

Payroll Accounting Information System Analysis at Sugarcane Plantation Company Wahyu Daya Sejahtera Ltd

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Abstract

Wahyu Daya Sejahtera Ltd is one of the companies engaged in sugarcane farming that has problems in payroll. What often happens in salary management is the calculation of working days, and salary deductions or salary payments that are less precise because the information obtained is inaccurate. This study aims to determine how the application of payroll accounting information systems. In this study, the method used is descriptive analysis method with a qualitative approach and the data collection techniques used are primary and secondary collected by means of interviews, observation and documentation, and the technique used is data analysis. The results obtained from this study are the application of payroll accounting information systems at Wahyu Daya Sejahtera Ltd has not yet fully implemented the payroll system in accordance with the description of Mulyadi's payroll accounting information system, because there are still indicators of payroll procedures that the company has not implemented optimally. The advice given to PT. Wahyu Daya Sejahtera, the company must add SOP for the parts involved in the payroll system so that there is no overlap in the implementation of tasks in carrying out operational tasks, Wahyu Daya Sejahtera Ltd is expected to be able to take advantage of existing technology, and increase the number of employees, especially in the finance department so that functions can work effectively.

Keywords:

Accounting Information System, Employee, Salary.

1. Introduction

The company, in its development, is led to provide information on the activities carried out. Any information related to the company's activities is generated from the Accounting Information System. An accounting Information System is a designed collection of natural resources to convert data into information. Various users communicate this information. The term user information system itself is used because it contains several transaction processing cycles, the use of information technology, and the development of information systems (Mardi, 2014).

In developing potential, the company has its components or so-called resources. The resources owned by the company consist of various kinds. In this context are human resources or if the company is called employees. An employee is every person working with sacrifices both physically and mentally to an agency and gets a reward for remuneration according to what is stated in the agreement rules that have been mutually agreed upon. One of these forms of compensation is financial rewards, namely salaries (Hasibuan, 2011).

Krismiaji, (2010) revealed that considering how important the payroll and wage system is, the payroll system must be designed so that the needs of the company's management are met. If there are incomplete payroll records and incomplete wages, it will harm employees and complicate decision-making.

WDS is a private company engaged in the plantation of sugarcane (Cane Plantation). Regular employees owned by WDS Ltd has 16 employees, while its daily employees reach approximately 300 employees. Absence of regular employees of WDS Ltd does not apply attendance recording, the source of payroll data, only recently, in September 2021 WDS Ltd started implementing Fingerprints in every region. However, there is no consistency in the application of the Fingerprint. Permanent employee salaries are transferred directly to the relevant employee's account after the financial manager approves the payroll calculation of the PT application. WDS uses a simple computerized system, which utilizes general functions such as addition, subtraction, multiplication, and division by entering simple formulas into the insert function (e.g., =D4-D3) in the Ms software. Excel.

The main problem that often occurs is salaried calculation errors, where the amount of salary does not match the number of employees working days. As a result, calculations must be done repeatedly and hinder the submission of payroll reports. The second problem is the unavailability of employee salary details or what is known as a payslip—for employees of PT. When receiving a salary, WDS does not know about the salary component each month. Employees only know the total salary without knowing how many components of salary

deductions and additions follow company regulations. The existence of a detailed salary slip for employees can create good trust between the company and employees. In addition to these two things, based on the results of initial observations, it can be seen that the authority distribution system that shows authorization for payroll transactions is often still overlooked.

Based on the analysis of the problems above, the researchers designed this accounting information system with the title "Analysis and Design of Payroll Accounting Information Systems at Sugarcane Company Wahyu Daya Sejahtera Ltd

2. Literature Review

2.1. Accounting Information System

According to Romney & Steinbart (2015), the system is a collection of two or more components that interact to achieve a goal. The system consists of subsystems that support a larger system. (Mulyadi, 2009) defines information as data that is made into a form that is more useful and meaningful for the recipient. After knowing the system and information, Romney & Steinbart (2015) defines accounting as a process for identifying, collecting, and storing data, along with developing, measuring, and communicating information. Based on experts' opinions about these three words, they will produce meaning if they are put together. Romney & Steinbart (2015) state that an accounting information system is a system that collects, records, stores, and processes data to produce information for decision makers.

