



## Web Based Cash Flow Information System

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### ABSTRACT

This study aims to find out the right Cash Management Accounting Information System for Rezeky sources and to produce a Cash Flow Information System, namely Web-Based Cash Receipts and Cash Disbursements. The theoretical framework is to analyze the Cash Management Accounting Information System by analyzing the information needed by management, related functions, a network of procedures, accounting documents and records used, flowcharts, and the current internal control system. The developed application program is the first step, which is carried out by designing relationships between tables, interfaces, and outputs. This study found that all daily cash records at Sumber Rezeky still use financial report books and notes. The author suggests using a web-based cash receipt and cash disbursement application to help Sumber Rezeky record customer data, record cash management transactions, and make it easier to find information on cash receipts and disbursement transactions.

## **INTRODUCTION**

Sumber Rezeky is a general trucking service engaged in delivering goods that are useful for serving the community's needs with effective and flexible delivery. Sumber Rezeky must record every business cash receipt and disbursement in each of its activities. Recording cash receipts and disbursements up to financial reporting still uses financial report books and notes that manage or process only store and evaluate important data, causing frequent data recording errors that result in the resulting financial reports being inaccurate and not timely. In addition, there are still difficulties in making journals and ledgers because the recording of transactions has not been automated, so these activities require a lot of time, resulting in ineffectiveness in the process of recording transactions. Improperly managed cash flows will result in an imbalance in cash inflows and outflows. (Anggraeny et al., 2017).

Seeing the weaknesses described above, how can we make it easier for general trucking services businesses to record, process, and manage data, as well as prepare financial reports that aim to reduce errors and loss of notes that often occur in preparing financial reports? So that all transaction data will be stored in a data storage medium, making it easier to make financial reports so that the data is stored properly and can be accessed and processed automatically. The company has used a computer system to record all transactions so that data is available automatically, more effectively, and efficiently for the company (Esteria, 2016).

To overcome this problem, a web-based application is needed where the system is built using the PHP programming language using the Bootstrap framework concerning MySQL as a Database Management System (DBMS) and is expected to make it easier to carry out cash receipts and disbursement transaction data for all financial activities, starting from cash in, cash out, and other activities, so that it can produce financial reports from the results of financial transaction data. An accounting information system is a system that aims to collect, process, and report information relating to financial transactions (Mulyadi, 2016).

## **LITERATURE REVIEW**

### **Information System**

The system is a network of procedures made using an integrated pattern to carry out the company's main activities (Mulyadi, 2016). The system is a series of two or more components that are interrelated and interact to achieve a goal (Marshall B & Steinbarth, 2015). Based on the above understanding, it can be concluded that the system is a network of procedures made according to an integrated pattern related to achieving certain goals.

Definition of information According to Lumbangaol (2020), the definition of information according to it is the result of data processing that is relevant and has benefits for its users. Definition of information According to Tukino (2020), Information is data managed into something of more value to the recipient to help decide.

From the various opinions based on the research above regarding the meaning of information, it can be concluded that information contains meaning which is very important in the decision-making process activities. Because information must be completely free from misleading errors and the information itself contains full value, namely accuracy, timeliness, and relevance.

The definition of an information system according to (Wahyudi & Ridho, 2019), an information system is some components where the components are interconnected with each other to achieve an expected goal. The definition of an information system according to (Anjelita & Rosiska, 2019) an information system is a relationship of data and methods and uses hardware and software in conveying useful information.

According to the expert opinion above, it can be concluded that an information system is a collection of several components that manage data so that the processed data can be used as meaningful information and can help achieve organizational goals.

### **Cash**

The definition of cash or cash in accounting is a company's assets in the form of cash (banknotes, coins, money orders, checks, and others) held by the company or kept in a bank and can be used for general company activities. Below is the meaning of cash from several experts:

According to Thomas Sumarsan, he argued and explained that the notion of cash is a current asset which is very liquid in nature and can also be used directly for the continuity of the company's business activities. Zaki Baridwan (2011) has the opinion that the notion of cash is a medium of exchange and can be used in a form of measurement in the field of accounting. And according to Rudianto, the definition of cash is a means of payment or exchange owned by a company and can be used directly for company transaction activities when a company really needs it (Pangestika, 2022).

The accounting information system for cash receipts and disbursements can be implemented systematically (Syaifudin & Ardani, 2017). This is also supported by the results of research from Damayanti & Sulistiani (2017) that the cash receipts system can make it easier to search for data, simplify and speed up the presentation of reports so that leaders can immediately make decisions based on reports received.

