INTEGRATED CLIENT-SERVER BASED FINANCIAL DATA PROCESSING SYSTEM FOR BMT BINA ARTHA MADANI

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ABSTRACT

This financial data processing system was constructed to assist in the processing of financial data in BMT Bina Artha Madani. This system needs to be built since business activities in BMT Madani Bina Artha are increasing.

This system is divided into several types of data processing: customer data processing (saving and loans), financial data processing, and user data processing. Each data processing access rights are divided into three levels of users.

Results from testing of the system shows that the system has been built to meet the required needs of the BMT Madani Bina Artha Madani.

1. INTRODUCTION

1.1 Problem Formulation

How to build an integrated information system capable of processing the transactions data, customer administration and financial data for the BMT Bina Artha Madani.

1.2 Mean and Objectives

The purpose of writing this final task is to build an information system that could handle the administration of data processing and customer transactions and financial data in an integrated manner at BMT Bina Artha Madani.

The objectives to be achieved from the writing of this thesis is as follows :

1. To help speed up the transactions data processing and customer administration at BMT Bina Artha Madani.
2. To meet the demand from BMT Bina Artha Madani, namely changing the previously manual information system into an integrated information system.
3. To make the data change process becomes fast, precise and efficient, and can be accessed by multiple users in accordance with its access rights.

3.3 Benefits

The benefits of making this application include:

1. Faster transactions data and customer administration data processing at BMT Bina Artha Madani.
2. Information system owned BMT Bina Artha Madani changed into an integrated information system..
3. Data change process becomes faster, precise and efficient, and can be accessed by multi-user with correct access rights.

2. METHODS, ANALYSIS, DESIGN AND IMPLEMENTATION

2.1 Methods

1. Data collection stage
   a. Literature studies
   b. Interviews
   c. Observations
2. Software development stage

a. System engineering
b. Requirement analysis
c. Design
d. Coding (implementation)
e. Testing
f. Maintenance

2.2 Problem Analysis

From the results of data collection, the following things are obtained:

1. BMT Bina Artha Madani store customer data in the form of paper files and documents.
2. BMT Bina Artha Madani rely on Microsoft Excel to store and process the customer transactions data, and to store and process financial data and financial reports.
3. BMT Bina Artha Madani wanted to improve their system by building a new information system capable of functioning as required.

2.3 Design

1. ERD (*Entity Relationship Diagram*)

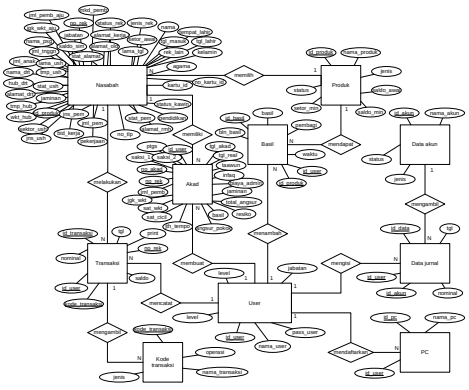


Figure 1 ERD (Entity Relational Diagram)

2. Table relationship scheme

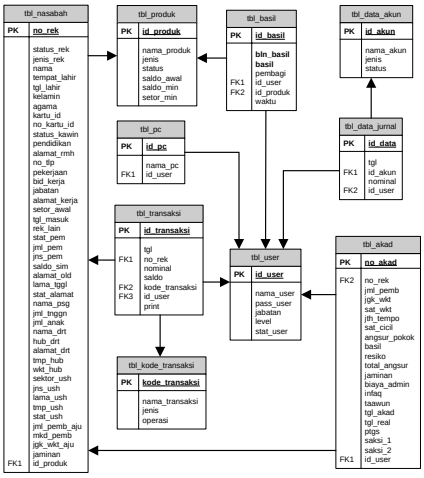


Figure 2 Table relationship scheme

3. Context diagram

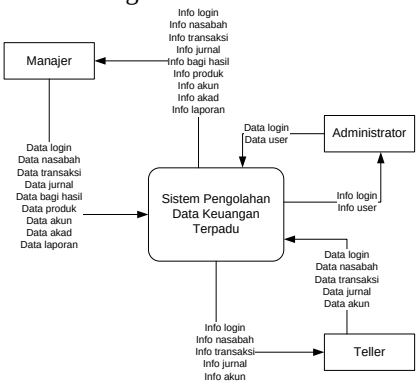


Figure 3 Context Diagram

4. Level 1 DFD

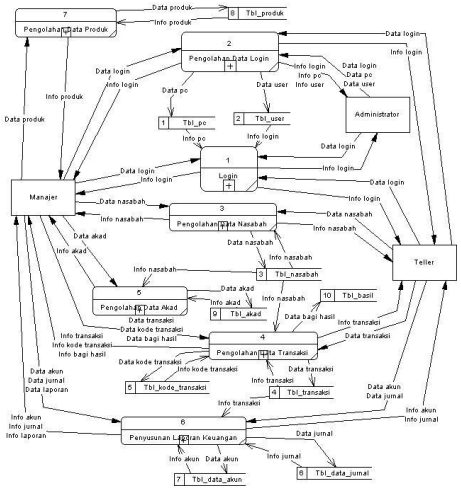


Figure 4 level 1 DFD

2.4 Implementations

1. Software Implementation

Software specifications that are used in building the financial data processing system are as follows:

1. *Microsoft Windows XP Professional SP3* as operating system.
2. *Adobe Dreamweaver CS3* as developers application.
3. *WampServer 2.0i* applications that are bundled with the application server application server *Apache 2.2.11*, *PHP 5.3.0*, and database management system *MySQL 5.1.36*.
4. *Mozilla Firefox 3.5.3* web browser that has *Adobe PDF 9.1* plugins.