2.2. Payroll Accounting Information System

According to Mulyadi, (2016) formed a payroll information system to handle transactions for paying salaries or employee wages. Payroll accounting information systems can be run by company management in planning and controlling company operations. Krismiaji (2010) states that an accounting information system is a system that processes data and transactions to obtain useful information for planning, controlling, and operating a business. Meanwhile, the payroll system itself has an important role because this system determines the amount of salary that employees should receive (Mulyadi, 2016)

2.3. Internal Control of Payroll and Wages Accounting Information System

According to Mulyadi, (2016) explains that the definition of internal control broadly includes organizational structures, coordinated methods, and measures to maintain organizational wealth, check the accuracy and reliability of accounting data, increase efficiency and encourage compliance with management policies. (Agrianto et al., 2014) identified internal control, which includes plans and all coordinated methods and policies within a company to secure assets, test accuracy, the extent to which accounting data can be trusted, improve business efficiency, and encourage compliance with the policies of the leadership that have been outlined.

2.4. Employee

The definition of an employee based on Mardiasmo, (2011) is an individual who works for an employer either as a permanent employee or a temporary employee/freelance worker based on a written or unwritten work agreement or agreement to carry out a job in a certain position or activity by obtaining remuneration paid based on a certain period, completion of work or other conditions determined by the employer, including individuals who work in a state office or state-owned enterprise or regional-owned enterprise. Employees are an organization's most valuable asset. Their knowledge and expertise affect the quality of goods and services provided to customers.

2.5. Flowchart

A flowchart (System Flowchart) is a chart showing the system's overall workflow. This chart describes the sequence of procedures in the system (Jogiyanto H.M, 2005). The main purpose of using a flowchart is to describe a stage of problem-solving in a simple, unraveled, neat, and clear manner using standard symbols. Each symbol has a special meaning, so its shape is easily recognizable. The form of the symbol shows and describes the activities carried out, showing input, output, process, and storage (Firman M, 2019).

