

DESIGN OF ACCOUNTING INFORMATION SYSTEM FOR CASH RECEIPTS AND DISBURSEMENTS AT TK ABC WITH ADDIE MODEL

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Abstract

One way to develop and improve the quality of the service system in kindergarten is by innovating and enhancing the efficiency and effectiveness of cash management, including resources involved in financial management, educational facilities, and infrastructure. Recognizing the importance of systematized activities in an educational institution, the use of accounting information systems is crucial in ensuring precise and accurate fulfillment of information needs. This study aims to propose the application of an accounting information system for the cash receipt and expenditure cycle at TK ABC. A qualitative approach was used in this research. Data was collected through observation, interviews, and documentation. The analysis included an examination of the organizational structure, an analysis of receipt and disbursement documents, and the procedures that have been implemented. The implementation of the accounting information system in managing cash receipts and disbursements at TK ABC has not been effective or adequate. This is evidenced by the fact that several tasks are still performed by only one party, the process of receiving and spending transactions has not been digitized, and internal controls are not optimal. Researchers provided recommendations in the form of Standard Operating Procedures and flowcharts for cash receipts and disbursements at TK ABC, which are expected to help the school improve the effectiveness and accountability of cash receipt and disbursement activities.

Keyword: Accounting Information System; Cash; Disbursement; Receipt; Standard Operation Procedure

1. Introduction

To support PAUD (Early Childhood Education) operational activities, based on Permendikbud No. 137/2014, the financing component includes operational costs and personal costs. These costs can come from the central government, local government, foundations, community participation, and other non-binding parties. One form of operational financing assistance from the government is Bantuan Operasional Penyelenggara (BOP).

Improving and developing the quality of service systems in kindergartens can be achieved through innovation and enhancing the efficiency and effectiveness of resource management involved in financial management, educational facilities, and infrastructure (Astuti, 2023). The success and effectiveness of an organization depend on good performance and quality human resources. Human resources are the main assets of the organization and must possess knowledge, skills, competence, excellent physical and mental health, as well as a high work ethic and motivation. Human resource management plays a crucial role in improving the quality of an organization and leading it to success (Lestari & Apriliya, 2021).

Based on the National Education Standards, the development of curriculum, teaching staff, infrastructure, management, and financing of education must adhere to established standards. However, in practice, some administrative arrangements are not well organized, particularly regarding the management of human resources (HR) involved in education (Puspitasari et al., 2023). Recognizing the importance of systemized activities in educational institutions, the use of accounting information systems is essential to ensure the precise and accurate fulfillment of information needs. An accounting information system integrates various components, namely hardware, software, brainware, procedures, databases, and communication network technology. In other words, the accounting information system is formed through a combination of these components, creating a single unit in the processing cycle (Erica et al., 2019).

The accounting information system includes recording transactions, which captures every financial transaction, from cash receipts and disbursements to other financial activities. Through structured recording, the accounting information system creates an important audit trail and ensures the integrity of the organization's financial data. Besides recording, the accounting information system also processes data by calculating, combining, and generating financial reports (PPM SoM, 2023).

2. Literature Review

2.1 Accounting Information System

Accounting Information System (AIS) is a system that collects, records, stores and processes data to produce information for decision makers. It includes people, procedures, instructions, data, software, information technology infrastructure, and internal control and security measures. AIS can be a manual paper-and-pencil system, a complex system using the latest technology, or something in between. Regardless of the approach taken, the process is the same. The AIS must collect, enter, process, store, and report data and information. Paper, pencils, or computer hardware and software are just tools used to produce information. Therefore, AIS must be able to become the main information system for the organization so that it can provide interested parties with the information they need to do their jobs (Romney et al., 2021). According to (Romney et al., 2021) several documentation tools that can be read

and used by humans in general, including Business Process Diagram (BPD), Flowchart, Data Flow Diagram (DFD).

According to (Romney et al., 2021) Flowcharts record business processes and document flows in organizations. Flowcharts are also used to analyze and improve business processes and document flow. Making flowcharts generally uses programs such as Visio, Word, Excel, or PowerPoint. Flowchart symbols are divided into four categories, such as:

A. Input and Output Symbols


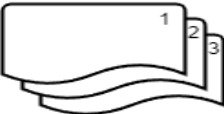

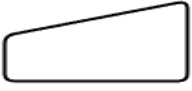

Symbol	Name	Information
	Document	Electronic or paper documents or reports
	Multiple copies of a single paper document	Illustrated by overlapping the document symbol and printing the document number on the face of the document in the upper right corner
	Electronic output	Information displayed by an electronic output device such as a terminal, monitor, or display
	Electronic Data Entry	Electronic data entry devices such as computers, terminals, tables, or telephones
	Electronic input and output devices	Electronic data entry and output symbols are used together to indicate the device used for both.

