FINANCIAL MANAGEMENT INFORMATION SYSTEM DEVELOPMENT IN PT. TATA DIMENSI PANCARINDO

Yovan Aprilliano[1] , Tati Harihayati M[2]

[1,2] Teknik Informatika – Universitas Komputer Indonesia
Jl. Dipatiukur 112-114 Bandung
Email : aprillianoy@gmail.com[1], tati.harihayati@email.unikom.ac.id[2]

ABSTRAK

PT. Tata Dimensi Pancarindo is a company located in the area of tebet, South Jakarta. This company is engaged in construction services. The problems that often occur in PT. Tata Dimensi Pancarindo is the result of the costing of the company that has been made by the Finance Manager and has been approved by Directur there is a result of inequality between the cost plan and the realized cost, because if the result of planning the cost of the company does not match the cost burden realized at the end of the period will make the company experienced a decrease in net profit, in addition there is an imbalance between debit and credit transactions that hamper profit growth in PT.Tata Dimensi Pancarindo can. Based on the problems that exist in PT. Tata Dimensi Pancarindo, hence the need of a financial management information system development. The purpose of this system is to help finance managers in planning the company's cost expenses for the next period and oversee the flow of transactions on cash.

The method in developing financial management information system in PT.Tata Dimensi Pancarindo is using structured method and for forecasting company cost expenses using present increase method, and for management cycle using PDCA (Plan, Do, Check, and ACT).

The results of the test can be concluded that financial management information system built can help in preparing the company's cost expenses and monitoring the flow of transactions on cash.

Keyword: management information System,financial management, present icrease, Plan,Do,Check,Act.

1. INTRODUCTION

Tata Dimensi is one of the companies engaged in construction services. Companies that have been established since 2008, usually for a year can handle 5-7 construction projects. In the process of payment construction payment, the client directly related to Finance Manager to determine the details of the fees to be paid. The Finance Manager not only takes care of the payment process but also contributes to planning, managing and controlling the company's cost, analyzing the Company's finances, managing and controlling the company's cash flow, evaluating the Financial Statement, and making the company's profit and loss statement.

The result of interview with Ibu Sri as Finance Manager of PT.Tata Dimensi Pancarindo in Appendix F-2, said that the finance activity in PT.Tata Dimensi Pancarindo starts from the use of capital obtained from the previous period net profit, then continued with financial planning that is making expense plan the company starts from making a company cost plan to paying employees, financial management where it can use the company's funds regularly in order to allocate unexpected funds, financial controls oversee the planned costs at the cost that has been realized, and financial reporting provision of information about the company's financial condition as well as an evaluation material. The company's financial planning process is carried out at the beginning of each period by looking at the company's financial capital earned at the beginning of the period, after which Mrs. sri determines how much the company must pay for a period, in determining the cost to be incurred during one period, previously a reference finance manager to determine the financial plan for the next period. The result of planning of company cost expense must be approved by Directur. The costing of the company that has been created by the Finance Manager and approved by Directur is the result of the inequality between the company's cost plan and the cost of the realized company. This is evident from the company's cost report report of 2016 in Appendix F-4, such as payroll and expenses eating and drinking, on the payroll of employees experiencing a deficiency of -1%, the deficiency occurs because of employees who get additional costs for working outside working hours and completing work outside the city, the burden of eating and drinking deficiency -19%, due to the purchase consumption for construction workers or company guests. The difference between the company's cost plan and the cost of the realized cost means that the finance manager has to search for funds to cover any expense loaded item.

Supervision in the company's financial activity, Ibu sri didya by looking at the total debit and credit transactions recorded on the cash each month, but on supervision in the company's financial activities

there is an imbalance between the total debits and credit, for example in April recorded total debit of smaller companies 34 % compared to total credit, imbalance caused by Client PT. Tata Dimensi Pancarindo likes to be late in performing the obligation to pay project installments while the construction work must be kept running so that the company continues to experience expenditure in order to keep running the development experienced by the company, it makes PT. Tata Dimensi Pancarindo makes the inhibition of profit growth in PT.Tata Dimensi Pancarindo can.