2. Hardware Implementation

Hardware specifications used in building the financial data processing system is a laptop PC with the following specifications:

1. Prosesor *Intel Core 2 Duo 2 GHz*
2. Memory 1 GB
3. Harddisk 160 GB
4. Onboard network adapter *Realtek RTL8168/8111*.

3. Hardware Implementation

1. Login page

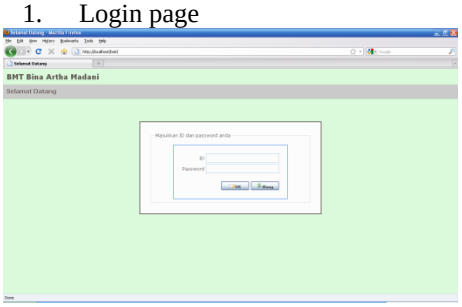


Figure 5 Login page

2. Saving customer data add form

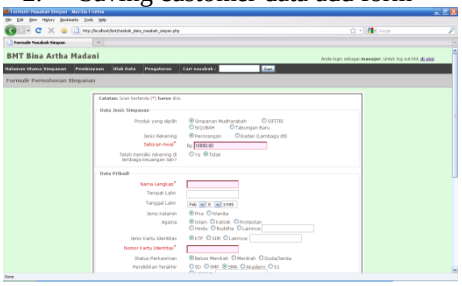


Figure 6 Saving customer data add form

3. View saving customer data

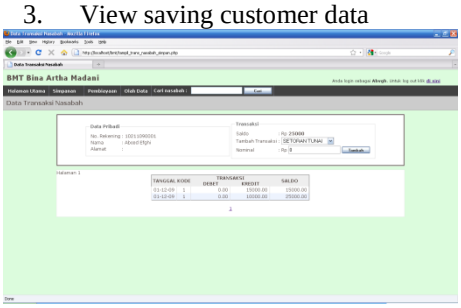


Figure 7 View saving customer data

4. Loan customer data add form

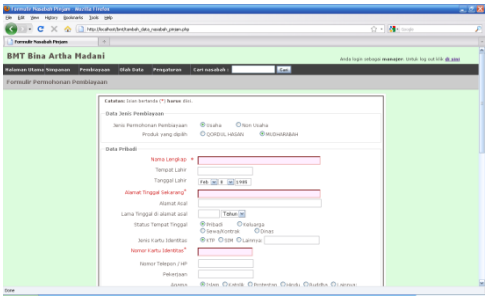


Figure 8 Loan customer data add form

5. Loan agreement data form

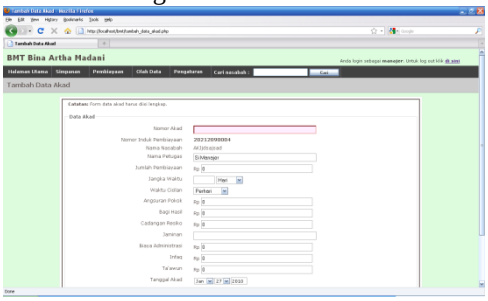


Figure 9 Loan agreement data form

6. Product data form

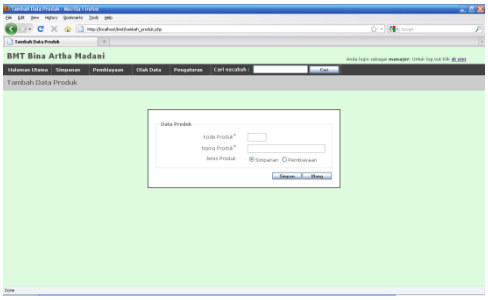


Figure 10 Product data form

7. Transaction data form

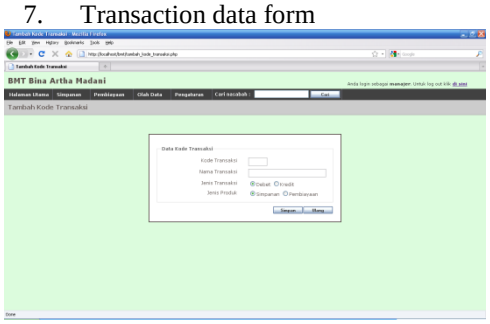


Figure 11 Transaction data form

8. Report view

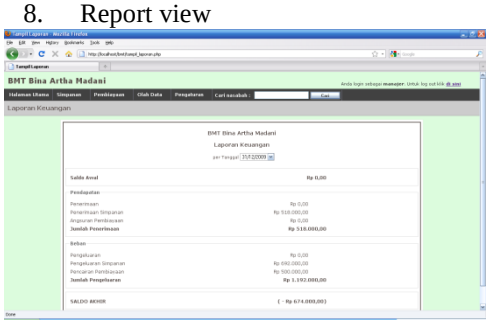


Figure 12 Report view

3. TEST RESULTS

From the results of alpha and beta testing, it was concluded that the system of integrated financial data processing have been built to help meet the goal of accelerating the process of transactions and customers administrative data processing, changing from manual systems into an integrated information system, and make the data change process becomes more rapid, precise and efficient.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

1. This information system can process customer data and financial data BMT Bina Artha Madani more easily and quickly.
2. The information system created can provide customer data and financial data more quickly.
3. This information system can generate financial reports more quickly.
4. From the conclusion of the test, the system has outputs as needed.

4.2 Suggestions

1. The system does not have any automatic data backup and data restore.
2. A Microsoft Excel data import should be added, considering that Excel data format was used in the previous system.
3. Further development can be done to add a decision-making system to help analyze the feasibility of a potential loan customer.

5. REFERENCES

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