Figure 2.1 Input and Output Symbols

Source: Romney et al., (2021)

B. Processing symbols


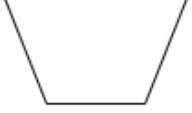
Symbol	Name	Information
	Computer Processing	The Processing functions that a computer performs. Usually results in changes to data or information
	Manual Operation	Processing operations are performed manually

Figure 2.2 Processing Symbols

Source: Romney et al., (2021)

C. Storage symbols

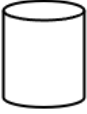



Symbol	Name	Information
	Database	Data stored electronically in a database
	Magnetic Tape	Data is stored on magnetic tape. Cassettes are an example of a popular backup storage medium
	Archive Document (File)	Paper documents (files). Usually marked with letters that indicate the file ordering. N: numeric, A: alphabetical, D: by date
	Journal/Ledger	Processing operations are performed manually.

Figure 2.3 Storage Symbols

Source: Romney et al., (2021)

D. Flow and Miscellaneous Symbols





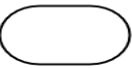
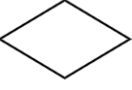

Symbol	Name	Information
	Document flow or processing	Electronic or paper documents or reports
	Communication Links	Illustrated by overlapping the document symbol and printing the document number on the face of the document in the upper right corner
	Connector on page	Information displayed by an electronic output device such as a terminal, monitor, or display
	Off-page connector entry	Electronic data entry devices such as computers, terminals, tables, or telephones
	Terminal	Electronic data entry and output symbols are used together to indicate the device used for both.
	Decision	A Decision making step
	Annotation	Add descriptive comments or explanatory notes for clarification

Figure 2.4 Flow and Miscellaneous Symbols

Source: Romney et al., (2021)

2.2 ADDIE Model

The development model is a design process that aims to improve the performance of existing models by adding new learning components that are expected to improve goal achievement. ADDIE (Analysis, Design, Development, Implementation, and Evaluation) is one of the development models that can be used as a guide in building training programs that are effective, dynamic, and support the performance of the training itself (Sugiyono, 2016).

3. Material and Method

According to Sarwono (2006), when viewed from its type, the type of data can be divided into primary and secondary data:

A. Primary Data

Primary data is collected directly from the original source, without intermediaries. In this study, primary data was gathered through observations and interviews with principals and school administrators. This data is then processed to address the research questions.

B. Secondary Data

Secondary data refers to data that is already available and can be obtained by researchers through reading, observing, or listening. The secondary data for this research includes internal documents such as school profiles, organizational structures, and financial reports, including school cash receipts and expenditures.

After obtaining the necessary data, the researcher will test it against the procedures used during the research. It is essential for researchers to ensure and document that the procedures followed align with actual events to achieve research objectivity. This objectivity ensures that the research results can be validated by the school.

3.1 Design Study

The type of research design used in this research is R&D (Research and Development). R&D (Research and Development) is a research method that aims to develop certain products and test their effectiveness in use. Needs analysis and product testing are two important components in successful product development. Needs analysis ensures the product fits the user's needs, while product testing ensures the product functions properly and effectively. (Andi Rustandi & Rismayanti, 2021).

This research procedure uses the ADDIE development model. The stages of application and development that researchers apply to research at TK ABC include:

- A. Analyzing the application of the accounting information system to the cash receipt and expenditure cycle at TK ABC (Analysis);
- B. Create Financial Management Guidelines and accounting information systems that are in accordance with the procedures and needs of TK ABC (Design)
- C. Conduct development and improvement related to the design of Financial Management Guidelines/SOPs and accounting information systems that have been designed (Development);

3.2 Data Analysis

The data analysis technique used by researchers in this study is the descriptive analysis method by analyzing the data obtained from research conducted at the TK ABC. The steps taken by researchers to analyze the data are as follows:

- A. Collecting data and information about the process of cash receipts and disbursements at TK ABC is collected through interviews and direct observation in the field. Interviews were conducted with relevant sources, such as the principal, treasurer, and finance staff. Observations were made by directly observing the process of cash receipts and disbursements at TK ABC;
- B. Identifying existing problems at TK ABC and analyzing the system needed, as well as studying what components can support or hinder the cash receipt and expenditure system to be designed;
- C. Create and propose an accounting information system that is designed in accordance with the conditions that occur in the field. This is done so that the system can run well and meet the needs of TK ABC.

4. Result

There are 3 stages of discussion in this study, first, analyzing the application of accounting information systems to the cash receipt and expenditure cycle at TK ABC. Second, identify what factors are the supporters and obstacles in implementing the accounting information system at TK ABC. The last stage, proposing the implementation of an accounting information system for the cash receipt and expenditure cycle at TK ABC.

4.1 Cash Receipt Procedure Analysis

A. New Student Admissions

The cash receipt procedure for new student admissions at TK ABC is quite well structured and has a clear flow. Each party (student guardian, principal, foundation) has clear roles and responsibilities in the cash receipt process. The use of billing slips and duplicate receipts ensures valid and well-documented proof of payment. The foundation plays an important role in drafting the school budget and budget items, as well as monitoring and managing finances related to new student admissions.

However, there are several aspects that should be improved to strengthen the effectiveness and accountability of these procedures, namely strengthening internal controls by monitoring new student admission activities by the foundation and other school staff, as well as improving transaction documentation and cash receipt reporting.

