea, object , condition , or other situations (Sutabri , Tata. 2013) in Karlina Aisah, Heri Yanto, Firdaus (2021).

2.3 Salary Employee

Wages is something reception as reward from businessman to employee For something employment or services that have been or done and stated in established form of money in accordance agreement or regulation legislation as well as paid on base something agreement Work between businessman with employee including allowance (Yulistiawan et al., 2012) in Esti Rahmadhani, Intan Mutia, Finata Rastic Andrari (2021).

Following This example approach in determination element salary . In terms of general target payroll intended Because consideration a number of matter as following :

a. *Pay for Position,* namely determination wages employee caused by consideration mark something work that becomes not quite enough he answered .

b. *Pay for Person* , namely determination wages employee caused by consideration the person who can differentiated from aspect his competence or also because factor scarcity availability of people with appropriate qualifications in the labor market Work .

c. *Pay for Performance* , is determination wages employee caused by consideration achievement performance somebody .

d. *Pay for Year of Service* , is determination wages employee caused by work period considerations somebody .

2.4 Understanding Android

In the book entitled Android Application Development for Rookies by Nadia Firly (2019) In English English The term Android means "robot that resembles a computer" human beings ". This can seen clearly on the Android icon that depicts a colored robot green that has pair hands and feet. As system operation , Android works as connecting device between users and devices hard on smartphone or tool electronic certain so that matter the allows users can interact with the device and run various type mobile application .

3. Problem Analysis

3.1. Input Data Analysis

In the analysis of input data containing about all data that is input where consists of from Input Name , Function , Source , Media, Frequency , Format, description and others.

3.1.1 Employee Data Analysis

Employee data is the data in it load regarding Employee Data at PT. Piranti Teknik Indonesia . For find out salary data employees, then requires employee data . The data required found in table 3.1. 32

Table 3.1

Employee data

No.	Data Attribute	Process	Creator	Purpose
1.	Name			
2.	Employee ID (NIK)			
3.	Employment Status	Using Ms Excel	HRD Team	Employee
4.	Department			
5.	Bank Account Number			

Source: Study developed cases 2022

Analysis Data:

Based on Table 3.1 above , the data attributes are Enough fulfil condition For make program, however Still can lack that is recording done in a way manual, so that the processing process can hampered , then need system computerized, so that can help and make things easier in manufacturing report .

3.1.2 Salary Data Analysis Employee

Salary Data Employee is the data in it load Regarding salary data at PT. Piranti Teknik Indonesia. The salary data created in the form of a pay slip and sent through employee email address.Data Wages For required analysis found in table 3.2.

Table 3.2
Salary Data Employee

No.	Data Attribute	Process	Creator	Purpose
1.	Basic Salary			
2.	BPJS Allowance			
3.	Uniform Deduction			
4.	BPJS Deduction			
5.	Loan Deduction	Using MRS.Excel	HRD Team	Employee
6.	Absence Deduction (Days)			
7.	Absence Deduction (Rp)			
8.	Total Deductions			
9.	Total Income			
10.	Paid			

Source: Study developed cases 2022

Analysis Data:

Based on Table 3.2 above , the data attributes are Enough fulfil condition For make program, however Still can lack that is recording done manually , so that the processing process can hampered so requires a computerized system , so that can help and make things easier in manufacturing report .

3.1.3 Complaint Data Analysis Wages Employee

Complaint Data Wages Employee is the data in it load about complaint wages employees who are understaffed and recorded manually which will later will given direct to HRD at PT. Piranti Teknik Indonesia. For Complaint Data Wages Employees needed For analysis found in table 3.3.

Table 3.3
Complaint Data Wages Employee

No.	Data Attribute	Process	Creator	Purpose
1.	Employee Name			
2.	Employee ID (NIK)			
3.	Department	Using paper and written manually	Employee	HRD Team
4.	Total Absences			
5.	Total Paid			
6.	Underpayment Correction			

Source: Study developed cases 2022

analysis :

Based on Table 3.3 above , the data attributes are Enough fulfil condition For make program, however Still can lack that is recording done manually , so that the processing process can hampered , then need system computerized, so that can help and make things easier in manufacturing report .

3.2. Output Data Analysis
3.2.1 Report Wages

Steps taken For can analyze problems that exist at PT. Piranti Teknik Indonesia based on observation and interviews with HRD section of PT. Piranti Teknik Indonesia , namely identify the problem . Identification problem done with observe how the process occurs in payroll employees , determine problem in the payroll process employees , and determine solutions and goals that can be obtained Payroll Employees at PT. Piranti Teknik Indonesia. For Report Data Salary required For analysis found in table 3.4.