#### **1. Document Flowchart**

Flowchart is a chart that describes the sequence of process instructions and the relationship between one process and another using certain symbols. Flowcharts are used as communication and documentation aids (Yakub, 2012). Flowcharts play an important role in deciding a step or functionality of a programming project that involves many people at once. In addition, using a process flow chart of a program will be clearer, concise, and reduce the possibility of misinterpretation. The use of flowcharts in the world of programming is also a great way to connect technical and non-technical needs (Setiawan, 2021). The accounting system can be described with a document flowchart using symbols.

## METHODOLOGY

In the process of collecting data, the research methods used in the process of implementing and preparing reports are carried out in several stages, including:

1. Observation Method, the author conducts interviews directly at the research location and seeks the necessary information, besides that the author also establishes communication via online chat.
2. Literature Study, namely by looking for references in the form of books and journals related to the research being carried out.

From the results of the research carried out based on some of the data that has been collected, it can be seen that the accounting information system for cash receipts and disbursements at Sumber Rezeky that is applied still has several weaknesses, namely cash receipts and disbursements are only recorded in the book of cash receipts and disbursements, there are concurrent duties in the administrative section, incomplete payment notes and no evidence of cash out and non-fulfillment of internal control elements, namely the existence of a control environment, control activities, risk assessment, information and communication and finally monitoring (Sujarweni, 2015).

The alternative solution to the problem that the author provides is to suggest creating a cash flow information system that has related functions in the form of cashier, administration, and accounting functions. Network information system procedures include registration to provide administrative processes and receipt of transactions and suggest documents in the form of cash receipts in table 1 and reports of cash receipts in table 2.

Table 1. Form of Cash Receipts

Nomor : 1  
Tanggal : 01-01-2023

<b>PROOF OF CASH IN</b>				
Nama Pelanggan	Jenis Barang	Jumlah	Masuk	Nama Supir
Rahmi	Meja	1	100.000	Adi

Source: author

Table 2. Cash Receipt Report  
**CASH RECEIPT REPORT**  
Period: 01-01-2023 sampai 31-01-2023

No.	Tanggal	Pelanggan	Jenis	Jumlah	Supir	Masuk
1	01-01-2022	Rinda	Kursi	2	Adi	200.000
2	01-01-2022	Dika	Meja	1	Adi	100.000
3	05-01-2022	Maya	Meja	2	Adi	200.000
4	07-01-2022	Kinan	Lemari	1	Duan	150.000

Source: Author

The cash receipts flowchart suggested by the author for the company can be seen in Figure 1 below:

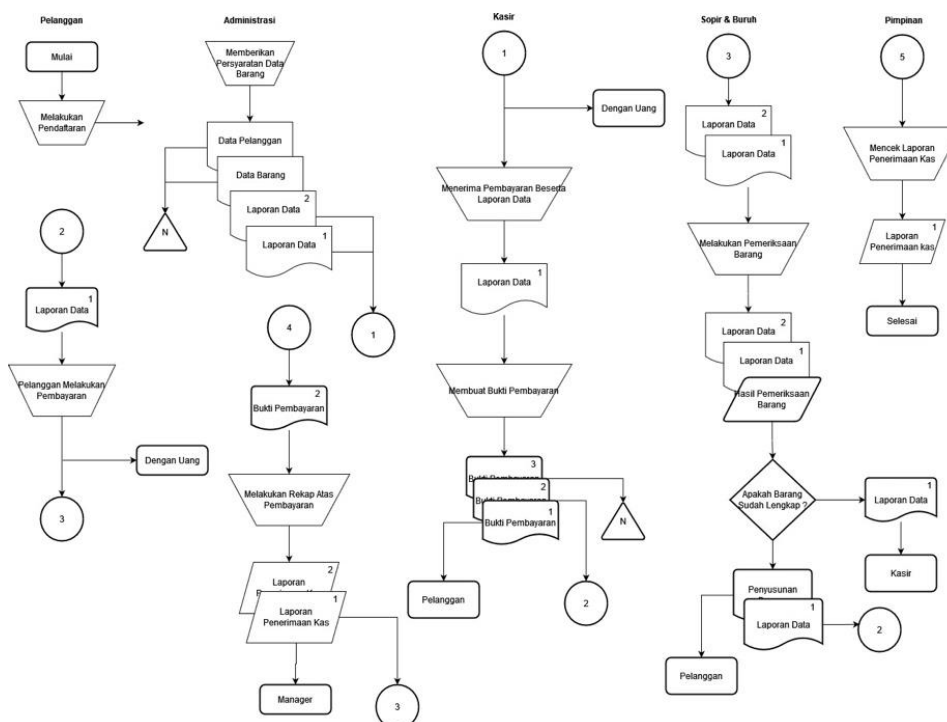


Figure 1. Recommended Cash Receipts Flowchart

The alternative given for cash disbursements is to make cash disbursement reports and cash books, for functions related to the cash disbursement information system is the accounting function that is responsible for carrying out cash disbursement transactions up to the reports. The recommended cash disbursement procedure is the process of disbursing cash to make payments with proof of cash outflow, recording of cash disbursements functions to make evidence of cash out. The recommended documents are proof of cash out and reports of cash disbursements. Below is the suggested evidence of cash in table 3 and cash disbursement reports in table 4.

Table 3. Proof of Cash Out

Nomor: 1

**PROOF OF CASH OUT**

Tanggal	Nama	Keterangan	Biaya
01-01-2023	Adi	Kerusakan mobil	1.000.000

Source: Author

Table 4 Cash Expenditure Report

**CASH EXPENDITURE REPORT**  
**SUMBER REZEKY**  
**Periode: 01-01-2023 sampai 31-01-2023**

No.	Tanggal	Nama	Keterangan	Biaya
1	01-01-2023	Adi	Kerusakan mobil	1.000.000
2	04-01-2023	Duan	Ganti Ban	200.000
3	04-01-2023	Adi	Ganti Oli	150.000

Source: Author

The cash disbursement flow chart suggested by the author for the company can be seen in Figure 2 below:

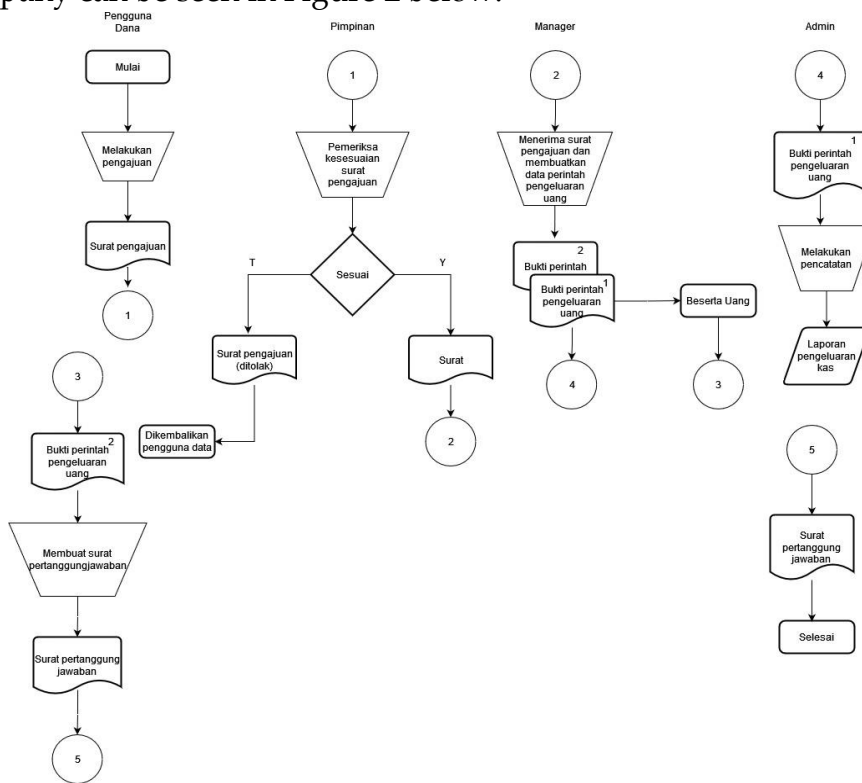


Figure 2. Recommended Cash Disbursement Flowchart

**RESULT**

The steps in designing a web-based cash flow application system are as follows:

**Database System**

The database system is a database with users who use the database together, personnel who design and manage databases, techniques for designing and managing databases, as well as computer systems that support them (Canggih Ajika, 2017). The stages are unnormalization, first normalization, second normalization and third normalizatio (Setiyadi, 2018).