To be able to plan and evaluate company cost expenses, monitor credit debit transactions on cash, and provide accurate financial statements. Therefore it is required a Keuagan SIM in order to assist the Finance Manager to integrate all the process of financial activities ranging from financial planning, financial management, financial control to analyze the company's financial condition.

2. RESEARCH CONTENTS

2.1 Theoretical Basis

The theoretical basis used to create a final report and establish a Financial Management Information System at PT. Tata Dimensi Pancarindo. The theories to be discussed in this foundation are as follows:

2.2 Information Systems

An information system is a system within an organization that brings daily transaction processing needs that support organizational operations functions that are managerial with the strategic activities of an organization to be able to provide to certain outside parties with the necessary reports. [1]

2.3 Management information System

The term Management Information System consists of three keywords, namely system, information, and management. As mentioned above, management information systems can be defined as a set of interconnected sub-systems, gathering together and forming a unity, interacting and working together between the parts with each other in certain ways to perform data processing functions , receive inputs in the form of data, then process (processing), and produce output (output) in the form of information as a basis for decision-making useful and have real value that can be felt as a result both on the spot and in the future, support operational, managerial and strategic activities of the organization, utilizing the resources available and available for the function to achieve the objectives.[2]

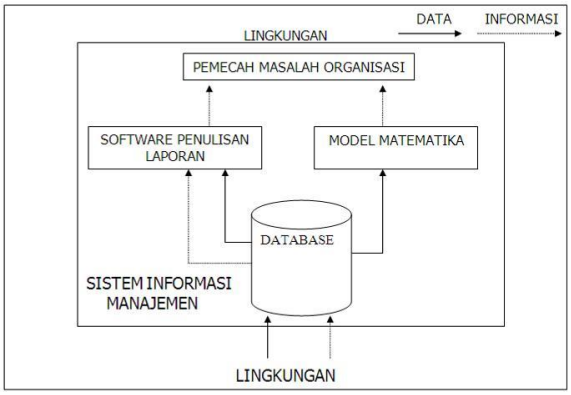


Figure 1 Management Information System Model

2.4 Financial Management Information System

Financial Management Information System is an information system that handles everything related to accounting. Accounting itself is actually a system of information. Important functions established financial management information systems in an organization, among others[2]:

1. Collect and store data about the activities and transactions.
2. Processing data into information that can be used in the decision-making process.
3. Precise control of the assets of the organization.

2.5 Financial Statements

The Financial Statement is the result of the recording process, so as to explain the financial constraint of an enterprise at a certain period or period of time in terms of its function, the financial statements is the most important medium to assess the performance, activity, and financial condition of a company that will be the source of information for analysts to take an important decision for the company in the future and according to Harmono, the financial report is a report that describes the financial impacts and events classified in several large groups according to their economic characteristics.[3]

2.6 Type of Financial Statement Type

In general, financial statements made by the company consists of several types, depending on the intent and purpose of making the financial statements. Each financial report has its own meaning in looking at the financial condition of the company, either partly, or as a whole. However, in practice the company is required to compile several types of financial statements in accordance with predetermined standards, especially for self-interest or for the interests of others. The preparation of financial statements is sometimes adjusted to the changing conditions of the company's needs, meaning that if no changes are made to the report, it is not necessary to make, for example, a change in capital or a report on a financial statement, or a

financial report made only to add, already created. In practice, there are generally four common types of financial statements, namely [3] :

1. Balance Sheet
2. Income statement
3. Financial Capital Report
4. Caseflow

2.7 Understanding PDCA Analysis

The PDCA technique (Plan, Do, Check, Action) is a method for continuous process improvement. This technique is a cycle popularized by W. Edwards Deming (October 14, 1900 - December 20, 1993), a professor, author, teacher and consultant. He is considered the father of modern quality control so that this cycle is often called the Deming Cycle. The PDCA or Cycle cycle 'plan, work, check, follow-up is a four-step problem-solving process commonly used in quality control.