B. Tuition Fee Payment

The tuition fee payment receipt procedure starts from the principal who gives the tuition fee bill payment card to the student guardian, then the student guardian pays the tuition fee amount stated on the payment card. After making the payment, the principal will give the first copy of the receipt to the student guardian and keep the second copy of the receipt and initial the tuition payment card, then record the tuition fee receipt in the cash book. The principal then makes a bookkeeping report on tuition fee receipts along with the details and submits the bookkeeping results, tuition fee funds and the second copy of the receipt to the foundation.

Based on the tuition fee receipt procedure, it is known that tuition fees are a routine activity of the cash receipt activities of TK ABC and the last flow of cash receipts from tuition fee receipt activities will be deposited to the foundation. Tuition fees received are then separated for several items, including 90% for operational activities, learning and teaching activities and payroll, the remaining 10% is recognized as the foundation's profit. The profit will be managed by the foundation which will then be reused for operational needs and maintenance of school facilities. Based on the analysis and explanation above, the researcher recommends implementing a more organized tuition fee payment system to prevent misappropriation of tuition fee funds.

C. Bantuan Operasional Penyelenggara (BOP)

TK ABC has a structured mechanism for managing kindergarten grants. The school develops a detailed budget plan, which is then submitted to the foundation and education office for approval. This submission process aims to ensure that the funds received are used effectively and efficiently in supporting early childhood learning activities. In addition, the school also conducts periodic evaluations of the budget implementation to see if any adjustments need to be made.

4.2 Cash Expenditure Procedure Analysis

A. Operational Expenses

In the procedure for purchasing operational needs and school utilities, the principal has made itemized expenditures which are reported to the foundation for verification. Upon approval of the foundation treasurer and the head of the foundation, the principal will receive funds to purchase the needs of school activities. TK ABC still tends to use the cash expenditure method more often for every expenditure transaction made. Cash expenditures that have occurred are then recorded and recorded based on proof of cash expenditure documents, such as expense receipts, payment notes, and other transaction evidence by the principal.

Based on the description of the procedures above, it can be seen that schools need to separate the duties between those who record cash expenditures and those who are responsible for making purchases (cash expenditures) at school, this aims to prevent fictitious expenditures or misuse of cash.

B. Teacher and Staff Payroll

In this procedure, the foundation makes allocations and issues a decree on salary details which are then submitted to the principal to be recapitulated with the teacher attendance. After the recap has been made, it is verified by the foundation and then the salary funds will be distributed to teachers and school staff.

Based on the above procedure, there is a weakness, namely the absence of proof of distribution and receipt of teacher and staff salaries, which is feared to cause misunderstanding in the future.

C. Bantuan Operasional Penyelenggara (BOP)

In the process of BOP cash disbursement, schools and foundations have worked together to maximize BOP funds to be used in accordance with the RKAS that has been prepared based on student dapodik data. In this activity, the foundation has contributed to overseeing the use and budget design that has been carried out by the school.

The school has also contributed in being accountable for the funds that have been given by the government by working with partners so that cash use transactions are carried out in accordance with the procedures requested by the agency. Starting from making activity plans and budgets, reporting proof of expenditure and making accountability letters.

5. Discussion

Based on the analysis, the following discussion pertains to the factors that may support or hinder the implementation of an effective accounting information system at TK ABC , as well as the researcher's recommendations for the school's accounting procedures and information systems.

5.1 Supporting and Inhibiting Factors in the Implementation of Accounting Information Systems

The implementation of the accounting information system at TK ABC has the potential to enhance the efficiency and effectiveness of the school's financial management. The support from the foundation and the need for transparency and accountability are strong supporting factors. On the other hand, a lack of human resources and limited time are inhibiting factors that need to be addressed, also the process of implementing a school accounting information system requires a considerable amount of time for installation, training, and adaptation by teachers and school staff. The limited time available due to daily operational activities can be a significant hindrance.

5.2 Recommendations for the Accounting Information System

A. Cash Receipt Procedure

1) Cash Receipt Procedure for New Student Enrollment

The recommendations for the Cash Receipt Procedure for New Student Enrollment aim to ensure that the cash receipt process from new student enrollments is conducted in an orderly, efficient, and accountable manner; to ensure the accuracy of recording and reporting of cash receipts from new student enrollments; and to maintain the security and reliability of cash receipt data from new student enrollments. To ensure that the cash receipt activities run smoothly, relevant parties such as the Foundation Treasurer, School Administrator, School Treasurer, and Parents must follow the cash receipt procedure diligently.