- a. Unnormalization, namely several tables that are described in designing application programs.
- b. First normalization (1NF), a table satisfies the story as first normal form if each attribute has only a single value, it cannot be subdivided into smaller parts.
- c. Second Normalization (2NF), a table can meet the second normalization criteria if it has formed the first normal. In the second normalization, there cannot be 2 attributes in a table on the primary key of a table. Therefore, the table must be split based on the primary key.
- d. Third normalization (3NF), the table will fulfill the third form if it has fulfilled the first and second normal form. If in a table there are attributes that do not depend on other fields, the attributes must be separated.

### Data Flow Diagrams

Data Flow Diagrams (DFD) also known as Data Flow Diagram (DAD). DFD is a data or process logic model created to describe where does the data come from, and where does the data go out of the system, where is the data stored, what process produces the data, and the interactions between the stored data, and the processes imposed on it those data (Andri Kristanto, 2008).

- a. Context diagram (CD) shows the system designed as a whole, all external entities must be described in such a way, so that you can see the data flowing in the input-process-output using three symbols. The processes on the CD are usually not numbered (Hardiansyah et al., 2020).
- b. Serves to describe the system in more detail and contains the data input process at number 1 (one), the transaction process at number 2 (two) and the report process at number 3 (three).
- c. DFD Level 1, describes the whole, entities are described in each part according to the needs at level 1.

#### 1. System Interface

- a. The login form is the first page that is displayed when the application program is run, and to be able to enter the application program, the user needs to enter an email and password first. The following shows the login form:



The image shows a web login form for 'Kas Jasa Angkutan Truk Umum'. At the top, it says '© Sumber Rezeky / H. Hasan'. Below that is a yellow banner with the text 'You have logged out'. The main form area is pink and contains the following elements: a heading 'Sign in to start your session', an 'Email address' label with an input field containing 'Enter email', a note 'We don't share email with anyone', a 'Password' label with an input field containing 'Password', a note 'your password is saved in encrypted form', a link 'Not an user? Register Now!', and a blue 'Submit' button. To the right of the form is a decorative image of a green plant growing from a stack of coins.

Figure 3. Login Form

- b. Dashboard, After the login process, the user will be redirected to the main page / dashboard. On the left side there are several menus that can help system users to input data. In the middle there is a graphic of incoming cash information.



Figure 4. Dashboard

- c. Data Input, this page functions to manage data related to the store, namely customer data, item type data and driver data. Below is an example of a customer data input form:

The screenshot shows a form titled 'INPUT DATA PELANGGAN'. It contains several input fields: 'Nama Pelanggan' with a text input containing 'nama\_pelanggan', 'Alamat' with a text input containing 'alamat', 'Tanggal' with a text input containing 'hh / bb / tttt', and 'Jenis Barang' with a dropdown menu showing 'Lemari'. At the bottom are two buttons: 'Simpan' and 'Kembali'.

Figure 5. Input Customer Data Form

- d. Input and incoming cash data. The incoming cash data contains the date, customer name, type of item, unit, entry, and driver's name. And there are options to add, edit, detail, delete and print cash receipts. Below is the form and data of incoming cash:

The screenshot shows a form titled 'INPUT DATA KAS MASUK'. It contains several input fields: 'Tanggal' with a text input containing 'hh / bb / tttt', 'Nama Pelanggan' with a dropdown menu showing 'Rahmah', 'Jenis Barang' with an empty text input, 'Satuan' with a text input containing 'satuan' and a small icon to its right, 'Masuk' with a text input containing 'Masuk', and 'Nama Supir' with a dropdown menu showing 'Arif'. At the bottom are two buttons: 'Simpan' and 'Kembali'.

Figure 6. Incoming Cash Input

Total Kas Masuk  
Rp. 2.800.000

KELOLA KAS MASUK

No	Tanggal	Nama Pelanggan	Jenis Barang	Satuan	Masuk	Nama Supir	Action
1	05 Januari 2022	Rahmah	Lemari	1	Rp. 100.000	Arif	Hapus detail Edit Cetak
2	06 Januari 2022	Hj. Tati	Helim	1	Rp. 100.000	Denni	Hapus detail Edit Cetak
3	07 Januari 2022	Udin	Besi	1	Rp. 100.000	Sugli	Hapus detail Edit Cetak
4	08 Januari 2022	Hikmah	Buku	1	Rp. 100.000	Arif	Hapus detail Edit Cetak
5	10 Januari 2022	H. Hanafi	Karpet	1	Rp. 100.000	Arif	Hapus detail Edit Cetak
6	08 Februari 2022	Koh Adi	Kursi	1	Rp. 100.000	Arif	Hapus detail Edit Cetak
7	09 Februari 2022	Hj. Tati	Helim	1	Rp. 100.000	Denni	Hapus detail Edit Cetak