2.7 PDCA Cycle

The PDCA cycle provides the steps of measurable and accurate problem-solving process. This PDCA cycle is effective for:

1. Helping Kaizen implementation or continuous improvement process. When this PDCA cycle is repeated it will open up the possibility of finding new areas that need to be upgraded.
2. Identify new solutions to significantly improve recurring processes.
3. Opening up a wider horizon of existing problem solutions, testing them and improving the results in a controlled process before being widely implemented.
4. Avoid wasting resources extensively



Figure 2 PDCA Cycle

1. Plan
   Plan is the selection and linking of facts, making and using assumptions related to the future by describing and formulating certain activities that are believed necessary to achieve a particular outcome.
2. Do This means planning a pre-defined process and monitoring the implementation process. Measures of this process have also been established in the PLAN stage. Refers to the implementation and implementation of planned activities.
3. Check
   CHECK is a review and review stage and learns the results of implementation at the DO stage. Compares the actual results that have been achieved with the specified Target and also the precision of a predetermined schedule.
4. ACT
   Following up the results to make the necessary improvements, it also reviews all the steps and modifies the process to fix them before the next implementation. If this stage is over and we have reached the next stage of the better, we can repeat this process from scratch back to reach the higher stages.

2.8 Presnent Increase

Present Increase is a way of calculating an increase in percentage value. The increase in value is calculated based on the ratio of the increment value to the original value (reference value) before any increase [4]. To calculate the percentage increase in value, the steps are as follows:

1. Know the original value (reference value) before the increase.
2. Know the value of increase
3. Calculate the ratio of the increase value to the original value.
4. Multiply the result of step 3 (the ratio of the value of increase to the original value) with the number 100%

***persent increase* = (new cost-previous cost) / (previous cost) X 100 %**

Phase calculate percentage increase:

1. Determine the initial value
2. Determine the increment value
3. Comparison of the value of the increase against the original value
4. Percentage increase

2.8 Management Analysis of Cost Management of the Company

Management analysis to be performed for costing company planning is by doing PDCA analysis (PLAN, DO, CHECK and ACT). Here is an explanation of the stages of management analysis of the preparation of the cost of the company in PT. Tata Dimensi Pancarindo with PDCA



Figure 3 Cycle Management Analysis Preparation of Expense Company Costs With PDCA

1. Cost Planning Preparation Company
   Planning cost burden of the company is the stage to plan the cost of the company for one period ahead, there are 11 load posts that will be planned that is Expense Spending Expense, Salary Expense, Eating & Drinking Expenses, Office Suplies Expense, Computer & IT Load, Photo Load Copy & ATK, Electricity Load Posts, Communications Expense Post, Fuel Burden Post, Tailor And Toll, Other Office Expense Post, and Outpatient Salaries Expense. The calculation in doing the cost of the company's load using the method of present increase, in calculating the data used is the cost of the company's cost report that realized 2 previous periods. The result of the calculation of present increase method is the company's cost plan for the next period. Below is a report of the company's cost expenses realized 2 previous periods.
2. Implementation of Cost Expense of the Company
   After looking at each post cost of the company two previous periods in the planning stage then the next process of determining the cost to be spent for the next period with the method of present increase.
3. Checking the Costing Preparation of the Company
   Checking The preparation of the company's cost expenses is by checking or correcting the calculation of the Present Increase method in the implementation stage.

Table 1 Calculation Result of Company Cost Expense Year 2017

NO	Expense Post	Result of PI
1	Belanja Bahan Baku	Rp. 402.636.381
2	Gaji Pegawai	Rp. 745.085.444
3	Gaji Luar Pegawai	Rp. 160.291.707
4	Makan & Minum	Rp. 22,359,533
5	Supplies Kantor	Rp. 132.692.080
6	Komputer & IT	Rp. 38.572.630
7	ATK & Foto Copy	Rp. 2.188.481
8	Listrik	Rp. 69.357.726
9	Komunikasi	Rp. 12.069.427
10	Kantor Lainnya	Rp. 216.271.148
11	BBM,Parkir & Tol	Rp. 28.191.125

4. Actions on Cost Expense Establishment
   Action to burden the company's cost is to follow-up of the checking stage is to monitor what has been done in the planning, implementation, and checking. Monitoring made look at planned transactions with realized transactions. If the burden of the realized cost is less than 80% then the condition will be given a secure status, but if it is greater than 80% then the condition will be given unsafe status, and if the cost of the realized expense exceeds the load plan it will be given a notice to conduct Audit . Monitoring continued is the presentation of a bar of the stem going to the curve x the load cost plan of the firm and the realized load curve, while the expenditure presented is divided into two colors, for the orange color of the load post and the blue color of the realization of the transactions.

