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FINANCIAL MANAGEMENT INFORMATION SYSTEM DEVELOPMENT IN SAMBEL HEJO RESTAURANT

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ABSTRAK

Sambel Hejo restaurant is one of the businesses in the culinary field. This restaurant offers a menu Sundanese with a special flavor into their products. The problems that often occur in the Sambel Hejo restaurant is a shortage or excess raw materials which resulted Section Purchasing often have difficulty in monitoring persediaaan procurement of raw materials in the Sambel Hejo restaurant, imbalance between revenue earned with the available budget that led to the Finance Section difficulties in monitoring the incoming funds and expenditure incurred for raw materials. Pursuant to the problems that exist at present in the Sambel Hejo restaurant, it places a financial management information system development. The development objective of financial management information system is to assist the Finance Division in monitoring the incoming funds and expenditure incurred for raw materials and make it easier to monitor the Purchasing Section persediaaan procurement of raw materials in the Sambel Hejo restaurant.

By applying the Financial Management Information System In Sambel Hejo restaurant is expected to resolve the existing problems through planning, implementation, inspection and evaluation, so aim for budget monitoring and procurement of raw materials inventory of raw materials and can be performed well.

Based on the test results it can be concluded that this system is enough to help the Finance Division in monitoring the expenditure of raw materials and procurement of raw material inventory.

Keywords : *SIM, Management Information Systems, Finance*

1. INTRODUCTION

Sambel Hejo restaurant, Bandung is one of the businesses in the culinary field in the city of Bandung. Restaurant is included in one of the restaurant's favorite meal even though the house is not included in the big house and fancy dining. RM is sought after by lovers of culinary service and presentation are different. Customers who come mostly people who already know where restaurant and often eat at the restaurant. This restaurant offers a menu Sundanese with a special flavor into their products.

In interviews with the Purchasing Section is responsible for the supply of raw materials. The problem that often occurs in restaurant Sambel Hejo is the number of inventories of raw materials procurement in the restaurant only be known after checking the inventory, ie before the clock restaurant closed or open after hours. This causes the restaurant often have excess or shortage of raw materials. Purchasing so that the difficulties in monitoring the supply of raw material procurement in the restaurant. When the necessary raw materials shortage, then the restaurant will incur a loss because the menu is available in the restaurant should be empty. When restaurant experience the advantages of raw materials, the restaurant suffered a loss that is rarely used raw materials that will be wasted.

In interviews with the Finance Department is responsible for arranging and composing restaurant government budget. Budget obtained for raw material procurement spending in the restaurant was set at 30% by revenue on the previous day. Problems found in the restaurant that the budget for the procurement of raw material expenditure is large enough, whereas the revenue earned earlier in the day a little bit. This causes the imbalance between income earned within the budget available. When the restaurant was crowded with visitors, then this will lead to a loss in the restaurant that revenue will decline if the menu that will be ordered by the customer are not available.

Pursuant to the problems that exist at Sambel Hejo restaurant, it takes a development financial management information system that can help the Finance Division in monitoring the incoming funds and funds expended for budget feedstock restaurant, as well as facilitate the passage

Purchasing for monitoring inventory procurement of materials restaurant raw**.**

1.1 Purpose and Objectives

The purpose of this study is how to build an information management system to establish a financial management information system.

While the goal is:

1. Help the Finance Division in monitoring the incoming funds and funds spent on raw materials restaurant budget.
2. Facilitate Purchasing section for monitoring the supply of raw material procurement restaurant.

1.2 Information System

The information system is a system within an organization reconcile the needs of daily transaction processing, support the operation, managerial and strategic activities of a organisasasi, and provide certain outside parties with the reports - reports required. [1]

1.3 Management Information System

The information system is a system within an organization reconcile the needs of daily transaction processing, support the operation, managerial and strategic activities of a organisasasi, and provide certain outside parties with the reports - reports required. [4]

1.4 Financial Management Information System

Financial Management Information System is an information system that provides information to people or groups both inside the company and outside the company regarding the company's financial problems. The information provided is presented in the form of special reports, periodic reports, the results of a mathematical simulation, the advice of an expert system, and communication.[4]