2.6. Framework Used

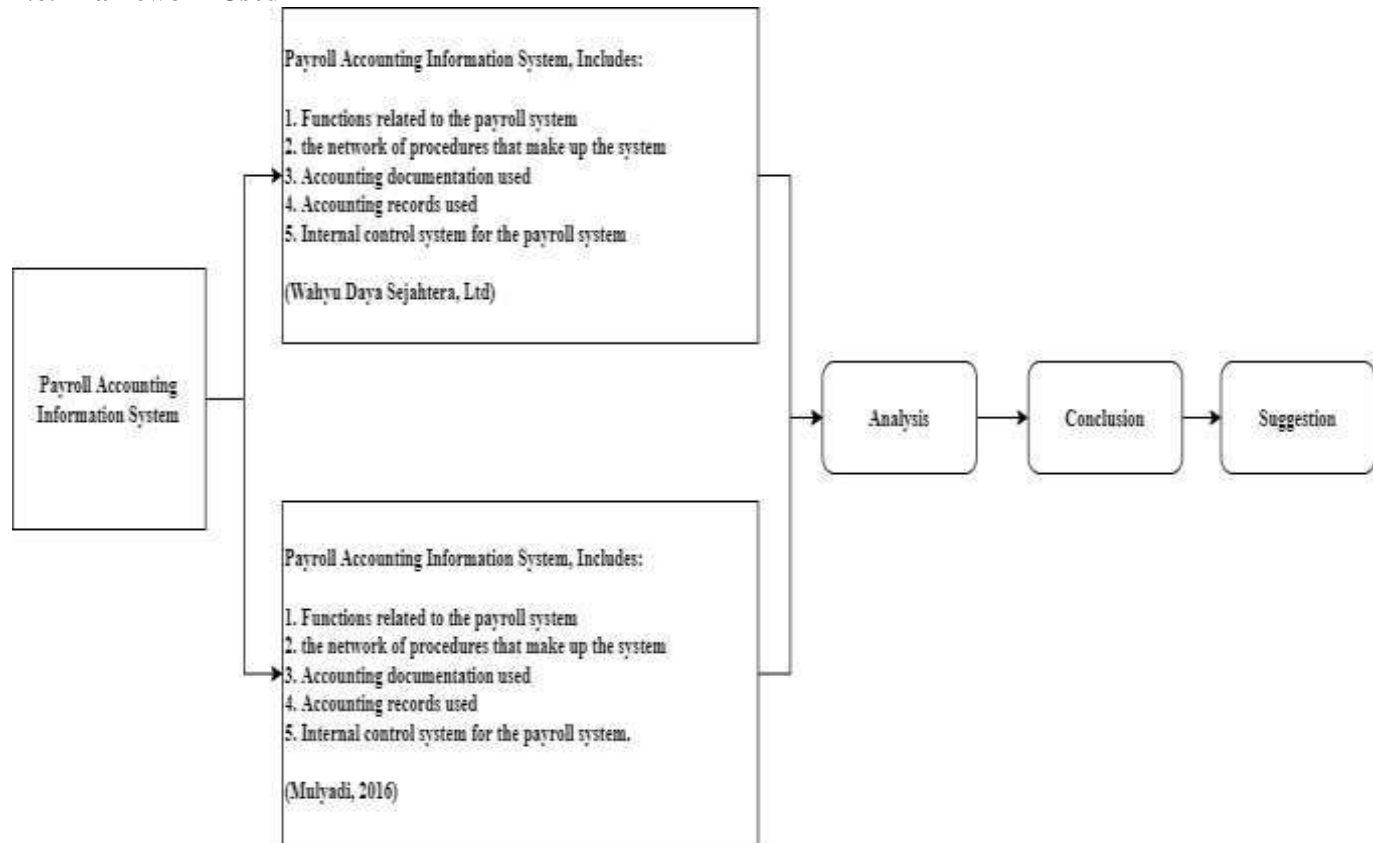


Figure 1 Framework Used

3. Research Methodology

The research method used is a descriptive analysis method with a qualitative approach. Data collection techniques are primary and secondary collected through interviews, observation, and documentation. Data analysis techniques carried out in this study are:

- a. Needs Analysis
- b. In analyzing the payroll system systems and procedures currently running at WDS Ltd researchers need several documents and information to support the proposed system analysis and design, such as; Employee attendance list, Employee salary calculation table, Employee Appointment Decision Letter, Employee Cash Register, Submission, Realization of submission, Proof of Cash Out to regular employees, Proof of cash out to regional admins to be distributed to daily employees, Company Current Account, Regional Admin Current Account, Proof of receipt of daily employee salaries, General Journal, Ledger.
- c. Describe the payroll accounting information system applied by Wahyu Daya Sejahtera Ltd through a flowchart and descriptive explanation.
- d. Analyzing the findings at Wahyu Daya Sejahtera Ltd with a payroll accounting information system according to the description presented by Mulyadi, (2016).
- e. I am analyzing the advantages and disadvantages of the payroll system of WDS Ltd.
- f. Conclusion
- g. Provide recommendations for the design of the payroll accounting information system of WDS Ltd.

4. Results and Discussion

4.1. A General Description of The Company

Wahyu Daya Sejahtera Ltd (WDS) is a subsidiary of Wahyu Daya Mandiri Ltd, focuses on sugar cane agro-agriculture. In its operations, WDS processes Concession rights from Perhutani, owned by Wahyu Daya Mandiri Ltd. The land area managed by Wahyu Daya Sejahtera Ltd is approximately 700 hectares, spread across various regions in East Java. Division of land area of WDS LTD is divided into 4 Forest Management Units (KPH), including KPH Jombang, KPH Tuban, KPH Padangan and KPH Bojonegoro. The details of the area of each KPH are as follows:

Table 1 Details of Location WDS LTD

KPH Name	Garden Location
KPH Jombang	Ngujug Timur
	Berbek
	Saradan
KPH Tuban	Sundulan
	Jompong
	Kranji
KPH Padangan	Tobo
	Kaliaren Barat
KPH Bojonegoro	Clangap
	Nglambangan

WDS Ltd has the main activity to process the acquired land concession rights. The series of activities carried out by WDS Ltd in cultivating this land initially started with land clearing and land leveling activities, where this activity was the first step because of WDS Ltd had to conceptualize land/land belonging to Perhutani so that it was ready to be planted with sugar cane. In this land clearing and land leveling activity, the activities are carried out using heavy equipment. After land clearing and land leveling, the next activity is land preparation. Some of the activities at this stage are plowing, irrigating, irrigation and drainage, and finishing the harrow.

After land preparation is carried out, the land enters the Planting or planting stage. Planting activities include the application of seeds, namely starting by cutting seeds, transporting seeds, embroidering seeds, and seeding tubing. After the planting is complete, the activities of WDS Ltd does not stop there; sugar cane also needs care and maintenance in terms of fertilizers, herbicides, terrane processing, roofing, and a boom sprayer. When entering the harvest period, WDS Ltd prepares loading and unloading personnel to execute the sugarcane crop, which will be sent to consumers. WDS Ltd consumers include sugar factories and sugar cane collectors (pok-pok an). WDS Ltd before entering the next planting period. WDS Ltd must carry out post-cutting maintenance activities to prepare the land to be replanted with sugarcane seeds.

Post-cutting care consists of cracking, roasting, and rasping dice activities. The activity flow of WDS Ltd every year starts from planting and ends with loading and unloading, while for land clearing and land preparation. It is only done once when clearing land. WDS Ltd was originally based in Delta Raya I No. 22 RT. 035 RW 006, Ngingas, Waru, Kab. Sidoarjo, East Java. However, because there is a mutual agreement between shareholders, the head office of WDS Ltd moved to the main director's house on Jalan Delta Raya Utara No. 77 to date. In regional operations, WDS Ltd has a regional office in each KPH led by a regional coordinator.

4.2. Payroll Accounting Information System Analysis at WDS Ltd

4.2.1. Relevant Functions In The Payroll System

a. Staffing Function

Based on the results of the researcher's interview with the financial manager of WDS Ltd, the staffing function of WDS Ltd is not carried out by the personnel department, responsible for making job vacancy announcements, selecting application files, selecting prospective employees, and other personnel duties. The staffing function at WDS Ltd is carried out directly by the relevant users; for example, when you need financial staff, the financial manager who performs the recruitment function is the financial manager, and when you need daily workers in the field of cultivation, the foreman will carry out the recruitment. After becoming an employee of WDS Ltd, then the one who takes care of the needs of employees is the financial staff.

b. Attendance Timing Function

WDS is carried out with manual attendance for daily employees in the form of employee daily attendance records containing data on names and employee signatures. For regular employees recently, when PT conducted the research. WDS has started implementing attendance using a Fingerprint machine for regular employees, but this has not seen consistent implementation. Employees take attendance at the time of entering and leaving work. The regional admin will collect the attendance results, which are then sent to the finance staff/central admin.

c. Payroll Creation Function

The function of making payroll at WDS Ltd is responsible for calculating the amount of salary and making a recapitulation of the payroll. WDS Ltd does not create a detailed payroll for each employee. The finance staff performs this function.

d. Accounting Function

Based on observations with financial staff and financial managers, this function is responsible for recording the number of expenses due to payroll by making evidence of cash outflows and recording

them in the cash-out journal. In applying payroll accounting WDS Ltd implements a basic cash system carried out by financial staff.

e. Finance Function

The finance function is responsible for verifying payroll documents and paying them according to the payroll to the relevant employees. Based on observations, this function is carried out directly by the financial manager at WDS Ltd does not have a separate cashier section.

f. Accounting Records Used

WDS Ltd in the payroll system only uses a cash-out journal to record the costs incurred due to employee salaries. The finance staff carries out this record. In recording the cash-out journal, the financial staff recorded it based on evidence of cash out from the bank received by the financial staff via email WDS Ltd.