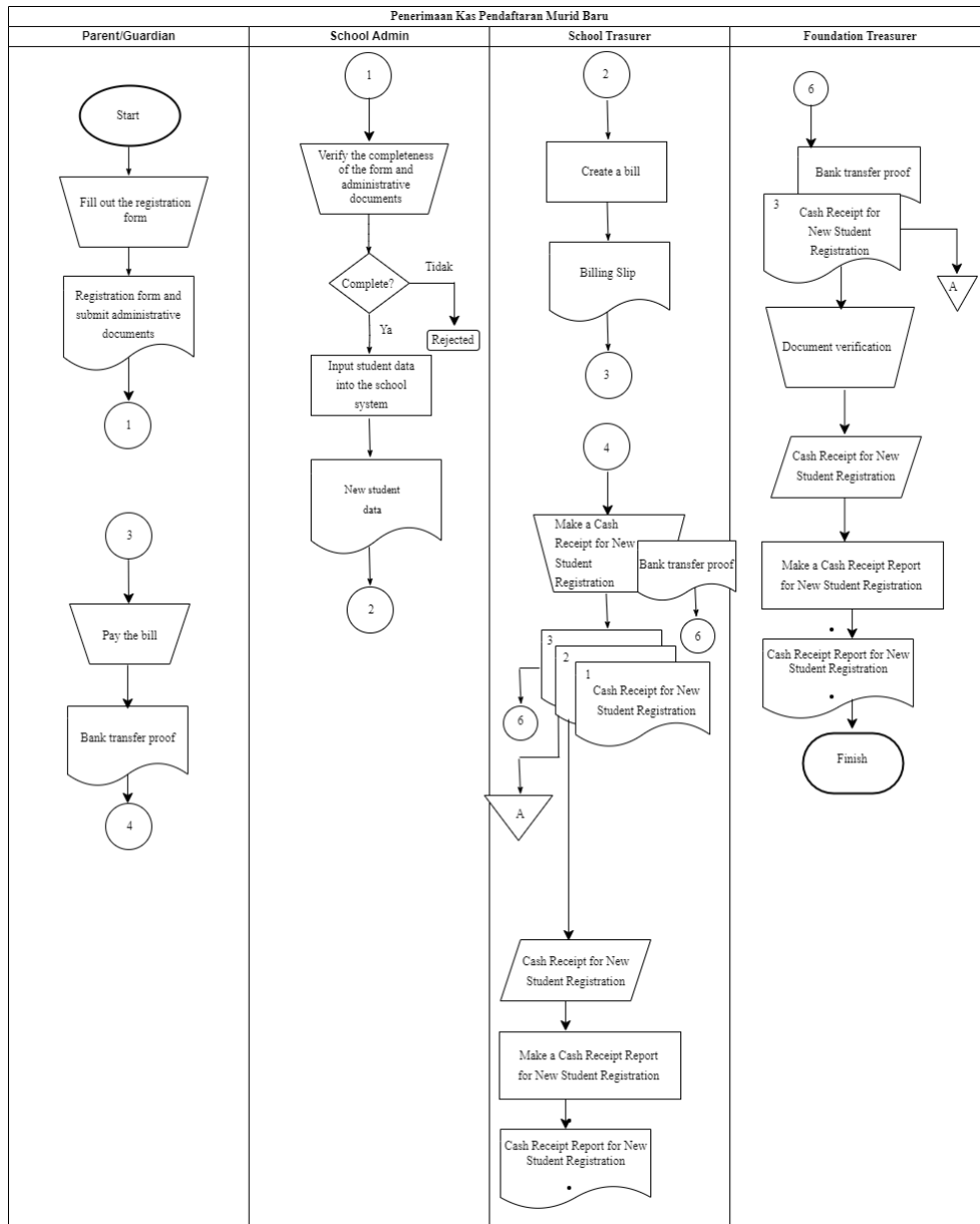


Figure 5.1 New Student Enrollment Flowchart

2) Tuition Fee Payment

The recommendation procedure for the tuition fee payment, aim to conduct the tuition fee receipt process in an orderly, efficient, and accountable manner; Ensure the accuracy of recording and reporting of tuition fee receipts; and maintain the security and reliability of tuition fee receipt data.