1.5 PDCA

PDCA is a continuous process improvement cycle or continuously. Stages in the PDCA method among others :

a. Plan

Plan stage is the stage to set targets or goals to be achieved in process improvement or problem to be solved, then determine the method to be used to reach the target or targets have been determined.

b. Do

Do stage is the stage of the application or execute all that has been planned in resistant plan including running the process of collecting data that can then be used to check the stage and act.

c. Check

Check stage is the stage of the examination and review and study the results of the implementation in stages do. Doing a comparison between the results achieved with the targets set and also the accuracy of the specified schedule.

d. Action

Phase act is the stage to take the action necessary to the outcome of the check phase. There are two types of action to be taken based on the results achieved, among others:

1. Corrective Action (Corrective Action), which can be a solution to the problems encountered in achieving the targets, corrective actions need to be taken if the results did not achieve what was targeted.
2. Measures Standardization (Standardization Action), action to download standardization-the way or best practices that have been made, this standardization actions carried out if the results achieve the set targets.

1.3. Java

Java is an object oriented programming language and free platform, developed by SUN Micro System with a number of advantages that allow java used as the language of enterprise development.

1.4. Forecasting

Forecasting is a user estimate the activities that will occur in the future. Forecasting techniques will assist in conducting analysis approach to behavior or pattern of past data, so it can provide a way of thinking, craftsmanship and solving systematic and pragmatic, as well as providing a greater level of assurance over the accuracy of the prediction made.

A crucial step in choosing the right method is to consider the type of data patterns, so that the most appropriate method to the pattern can be tested. Pattern can be divided into four types of cycles and trends are:

a. Horizontal Pattern

Horizontal pattern occurs when data values fluctuate around the average value of a constant, a product whose sales do not increase or decrease during a certain time are of this type.

b. Seasonal Pattern

Seasonal patterns occur when a row is affected by seasonal factors (eg, in a matter of yearly, monthly, weekly, or daily).

c. Cyclical Pattern

Cyclical pattern occurs when the data is affected by long-term economic fluctuations such as those associated with the business cycle as sales of cars, steel, and other equipment.

d. Trend Pattern

The pattern of trend occurs when there is an increase or decrease in long-term secular data.

Exponential smoothing is one category of the time series that uses past data weighting, in this category there are several commonly used methods.

Among other methods of single exponential smoothing, double exponential smoothing.

2. CONTENT OF REASEARCH

2.1 Problem Analysis

Analysis of the problem of the system that is currently running at Sambel Hejo restaurant are:

1. The Finance Department had difficulty in monitoring the funds incoming and outgoing funds spending for raw materials.
2. Section Purchasing experiencing difficulties in monitoring the supply of raw material procurement.

2.2 Analysis of Business Rules

Business process analysis describes the business rules that exist today in the Sambel Hejo restaurant and business rules proposed for Sambel Hejo restaurant.

2.2.1 Analysis of business rules in restaurant

Here are the rules that exist today in the Sambel Hejo restaurant:

1. Restocking food ingredients made each weekday for raw materials such as vegetable, and once a week for raw materials such as rice and seasonings. It can also be done without a schedule, depending on needs.
2. Checking food ingredients made each weekday by Purchasing section.
3. Purchase of raw materials is done on a daily basis according to the needs.
4. Procurement of raw materials budget funds taken from income on the previous day
5. Provision of receipt from the purchase of raw materials by Section Purchasing is done every weekend.
6. Recording of transaction reports conducted by the Treasury every day after work.
7. Delivery report to the Owner transactions carried out by the Finance function after work on weekends.

2.2.2 Analysis of business rules purpose

. Here are the rules proposed for the Sambel Hejo restaurant:

1. The process of recording the amount of raw material purchases made each day by the Finance Section
2. The indicators used in monitoring raw material inventory is available stock, the stock is used, and the remaining in stock.
3. Plan expenditure of raw materials is done on a monthly basis by the Finance Department and the views from the budget that came out in the previous month.
4. The reporting process raw materials budget is done every weekend or every month.
5. The evaluation is done every week.
6. Advice given when the evaluation process is to save budget funds raw material left over from the purchase of raw materials.

2.3 Analysis of Budget Management

Here is the analysis of management of the budget contained in the Sambel Hejo restaurant.