4.2.2. Documents Used

a. Payroll

Payroll at WDS Ltd for regular employees contains a recapitulation table of employee names, positions, basic salaries, allowances, overtime wages, and income tax deductions 21. In contrast to daily employees, the payroll is made by WDS Ltd contains the employee's name, daily salary, number of hours worked, number of overtime hours, and activities carried out by employees, such as doing keprasan, planting seeds, etc.

b. Attendance card

This attendance card has been made by each regional admin, which contains the name of the employee, date of entry, time of entry, time of departure, and the signature of the employee concerned.

c. Pay envelope

The salary envelope is only valid for daily employees containing cash for work done by the employee concerned without any information containing salary details made by the regional admin.

d. Evidence of Cash Out

Evidence of cash out is a document of proof of cash disbursements made by the financial staff by attaching an attachment to proof of bank exit from the email information received by the financial staff. The receipt document shows the cash-out date, amount, purpose, and bank receipt number.

4.2.3. Attendance Recording Procedure

Time recording of WDS Ltd is divided into two, namely regular employees and daily employees. Attendance time recording for recent regular employees using Fingerprint machine. The results from the Fingerprint will be downloaded by the regional admins to be sent to the financial staff, which will then become the basis for calculating payroll. Unlike the case with daily employees, the recording of attendance starts from filling out the attendance card in each regional office when entering and leaving work. The attendance card will later recapitulate the number of hours attended and overtime hours if reports are reported to the financial staff.

4.2.4. Payroll Making Procedure

WDS starts the preparation of the employee payroll by receiving the attendance recapitulation provided by the regional admin. The attendance recapitulation is then checked for validity manually by the central admin or financial staff whether there is a problem or not. If there is a problem, it will be confirmed to the admin of the area concerned. If there are no problems, the data will be processed for making a list of payroll reports. The payroll report document is then sent to the finance manager and director for authorization. After obtaining authorization from the finance manager and director and no problems arise, the payroll report list will be submitted back to the finance manager for further processing.

Salary Payment Procedure at WDS Ltd will be implemented when the payroll made by the central admin has been authorized and signed by the finance manager and director. Documents that have been approved will then be sent back to the central admin, which is then sent back to the finance manager to make a salary transfer as the researchers have said that the transfer of salaries of WDS Ltd has two systems, the first for regular employees and the second for daily employees. The salaries of regular employees will be transferred directly by the financial manager to the account in the name of the relevant permanent employee. As for daily employees, the salary will be sent by the financial manager to the regional admin, which the regional admin will distribute directly to the relevant daily employee.

4.3. Analysis of the Company's Payroll Accounting System on Internal Control

Implementing the payroll accounting information system in terms of the internal control system has not been running well. This is because of WDS Ltd does not separate the responsibilities between the payroll function and the payroll function, recording function, and operating function. The authorization system and recording procedures have also not been carried out properly because not all names on the payroll have a work

decision letter, as well as payroll supporting documents such as overtime orders and the salary list, which researchers still find unauthorized. Meanwhile, in terms of healthy practice, where the time recording function must supervise attendance card entry, it is not carried out at WDS Ltd, this is because there is no separation of responsibilities, so healthy practices do not exist in payroll accounting information system.

4.4. Analysis of Weaknesses and Strengths of WDS Ltd

4.4.1. Strengths

- Provision of employee salaries based on work decisions and reasonable wages for daily employees in each region. PT does this. WDS is a commitment of WDS in the welfare of employees and hopes that employees can work wholeheartedly to achieve the predetermined targets.
- Reporting of employee payroll is available a maximum of H-3 before disbursement of salaries to finance managers and directors. This is because there are rules that regulate sending data no later than every Wednesday, then the financial staff collects data; when it is complete, a budget proposal is made and can be forwarded to financial managers and directors anywhere with an internet network.