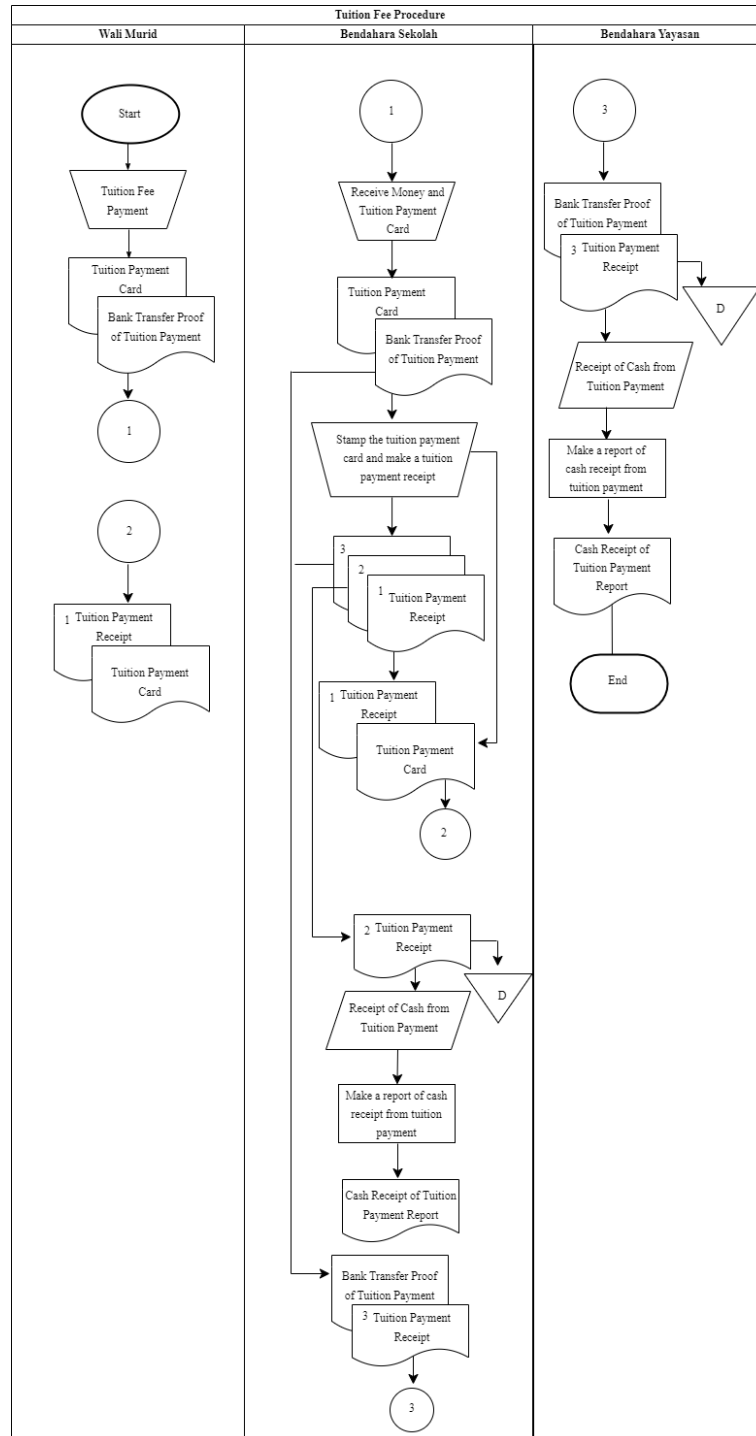


Figure 5.2 Tuition Fee Payment Flowchart

3) The procedure for receiving Bantuan Operasional Penyelenggara (BOP)

The objectives for the procedure of receiving Operational Assistance for Organizers (BOP) are to ensure the process is conducted in an orderly, efficient, accountable, and transparent manner. To achieve these objectives, relevant parties such as the School Administrator, School Treasurer, Foundation Treasurer, and Foundation Chairman must diligently follow the procedure for receiving BOP funds.