2.3.1 Analysis of Budget Planning

In the planning stage, the first thing to do from an analysis of PDCA is a budget plan. The budget plan is to be achieved is to prevent raw material expenditure budget is too big or too little.

2.3.2 Analysis of Budget Execution

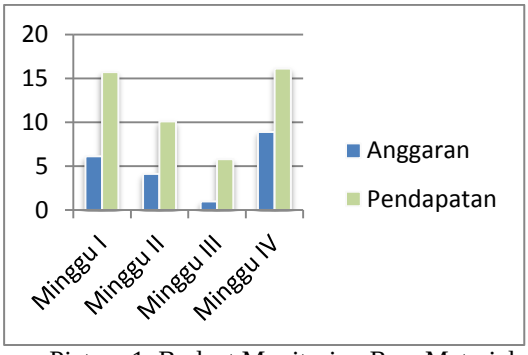
During the implementation phase things done is to budget funds the provision of raw materials to meet the budget targets of raw materials.

Table 1. Target Budget Raw Materials Period July 2015

No.	Period (July 2015)	Target Budget
1	Week 1	4.092.190
2	Week 2	3.762.242
3	Week 3	3.352.098
4	Week 4	1.994.435

2.3.3 Analysis Examination of Budget

In this stage of the examination, the thing to do is keep an eye on the result of the purchase of raw materials. In interviews with the Finance Department, the maximum percentage of the budget targets in the RM of raw materials is 30%. The process of monitoring the results of the purchase of raw materials using a graph with two pieces of the curve. In this graph, the x-axis is the inspection period for one month and the y-axis is the target budget of raw materials in rupiah (IDR). Indicators in the process of budget planning control of raw materials, namely raw material expenditure budget targets.



Picture 1. Budget Monitoring Raw Materials

Figure 1 is a picture of the check / monitoring budgets raw materials. Where the blue bar is the budget of the raw material and the bar is colored green is the realization of income, with the x-axis is the period (per week) while the y-axis is the revenue / budget. Percentage of targets obtained from the realization of the target divided and multiplied by 100%. Case in point, in the period from the first week of July 2015 had a budget plan of raw materials amounting to Rp. 4,093,290.000 while the realization of the revenue generated Rp. 3,726,000.00. Percentage of budget attainment of raw materials can be calculated by :

$$Percentage\ Budget\ Raw\ Materials = \frac{realization}{plan} \times 100\%$$

$$Percentage\ Budget\ Raw\ Materials = \frac{2.726.000}{4.092.190} \times 100\%$$

$$Percentage\ Budget\ Raw\ Materials = 66{,}62\%$$

From the above calculations it can be concluded that the percentage of the target for the first week in July 2015 was 66.62% Percentage of raw material expenditure budget of more than 50% in the period, the first week of July 2015 already meet the expenditure of raw materials that have been planned at the beginning.

2.3.4 Analysis Evaluation Budget

In the evaluation process, the target budget of raw materials to do is to evaluate the results of the monitoring that has been done. Evaluation is done every week the following week. If the budget exceeds the budget funds raw materials that have been planned in the beginning, it must be re-spending of raw materials. However, if the raw material expenditure budget is less than the budget that had been planned, the funds will be restored so that it can be used when needed. Based on the percentage of the budget that has been obtained, because the percentage of the budget belanjayang gained more than 50%, the excess budget funds will be deposited in cash restaurant.

Case in point, the results of the monitoring conducted at the stage of examination, evaluation conducted in each week.

Table 2 Evaluation Budget Raw Materials

No.	Period (Juli 2015)	Evaluation Result (%)	Action
1	Week 1	10,7	funds saved
2	Week 2	33	requesting funds
3	Week 3	19	funds saved
4	Week 4	19,8	funds saved

Conclusions from the evaluations conducted in July 2015 that RM will save funds remaining budget for the next budget needs raw materials due to the percentage of raw material expenditure of less than 30%.

2.4 Raw Material Inventory Management Analysis

Here is the analysis of inventory management of raw materials contained in the Sambel Hejo restaurant.

2.4.1 Analysis of Raw Material Inventory Planning

In the planning stage, inventories of raw materials most used will do the experiment. Case in point, in the first week of June 2015.