4.4.2. The weakness

Of the payroll accounting information system of WDS in the following cases:

- The accuracy of attendance data cannot be trusted with the validity of the data. This is because they still use manual attendance at the office, while there are several reasons for workers related to the distance from the office and far away land, as well as the absence of discipline, sanctions, and strict regulations on employee attendance obligations.
- The occurrence of a salary calculation error in June 2021 indicates the calculation of the salary of WDS still has weaknesses.
- Payroll documents of WDS has many files. Every Wednesday, the finance staff receives many files from the regional admin for daily employee salaries and every 25th for regular employees. The data is then collected again in a different file name. So that the possibility of human error can occur, the payroll document cannot be available accurately.
- WDS has not implemented administrative compliance, so the internal control of the payroll system has not been running well. This is due to the lack of sufficient evidence of transactions.
- WDS has not carried out authorization properly, which can be seen from the observation and documentation data collection techniques, where the salary list researchers found did not have authorization from the maker (regional admin) and who agreed (regional head).
- WDS does not provide employee salary details because all accounting, administration, and taxation tasks are charged to one person, namely the finance staff.

4.5. Proposed Payroll Accounting Information System Wahyu Daya Sejahtera Ltd

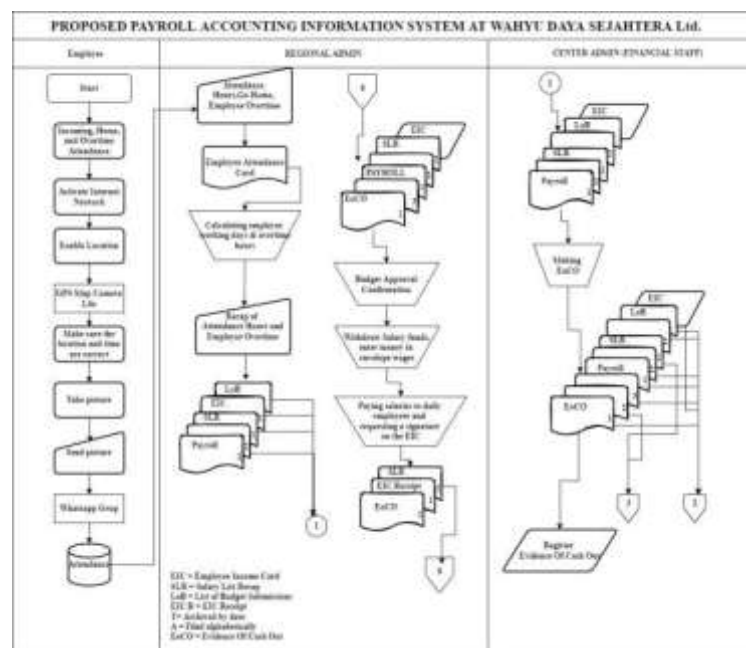


Figure 2 Proposed Payroll Accounting Information System of Wahyu Daya Sejahtera Ltd
Source: Researcher, 2022

In providing the proposal, the researcher made a design according to the parties involved in the payroll at WDS Ltd, with the following explanation:

1. Employee

In carrying out the attendance of all employees of WDS Ltd does the same thing, so there is no longer a distinction between regular employees' daily labor. Employees, namely by taking attendance through the GPS MapCamera Lite application when entering, leaving, and overtime. The first step is downloading the application, activate the internet network and location on the phone, then take a picture by making sure the location point and time listed are correct. If you have taken a photo, the employee is required to upload the photo into the attendance Whatsapp group managed by the regional admin.

2. Region Admin

- a. Collecting employee attendance database via WhatsApp group by ensuring the real ones are the date, time, and location used by employees.
- b. Inputting the database, then making it an employee attendance card document.
- c. Calculating the number of working days and employee overtime
- d. Recapitulating employee attendance and overtime hours, then making it a recapitulation document for salary lists, employee income cards, budget submission lists, salary lists, and employee income cards.
- e. Then if the budget proposal has been approved and the financial manager has distributed the salary costs to the regional admin account, the regional admin disburses the funds.
- f. Put money in an envelope.
- g. We are requesting Signature on employee income cards.
- h. File payroll documents into the orderer
- i. Forward evidence of cash-out documents, recapitulation of payroll, and receipt of employee income cards to the central admin (financial staff).