Table 3.4
Report Wages

No.	Data Attribute	Process	Creator	Purpose
1.	Name			
2.	Employee ID (NIK)			
3.	Employment Status			
4.	Department			
5.	Bank Account Number			
6.	Basic Salary			
7.	BPJS Allowance			
8.	Uniform Deduction	Processed Using MRS.Excel	HR Division	Employee
9.	BPJS Deduction			
10.	Loan Deduction			
11.	Absence Deduction (Days)			
12.	Absence Deduction (Rp)			
13.	Total Deduction			
14.	Total Income			
15.	Net Pay			

Source: Study developed cases 2022

analysis :

Based on Table 3.4 above , the data attributes are Enough fulfil condition For create a program, but Still can lack that is recording done manually using Microsoft Excel, so that the processing process can hampered so need system computerized, so that can help and make things easier in manufacturing report .

3.3 Code Analysis
3.3.1 Employee NIK Code Analysis

Code analysis It is analysis conducted to codes entered into the system . With objective as differentiator between One activity with other activities .

From the running system , there are use code special For distinguish personal data existing employees in employee status code , month entry , year enter, number sequence in each year , differentiated into five , namely, for example :

In the company there is employee NIK code that is :

1. 02050006200137
   - 0205000 = code For employees still
   - 6 = code For month enter Work
   - 20 = code For year enter Work
   - 0127 = code For number massage entered in the year That .
2. 30050009190389
   - 3005000 = code For apprenticeship from STMIK DCI campus
   - 9 = code For month enter Work
   - 19 = code For year enter Work
   - 0389= code For number massage entered in the year That .
3. 34050008210401
   - 3405000 = code For apprenticeship from STEI campus
   - 8= code For month enter Work
   - 21 = code For year enter Work
   - 0401 = code For number massage entered in the year it's 37
4. 310500011210606
   - 3105000 = code for LPK
   - 11 = code For month enter Work
   - 21 = code For year enter Work
   - 0606= code For number massage entered in the year That
5. 33050003220088
   - 3305000 = code For apprenticeship from STTB campus
   - 3 = code For month enter Work
   - 22 = code For year enter Work
   - 0088 = code For number massage entered in the year That

3.4 Analysis Procedure
3.4.1 Analysis Procedure in submit complaint lack wages employee

Based on problem analysis in the system in progress analyzed there is various type established procedures from several processes in existing system in research consisting of from procedure in submit complaint lack wages employees at PT. Piranti Teknik Indonesia. For Procedure in submit complaint lack required salary For analysis found in table 3.5.
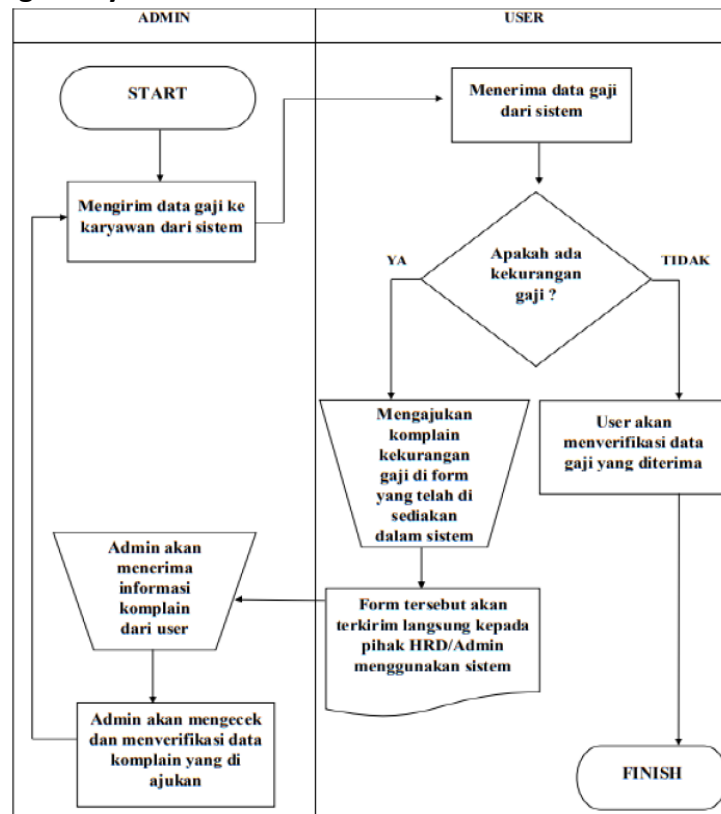
Table 3.5
Submission *Procedure* Complaint Lack Wages Employee