2.9 Employee Payroll Management Analysis With PDCA

Management analysis to be performed for payroll is by doing PDCA analysis (PLAN, DO, CHECK and ACT). Here is an explanation of the stages of management analysis Employee Payroll PT. Tata Dimensi Pancarindo with PDCA.



Figure 4 Payroll Management Cycle With PDCA

1. Employee Payroll Planning

At the stage of payroll planning there are regulations in the constitution of Article 1 paragraph 30 of Law no. 13 of 2003 on Manpower, Wages shall be the right of workers received and expressed in the form of money in return of employers or employers to workers stipulated and paid pursuant to an employment agreement, agreement or statutory regulations, including allowances for worker / laborer and his / her family for a job and / or service that has been or will be done.

According to Finance Manager that the payroll process at PT. Tata Dimensi Pancarindo there are 3 components, namely basic salary, Bonus, and Kasbon. Here is a table of total payroll per month at PT. Tata Dimensi Pancarindo.

$$Total = (Base\ Salary + Bonus) - Debt$$

2. Implementation Payroll Employee

In the implementation phase undertaken by the Finance Manager is involved 3 components on the payroll process for the payroll calculation process. In carrying out the recitation calculation, the company's cost plan for one period becomes the reference of Finance Manager to determine the bonus of each employee.

Table 2 Employee Bonus Determination Year 2017

Total Salaries of Employees	Employee Salaries Expense Plans	Balance
Rp. 687.720.000	Rp. 785.085.444	Rp.53.365.044

In the calculation phase of the bonus determination, the results obtained from the determination of the next step bonus made by Finance Manager is to determine the bonus of each position.

Table 3 Determination of Employee Bonus Each Position Year 2017

EMPLOYMENT	BONUS
Cleaning Service	Rp. 2.810.840
Driver	Rp. 2.810.840
Interior Desainer	Rp. 3.750.000
Finance & Admin	Rp. 3.750.000
Finance Manager	Rp. 7.000.000
Raw Material House	Rp. 3.750.000
Project Admin	Rp. 3.750.000
Site Manager	Rp. 7.000.000
Chief Exceutive	Rp. 3.750.000
Security	Rp. 2.810.840

3. Checking Employee Payroll

At the examination stage the thing that is done is checking the total recitation plan. The indicator used in the total employee payroll check is the total salary of the employee with the total employee bonus given during one period.

Table 4 Table of Employee Payroll Plan Report of 2017

Base Salary	Employment	Bonus	Total
Rp. 78.360.000	Site Manager	Rp. 7.000.000	Rp. 85.360.000
Rp. 32.400.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 56.280.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 40.800.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 57.360.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 37.560.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 45.000.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 37.560.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 38.400.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 32.400.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 72.000.000	Cleaning Service	Rp. 7.000.000	Rp. 35.210.840
Rp. 36.000.000	Driver	Rp. 7.000.000	Rp. 35.210.840
Rp. 36.000.000	Driver	Rp. 7.000.000	Rp. 35.210.840
Rp. 51.600.000	Project Desainer	Rp. 7.000.000	Rp. 35.210.840
Rp. 36.000.000	Driver	Rp. 7.000.000	Rp. 35.210.840

4. Employee Payroll Actions

In the process of action will be the action of the payroll check which is the difference between salary plan with realized salary. If there is a salary that is minus, then the salary plan of the next period will be added with the remaining salaries of other employees.