Figure 7. Incoming Cash Data

- e. Input and outgoing cash data. In the outgoing cash data there are dates, names, descriptions, and costs. And there are options to add, edit, detail, delete and print proof of cash out. Below is the cash out form and data:

INPUT DATA KAS KELUAR

Tanggal: hh / bb / tttt

Nama: Arif

Keterangan: keterangan

Biaya: biaya

Simpan Kembali

Figure 8. Cash Out Input

Total Kas Keluar  
Rp. 4.800.000

KELOLA PENGELUARAN DATA KAS KELUAR

No	Tanggal	Nama	Keterangan	Biaya	Action
1	03 Januari 2022	Arif	Kerusakan Motor	Rp. 1.000.000	Hapus Detail Edit Cetak
2	04 Januari 2022	Denni	Beli Bensin	Rp. 500.000	Hapus Detail Edit Cetak
3	05 Januari 2022	Sugli	Ganti Ban	Rp. 2.000.000	Hapus Detail Edit Cetak
4	06 Januari 2022	Nasrun	Gajih Sopir	Rp. 500.000	Hapus Detail Edit Cetak
5	07 Januari 2022	Jumai	Beli Bensin	Rp. 300.000	Hapus Detail Edit Cetak
6	08 Januari 2022	Yanor	Gajih Sopir	Rp. 500.000	Hapus Detail Edit Cetak

Figure 9. Cash Out Data

## **DISCUSSION**

From the results of the research carried out based on some of the data that has been collected, it can be seen that the accounting information system for cash receipts and disbursements at Sumber Rezeky that is applied still has several weaknesses, namely cash receipts and disbursements are only recorded in the book of cash receipts and disbursements, there are concurrent duties in the administrative section, incomplete payment receipts and no evidence of cash out and non-fulfillment of internal control elements, namely the existence of a control environment, control activities, risk assessment, information and communication and finally monitoring (Sujarweni, 2015).

The alternative solution to the problem that the author provides is to suggest creating a cash flow information system that has related functions in the form of cashier, administration, and accounting functions so that companies can more easily make transactions. This is in line with research that has been conducted by Damayanti & Hernandez (2018) which states that with the application of a cash receipts and disbursement information system it can make it easier for employees to manage cash receipts and cash disbursements data, speed up report presentation and simplify the search process. data cash in and cash out to increase the effectiveness and efficiency of work. In addition, the alternative given for cash disbursements is to make cash disbursement reports and cash books, for functions related to the cash disbursement information system, the accounting function is responsible for carrying out cash disbursement transactions up to the report. The recommended cash disbursement procedure is the process of disbursing cash to make payments with proof of cash outflow, recording of cash disbursements functions to make evidence of cash out. The recommended documents are proof of cash out and reports of cash disbursements. In previous research, it was stated that with the existence of an accounting information system for operational expenses, the company would be able to process the company's operational expenditure data properly and be able to provide the information needed by the company regarding operational expenses. (Darwis et al., 2019).

## **CONCLUSION AND RECOMMENDATION**

This research produces a web-based cash flow information system that is intended to help the Sumber Rezeki transportation service company in the process of recording transactions. With this system, it is hoped that it can facilitate general trucking service businesses in the process of recording, processing, and managing data, as well as preparing financial reports that aim to reduce errors and loss of notes that often occur in preparing financial reports. So that all transaction data will be stored in a data storage medium and make it easier to make financial reports, so that the data is stored properly and can be accessed and processed automatically. This information system has a registration procedure to provide administrative processes and receive transactions and suggest documents in the form of proof of cash in and reports of cash receipts and cash disbursements. This information system generates a cash flow report from the results of input transactions in the form of cash receipts and disbursements.

## **SUGGESTION**

It is hoped that companies will use this system, so that with this web-based cash flow information system it can help the Sumber Rezeky transportation service company more easily record financial transactions so that it can easily monitor cash flows in certain periods as desired. In addition, the work of the administration, cashiers and accountants will be more effective and efficient.

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