No. Process	Procedure	Description
1	If you want to file a complaint regarding salary shortage, inform the PIC about the salary discrepancy and provide proof in the form of a pay slip.	Manual
2	Then the PIC checks the manual attendance, which is filled in daily by the PIC and is only possessed by the PIC.	Manual
3	If there is indeed an issue with attendance, the PIC will prepare a written report in the form of a salary discrepancy complaint form, filled out with complete employee data and supported by the pay slip.	Manual
4	After the PIC prepares the report, the PIC submits the report to the HR department.	Manual

Source: Study developed cases 2022

4. Result and Discussion

4. 1. Flowmap Designed System

Source: Study developed cases 2022
Figure 4.1 : Flowmap designed system

Explanation Process :

1. Admin or from HRD inputs and sends salary data employee from system

2. User receives salary data from system .

3. If not There is lack wages then the user can Verify existing salary data accepted .

4. If there is lack wages then the user can submit complaint with Fill in the form provided by the system .

5. Then the form will sent direct to HRD /Admin uses system .

6. Admin will accept information complaint from user
7. Admin will check and verify the submitted complaint data
8. If approved then the admin will input and submit the latest salary data to the user using system .

4.2 Design System

Design system is part from methodology development something device software that is done after through stages analysis . Design the system is also something determination of the processes and data required by the new system . If the system That based computer so design can enter specification from type the device used .

The purpose of design system This is so that the structures and operations created can with easy understood and the procedure can easy followed . In addition , also for fulfil need from user about clear picture to the system that will made as well as its implementation . 42

4.3 Context Diagram and Data Flow Diagram (DFD) Design
4.3. 1. Diagram Context

Context Diagram is A image showing in a way comprehensive about data flow in a Data Flow Diagram (DFD). Context Diagram or context diagram is also the highest level from the DFD that describes all input to system or output from system . Interacting entities in system namely Admin and User.
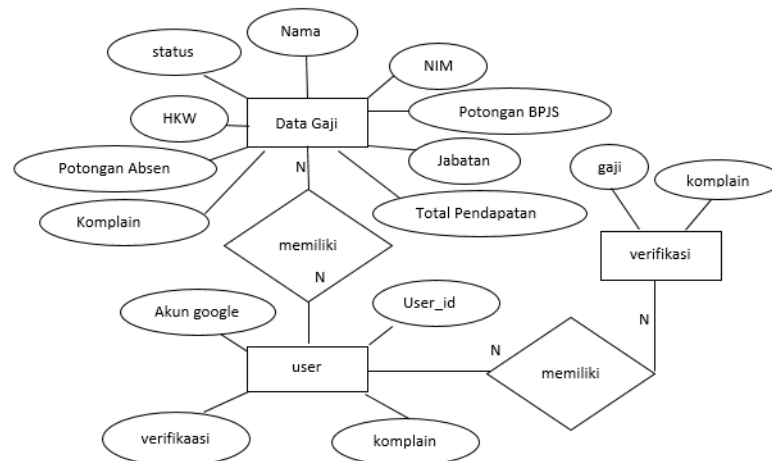Source: Study developed cases 2022

Figure 4.2 : Context Diagram

Information process :
1. Admin entity inputs salary data employee
2. User Entity receives salary data from admin.
3. User Entity will verify wages If No There is lack wages .
4. User Entity will submit complaint If There is lack wages .
5. The process of giving information submission complaint from user to admin.
6. The admin entity will verify on submission complaints received .

4.4 Entity Relationship Diagram (ERD) Design

Source: Study developed cases 2022
Figure 4.6 Entity Relationship Diagram Design

4.5 Design Database Structure

Design database structure is design specifications of the database used, here writer use *real time* database where No own type data and fixed data length , so the data is only consists of from the data name and data id. Here is design database structure :

Table 4.1
Database Content

No	Nama	Keterangan
1	Nik	R.id.nik
2	Nama	R.id.nama
3	Jabatan	R.id.jabatan
4	Gaji	R.id.gaji
5	Potongan BPJS	R.id.potonganbpjs
6	Potongan Absen	R.id.potonganabsen
7	Total Pendapatan	R.id.totalpendapatan
8	Komplain	R.id.komplain
9	Verifikasi	R.id.verifikasi

Source: Study developed cases 2022

5. Conclusion

From the results analysis conducted by the author to existing systems at PT. Piranti Teknik Indonesia moment this , found a number of things to do updated and improved . With system designed by the author based on analysis the system that is implemented , it is hoped can update in matter This as well as can improve and enhance efficiency .

As for the conclusions drawn based on results analysis and design from System Data Information and Verification Wages Employee Android based is :
1. With existence system This so will facilitate the payroll process that occurs
2. System This capable store salary data and complaint data with Good .
3. System This own right access with including admin as overall data processor .

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