Raw materials used in the forecasting process for the purchase of raw materials only raw materials of the most widely used is chicken. By looking at the results of the chicken raw material purchase, the purchase of raw materials to meet the raw material supply of chicken in the kitchen is as much as 78 kg.

Table 3. Purchasing Raw Chicken

No.	Period (Juli 2015)	Quantity (kg)
1	Week 1	78
2	Week 2	60
3	Week 3	25
4	Week 4	63

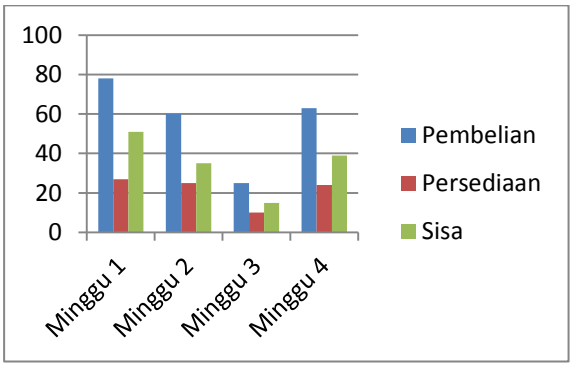
2.4.2 Implementation Analysis Raw Material Inventory

During the implementation phase, the thing to do is to purchase raw materials. The process of purchasing raw materials in Sambel RM RM Hejo done before the clock opened. Conditions of purchase of raw materials is to look at the conditions of supply of raw materials, the remaining 25% of raw materials available in the kitchen

In July, the Purchasing Section must buy at least 78 kg of chicken to meet the raw material inventory in the first week.

2.4.3 Analysis of Raw Material Inventory Inspection

At this stage of the examination, the thing to do is check the amount of raw material inventory and comparing with the purchase of raw materials which have been determined in June 2015. At this stage, monitoring inventories of raw materials, if the supply of raw materials began to thin, then the Purchasing will make a purchase raw materials back. The indicators used in monitoring the purchase of raw materials is the remaining stock of raw materials. Here is an example of an examination conducted in June, 2015.



Picture 2. Monitoring Inventory Raw Chicken Month July 2015

In the monitoring process will be evaluated by calculating the percentage ratio between the results of the purchase with the conditions set. Example: Evaluation of the first week.

$$\frac{\text{the rest of the supply of raw materials}}{\text{inventories of raw materials}} \text{ x } 100\%$$

$$= \frac{51}{27} \text{ x } 100\% = 18{,}9\%$$

In the first week of evaluation can be seen that the rest of the stock remained above the provisions of the stock should be available, so that they meet the required raw material inventories in the week.

2.4.4. Analysis of Raw Material Inventory Evaluation

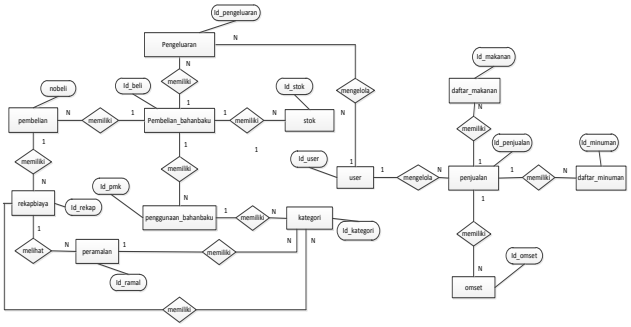
In the evaluation phase ie the stage to take action on the results of evaluations that have been done. If the rest of the raw materials contained in the kitchen above 25%, the system will provide information that the raw material is still sufficient, if the rest of the raw material is below 25%, the system will provide suggestions to make the purchase of raw materials. Here is a table of the results of evaluations carried out during the monitoring phase.