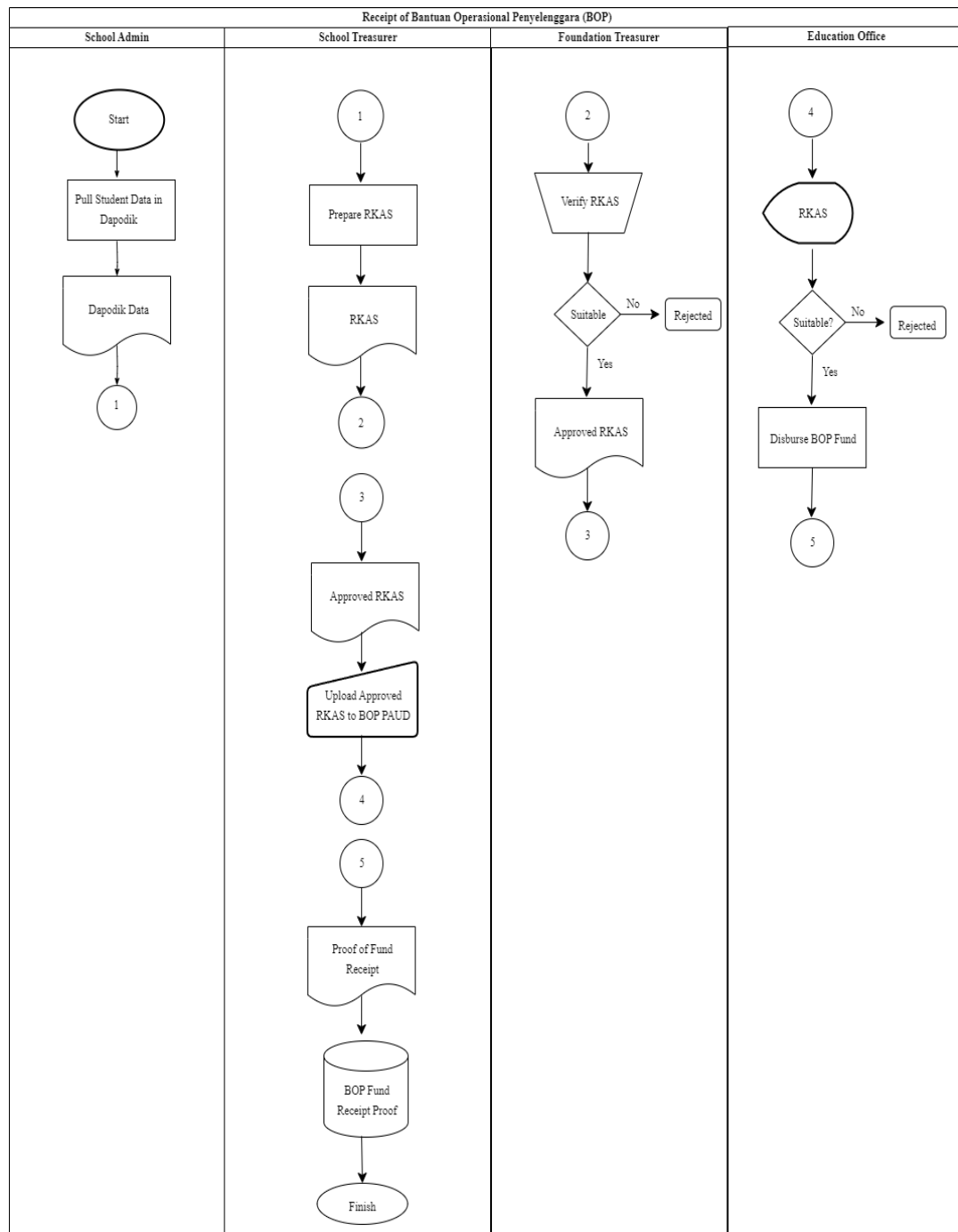


Figure 5.3 Receipt of Bantuan Operasional Penyelenggara (BOP)

B. Cash Expenditure Procedure

1) Operational Expenses

The recommendations for the Cash Disbursement Procedure for Operational and Learning Activity Costs aim to ensure that the cash disbursement process for operational costs and learning activities (KBM) is conducted in an orderly, efficient, accountable, and transparent manner. To ensure the smooth execution of cash disbursement activities, relevant parties such as the School Treasurer, Foundation Treasurer, and Foundation Chairman must diligently follow the cash disbursement procedure.