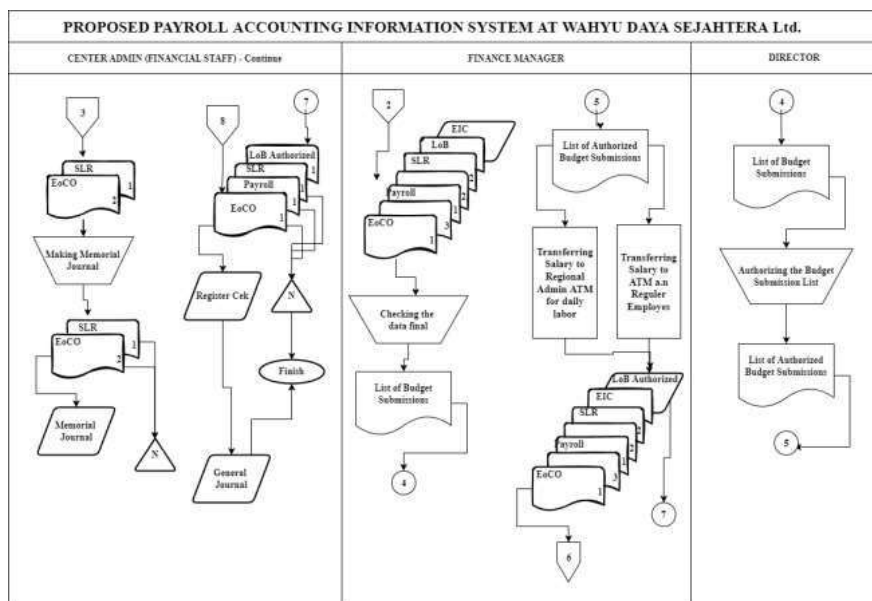


Figure 3 Proposed Payroll Accounting Information System of Wahyu Daya Sejahtera Ltd
 Source: Researcher, 2022

3. Central Admin (Financial Staff)

- a. Collecting documents and checking documents from all regional admins related to payroll
- b. Checking evidence of cash out.
- c. Register cash out a receipt
- d. Forward payroll supporting documents (recap of payroll, employee income cards, budget submission lists, payroll registers, and employee income cards) to the Finance Manager
- e. If you have a list of authorized budget submissions and other supporting documents that the directors and managers have approved, then the central admin must file payroll supporting documents.
- f. If there are no funds or other obstacles so that the payroll is not on time, the central admin makes memorial evidence, which later, when paid, will be made into the general journal.

4. Finance Manager

- a. Get salary supporting documents along with a list of budget submissions from the central admin.
- b. Checking the data final

- c. Forward the list of budget proposals to the Director
 - d. Waiting for authorization from the Director; when it is done, the financial manager performs his function of distributing salaries.
 - e. Transfer directly to the personal account of regular employees and transfer salaries to the regional admin.
 - f. Then forward it back to the central admin to be archived and recorded in the journal.
5. Director
Authorize a list of budget submissions which will later become the basis for salary distribution.

5. Conclusion and Suggestion

5.1. Conclusion

Based on the analysis results and findings obtained in WDS Ltd payroll accounting information system.