Table 4. Evaluation of Purchasing Raw Materials

No.	Evaluastion Result (%)	Action
1	18,9	Make purchases of raw materials, because the stock <25%
2	14	Make purchases of raw materials, because the stock <25%
3	15	Make purchases of raw materials, because the stock <25%
4	16	Make purchases of raw materials, because the stock <25%

2.4 Analysis database

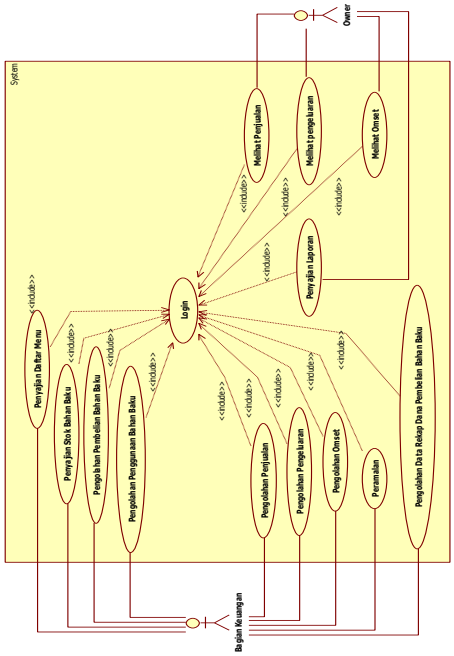
Modeling database analysis in constructing the system uses the Entity Relationship Diagram (ERD). Here are the ERD and the cardinality:



Picture 3. ERD system built

2.5 Functional Needs Analysis

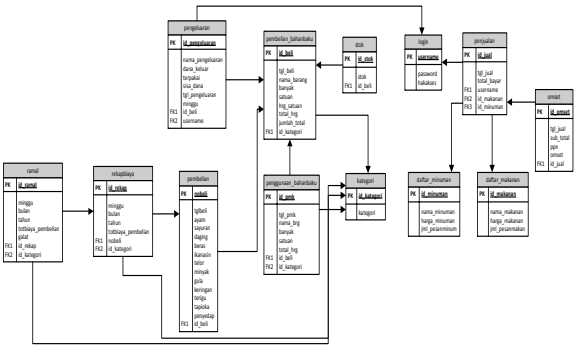
*Use case diagram f*or the overall process is the financial system:



Gambar 4.*Use Case Diagram* Financial system

2.6 Data Design

The design of the data of the development of this system can be seen in the following relation scheme:



Picture 5. Relation Schemaof system

2.7 Black Box Examination

Scenario testing is used to describe the testing of a system. This scenario describes the order and what to test, performed on the system. The test scenarios were performed on this system are as follows:

Tabel 1. Examination Scenario

Components tested	points Testing	types of Tests
Add List Menu Foods	Adding food menu list data	*Black box*
Change List Menu Foods	Editing food menu list data	*Black box*
Clear List Menu Foods	Removing data daftar menu makanan	*Black box*

Based on the results of tests performed it can be concluded that the Financial SIM built already works quite well and as expected, but did not rule out errors may occur at any time during the system.

3 CLOSING

Based on the results of the implementation and tests performed on the financial system, it can be concluded as follows:

1. The financial management information system that is built has not been able to assist the Finance Division in monitoring the expenditure of raw materials well, because there are shortcomings in the existing functionality in the system.
2. The financial management information system that is built is quite easy Purchasing Section in monitoring the supply of raw material procurement restaurant.

The suggestions for the further development of the financial management information system are as follows:

1. The addition of the management of financial information systems will be better when added processing of employee data so that it can manage payroll for employees directly from the system.
2. The existing information system can be developed with ¬client-based server.
3. The existing information system can be developed in order to facilitate the integration of web-based information systems where the company already has many branches.

BIBLIOGRAPHY

[1] Jogiyanto, *Analisis dan Desain Sistem Informasi*. Yogyakarta: Andi, 2005.

[2] R McLeod, *Sistem Informasi Manajemen*. Jakarta: Bina Alumni Indonesia, 2000.

[3] A.M. Kadarman and Jusuf Udaya, *Pengantar Ilmu Manajemen*. Jakarta: PT Gramedia Pustaka Utama, 1991.

[4] George M. Scott, *Sistem Informasi Manajemen*. Jakarta: PT. Raja Grafindo Persada, 1994.

[5] Skousen and Skousen, *Intermediate Accounting*. Jakarta: Salemba Empat, 2007.

[6] Djarwanto, *Siklus Akuntansi*. Yogyakarta: Liberty, 1995.

[7] Suagra, *Dasar Pemrograman Komputer dalam Bahasa Java*. Yogyakarta: CV. Andi Offset, 2009.

[8] S. Dharwiyanti and R. S. Wahono, "Pengantar Unified Modelling Language (UML)," *IlmuKomputer.com*, 2003.