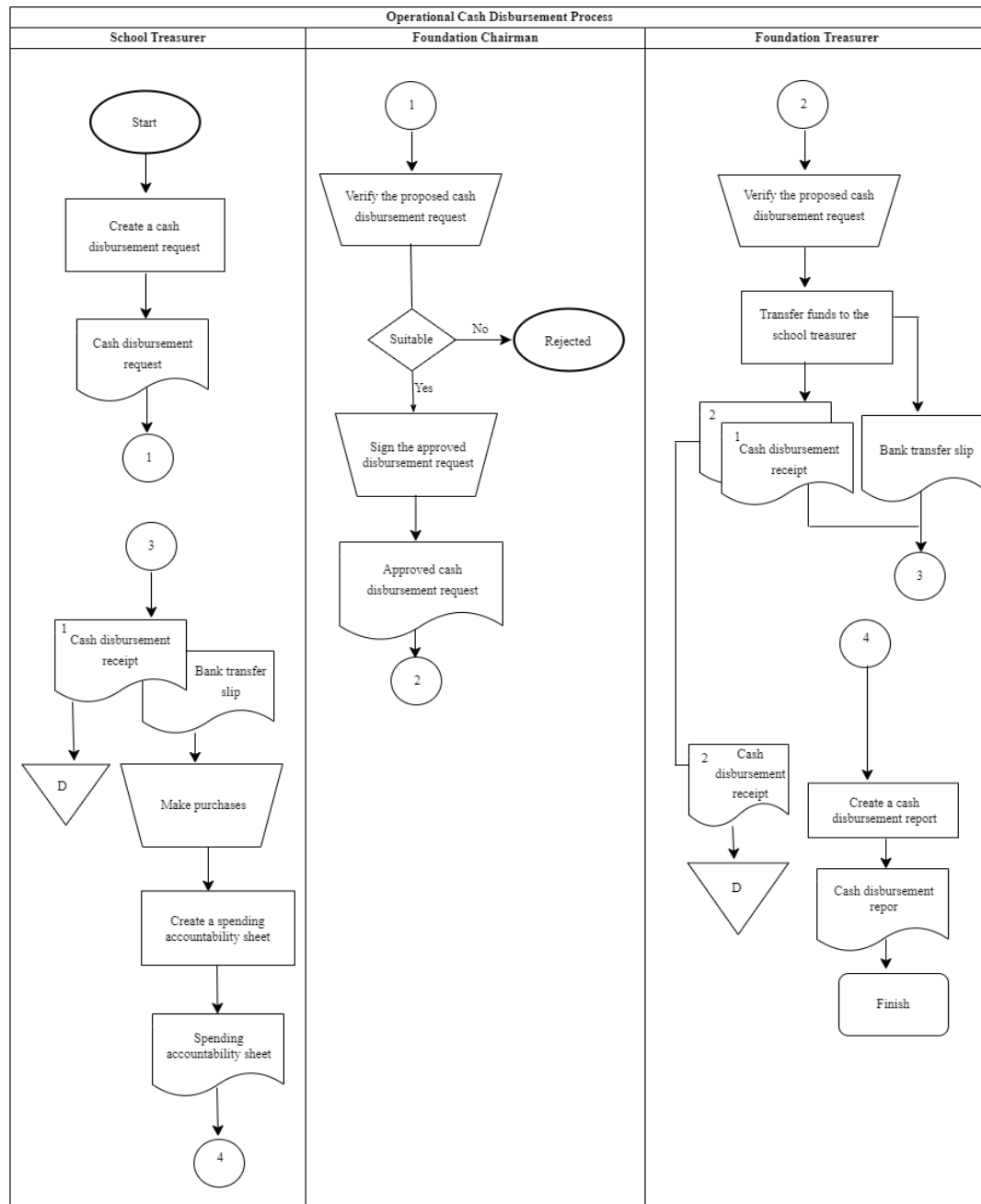


Figure 5.4 Operational Expenses Flowchart

2) Teacher and Staff Payroll

The aim of the payroll process is to guarantee that salary disbursements to teachers and staff are handled in a systematic, efficient, accountable, and transparent way. To ensure the payroll process runs smoothly, it is essential for the involved parties, including the Foundation Chairperson, Foundation Treasurer, School Administrator, and Teachers and Staff, to carefully follow the established payroll procedures.

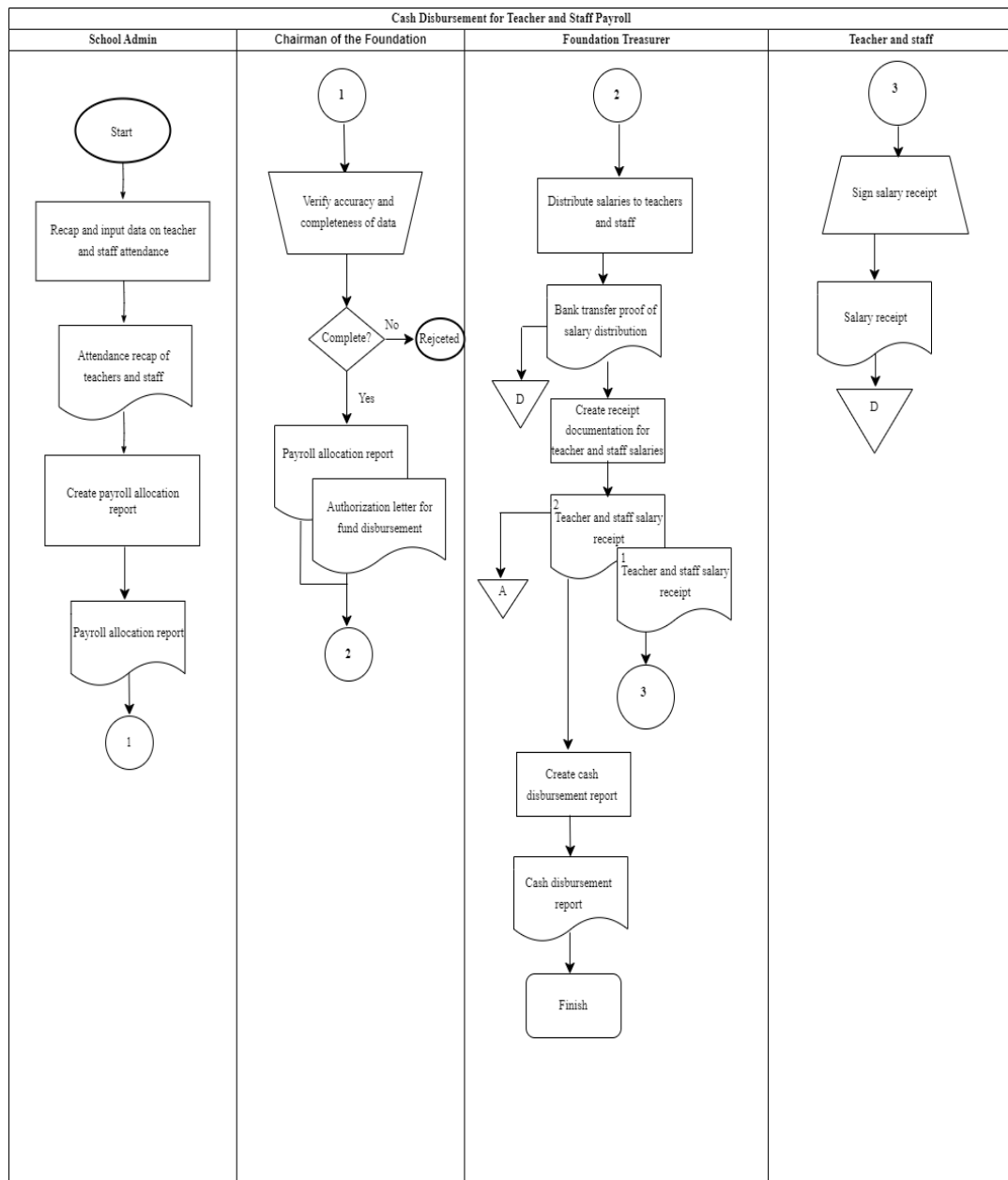


Figure 5.5 Teacher and Staff Payroll Flowchart

3) Disbursing Procedure for Bantuan Operasional Penyelenggara (BOP)