2.10 Analysis of Monitoring Management of Debit Transactions and Credit Cash

Management analysis that will be done to monitor debit and cash credit transactions is to analyze PDCA (PLAN, DO, CHECK, and ACT). Here is an explanation of the stages of management analysis monitoring debit transactions and cash credits PT. Tata Dimensi Pancarindo with PDCA

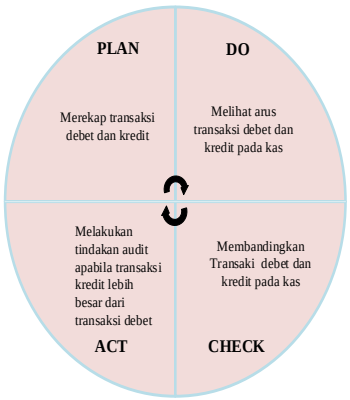


Figure 5 Cycle Management Monitoring Debit Transactions and Cash Credits With PDCA

1. Planning for Monitoring Debit and Credit Cash Transactions
   Stages for planning monitoring of Debit and Credit Cash Transaction is to include cash inflows and outflows that occur from the next until next. In carrying the total cash outflow transactions (Credit) includes the purchase of fixed assets, short-term or long-term debt repayments, lease payments, interest, taxes, Purchases of goods with cash, Payment of company operating expenses such as salary payments, purchase of office supplies, advertising costs, and includes cash proceeds and receivables, the sale of fixed assets, the sale or the issuance of shares or the increment of capital by the owner, the expenditure of the notes payable, bonds payable, bank loans, receipts outside the enterprise business .
2. Implementation of Debit and Cash Transaction Monitoring
   Stages in the implementation of cash flow monitoring is to calculate the total amount of debit and credit transactions.

Table 5 Number of Credit Transactions and Cash Debts of 2017

Month	Debt	Credit
Januari	Rp 459,870,000.00	Rp 330,957,320.00
Febuari	Rp 139,500,000.00	Rp 137,148,500.00
Maret	Rp 274,050,200.00	Rp 147,023,414.00
April	Rp 126,650,000.00	Rp 161,007,693.00
Mei	Rp 187,750,000.00	Rp 162,803,690.00
Juni	Rp 41,150,000.00	Rp 141,904,693.00
Juli	Rp 163,050,000.00	Rp 82,218,900.00
Agustus	Rp 312,051,200.00	Rp 114,156,300.00
September	Rp 350,500,000.00	Rp 149,439,200.00
October	Rp 287,500,600.00	Rp 119,044,000.00
November	Rp 235,000,000.00	Rp 104,721,200.00
December	Rp 425,000,000.00	Rp 161,826,500.00

3. Checking Monitoring of Debit Transactions and Credit Cash
   Checking cash flow monitoring is checking the results of the implementation phase by presenting a monitoring table where there is a status column if the credit transaction is close to 10% to the debit transaction then it will be given unsafe status. Here is a cash flow monitoring check

Table 6 Checking Monitoring of Debit Transactions and Credit Cash

Month	Debt	Credit	Status
Januari	Rp 459,870,000.00	Rp 330,957,320.00	Aman
Febuari	Rp 139,500,000.00	Rp 137,148,500.00	Aman
Maret	Rp 274,050,200.00	Rp 147,023,414.00	Aman
April	Rp 126,650,000.00	Rp 161,007,693.00	Tidak Aman
Mei	Rp 187,750,000.00	Rp 162,803,690.00	Aman
Juni	Rp 41,150,000.00	Rp 141,904,693.00	Tidak Aman
Juli	Rp 163,050,000.00	Rp 82,218,900.00	Aman
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October	Rp 287,500,600.00	Rp 119,044,000.00	Aman
November	Rp 235,000,000.00	Rp 104,721,200.00	Aman
December	Rp 425,000,000.00	Rp 161,826,500.00	Aman

4. Action of Monitoring Debit and Credit Cash Transactions
   Action on cash flow monitoring is to conduct an action / evaluation of the monitoring results that have been done. Action if unsecured status is debit transaction is smaller than credit, finance manager audits company's operational activities and determines transaction activity that must be first.

2.11 Entity Relational Diagram (ERD)

ERD is a design that becomes a guide in making the database. ERD for SIM Finance PT.Tata Dimensi Pancarindo.