Wahyu Daya Sejahtera, the researcher, draws the following conclusions:

1. It is implementing the payroll accounting information system in terms of functions related to the payroll system at WDS Ltd in practice already exists. This can be proven by the analysis by researchers, namely, four elements of 5 functions related to the payroll system, WDS Ltd is already running it. However, in carrying out the functions related to the payroll system of WDS Ltd has not run it well, so some weaknesses occur. These include human error, the absence of a payslip for each employee, and a database whose accuracy cannot be ascertained.
2. Implementing the payroll accounting information system in terms of the network of procedures that make up the system already exists in the practice of WDS. Nevertheless, WDS has not consistently implemented time recording with fingerprints, salary distribution is also not transparent, and regional admins carry no accountability document as a freelance daily employee salary distribution.
3. In implementing the payroll accounting information system in terms of accounting documents, six of the eight elements have been implemented at WDS. Accounting documents that do not exist at WDS is a working hour card and a salary statement or salary slip.
4. In implementing the payroll accounting information system in terms of the Accounting Records used, 1 of the four elements has already been implemented at WDS. In the payroll accounting records of WDS only uses a general journal with a basic cash approach.
5. Implementing the payroll accounting information system in terms of the internal control system has not been running well. This is because of WDS does not separate the responsibilities between the payroll function and the payroll function, recording function, and operating function. The authorization system and recording procedures have also not been carried out properly because not all names on the payroll have a work decision letter, as well as payroll supporting documents such as overtime orders and the salary list, which researchers still find unauthorized. Meanwhile, in terms of healthy practice, where the time recording function must supervise attendance card entry, it is not carried out at WDS, this is because there is no separation of responsibilities, so healthy practices do not exist in payroll accounting information system wahyu Daya Sejahtera Ltd.

5.1 Suggestion

Based on the research that has been done, the payroll accounting information system at WDS Ltd has been implemented. Wahyu Daya Sejahtera is not entirely following the elements of the payroll accounting information system. Therefore, the researcher advises to:

1. Policy Maker Wahyu Daya Sejahtera Ltd.
 - a. Preferably WDS Ltd creates accounts in all employees' names so that the salary distribution can be one door.
 - b. I am creating an integrated attendance system, considering that WDS Ltd has staff who are engaged in technology.
 - c. Making Standard Operating Procedures (SOP) control the administration and company bureaucracy.
 - d. Perform elements of internal control, one of which is the separation of responsibilities in each company's operational activities.
2. Next researcher

For further researchers, it is better to expand the object of research from other business activities, not only in terms of analysis but also in simple system design, to overcome the shortcomings that exist in the payroll accounting information system of the research object.

6. Research Limitations

In this research, the researcher only examined the side of the payroll accounting information system and only used the description submitted by Mulyadi. The researcher did not carry out an analysis of the

descriptions of other characters. The researcher also only carried out the analysis without providing this study's real systemimprovement design.

References

- Agrianto, R. S., Kertahadi, & Dwiatmanto. (2014). Analisis Sistem Akuntansi Penggajian Dan Pengupahan Dalam Upaya Meningkatkan Efektivitas Pengendalian Internal Perusahaan (Studikasuspada Pt. Duta Paper Prigen Pasuruan). *Analisis Kepuasan Nasabah Terhadap Kualitas Pelayanan Pada Pt Bank Negara Indonesia (Persero) Tbk*, 564(7), 1–73.
- H.M, J. (2005). *Analisis Dan Desain Sistem Informasi Pendekatan Terstruktur Teori Dan Praktek Aplikasi Bisnis* (3rd ed.). Andi.
- Hasibuan, M. S. (2011). *Manajemen Sumber Daya Manusia*. Bumi Aksara.
- Krismiaji. (2010). *Sistem Informasi Akuntansi*. Upp Amp Ykpn.
- M, F. (2019). Payroll Accounting Information System At Pt. Telekomunikasi Indonesia Tbk. *Sistem Informasi Akuntansi*, 1(1). <https://doi.org/https://doi.org/10.37338/Jaab.V1i1.66>
- Mardi. (2014). *Sistem Informasi Akuntansi*. Ghakia Indonesia.
- Mardiasmo. (2011). *“Perpajakan Edisi Revisi”*. Andi.
- Mulyadi. (2009). *Sistem Akuntansi* (2nd ed.).
- Mulyadi. (2016). *Sistem Akuntansi*. Salemba empat.
- Romney, M. B., & Steinbart. (2015). *Sistem Informasi Akuntansi* (13th ed.). Salemba empat.