The goal of setting procedures for the utilization of the Bantuan Operasional Penyelenggara (BOP) at TK ABC is to ensure that the funds are used in an organized, efficient, and responsible manner. This includes ensuring the accuracy of recording and reporting the use of BOP funds and maintaining the security and integrity of the financial data related to BOP. To ensure smooth operations, relevant parties such as the School Treasurer and Vendors are required to adhere to these established procedures carefully.

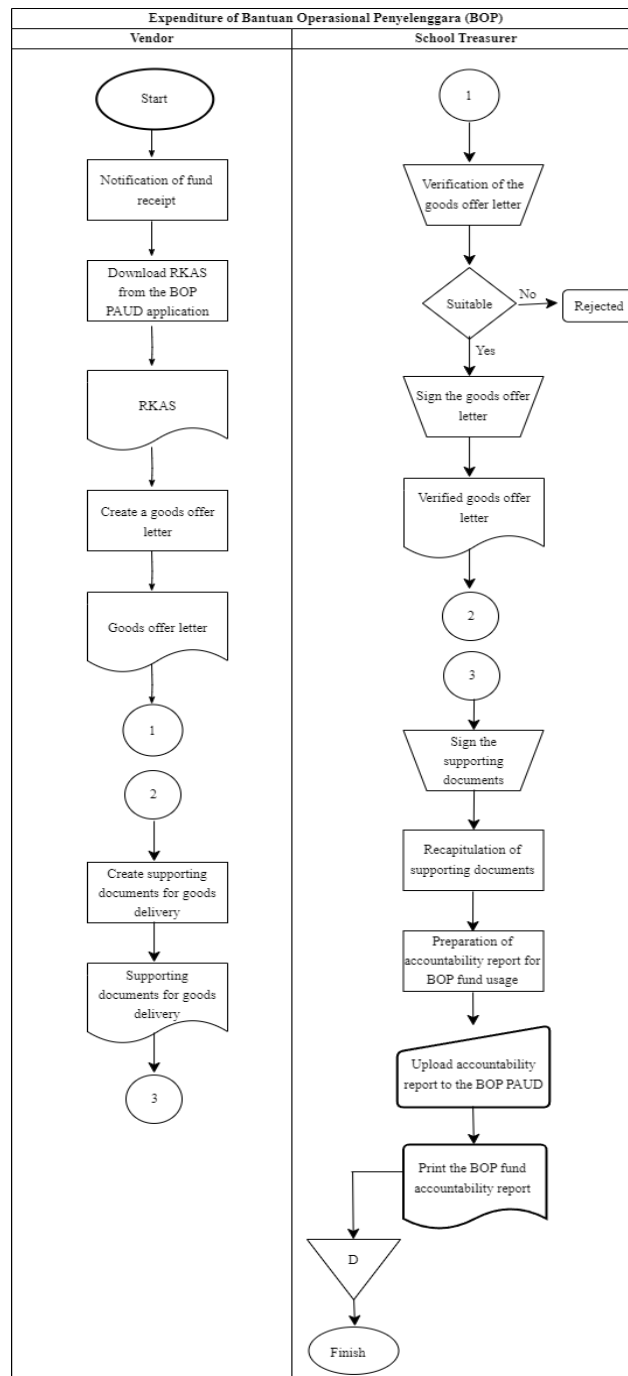


Figure 5.6 Disbursing Procedure for Bantuan Operasional Penyelenggara (BOP) Flowchart

6. Conclusion, Implication, and Recommendation

6.1 Conclusion

The application of accounting information systems in the management of cash receipts and disbursements at TK ABC is still not implemented effectively and adequately, this is evidenced by the fact that there are still several jobs that are only carried out by one party; the process of receiving and spending transactions that have not been digitized; and internal control that is still not optimal. Recommendations provided by researchers in the form of Standard Operating Procedures and flowcharts of cash receipts and disbursements at TK ABC so that it is expected to help the school in increasing the effectiveness and accountability of cash receipt and disbursement activities.

6.2 Implication

This research can be a source of literature for further research that will conduct research on similar topics, namely related to accounting information systems and standard operating procedures. In addition, the results of this study are taken into consideration and evaluation for TK ABC regarding the implementation of standard operating procedures and school accounting information systems so that it is hoped that the recommended system can help schools manage cash more effectively and efficiently.

6.3 Recommendation

Future research is expected to not only discuss the flow of cash receipts and disbursements, but other flows such as asset or inventory measurement. Future research is also expected to discuss the financial reporting of non-profit organizations in accordance with ISAK 35.

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