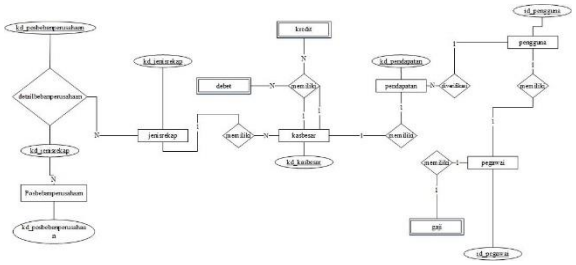


Figure 6 Entity Relational Diagram (ERD)

2.12 Context Diagram

Context diagram is a tool structure analysis that describes the relationship and linkage system with entities and data flow from entities to the system and from the system to the entity. Context diagram describes the system in outline or as a whole. Context diagram also describes the external entity which is a thought device that produces data processed by the system and the purpose of information generated by the system.

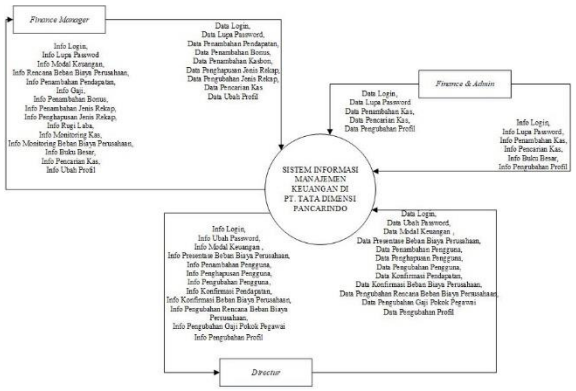


Figure 7 Context Diagram Financial Management Information System PT. Tata Dimensi Pancarindo

2.13 DFD Level 1

Data Flow Diagram level 1 for development of financial management information system At PT. Tata Dimensi Pancarindo

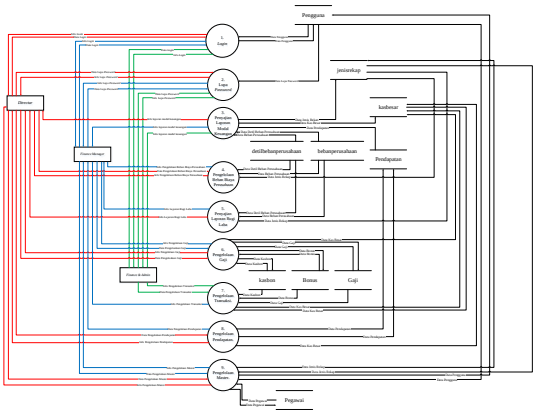


Figure 8 DFD Level 1 Development of Financial Management Information System At PT. Tata Dimensi Pancarindo

2.14 Relation Scheme

Relationship scheme is a description of some interconnected data and its restrictions.

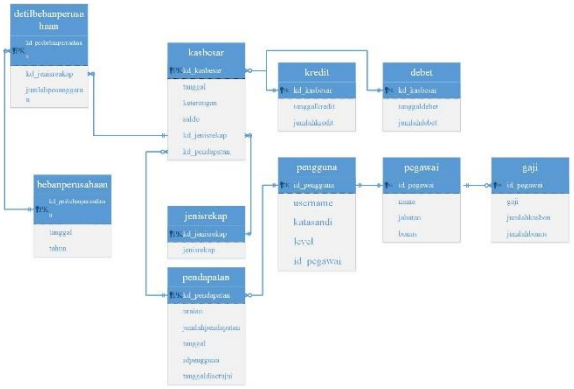


Figure 9 Relationship Scheme Diagram

3. CLOSING

In this section will explain the conclusions and suggestions of the research.

3.1 Conclusion

The results obtained in making this final task, it can be deduced as follows:

1. The financial management information system built has been able to assist the Finance Manager in planning and overseeing the cost of the company.
2. The financial management information system built can monitor the debit and cash loans transactions.

3.2 Suggestion

As for Suggestions for developers of financial management information system, there are some suggestions that can be done, among others:

1. The addition of a balance sheet report in order to determine the tax cost of the company for each period.
2. Long-term corporate investment decision-making, viewed from the side of the company's financial capital

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