

Information System Design Of Goods Stock Using Framework For The Application Of System Thinking (FAST) Method (Case Study CV. Aneka Mandiri Lestari)

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ABSTRACT

CV. Aneka Mandiri Lestari constitutes resulting company earth. Current stock management processes that are running in the CV. Aneka Mandiri Lestari is still done in a simple to use computer tool. However, systems that use has not been specifically designed for the purposes. Some data related to the management of the stocks on CV. Aneka Mandiri Lestari still organised and recorded using book so difficult in the process serving and reporting information associated. Information systems Design of goods stock It is a system that can handle the problem of inventory items, including the recording of incoming goods, against goods that come out, the purchase of raw materials, goods that are in the warehouse, and also reporting. This information system architecture using the FAST (Framework for the Application of System Technique) method. Based on the results of the functional testing, obtained that 100% of the system is valid. While the results from testing the usability, for the ease of use factor of 65% and activities of the experiment system based on scenario 85.5% of respondents strongly agree to ease of use this system. So from the test results it can be concluded that by using this stock information system can make CV Aneka Mandiri Lestari in the running of its business processes and systems that have been built can be received by users. To assist in processing stock items and sales generated a new system design, i/o design, database design and systems built using Visual Basic.Net The results of the data processing system of the manufacture and distribution of stock this stuff makes it easy for employees to entry, fix (edit), erase (delete), and search (searching) data reception and spending on goods, so as to facilitate in reporting revenue and expenditure items

Keywords: goods stock, FAST

1. Introduction.

CV. Putra Aneka is a company engaged in the field of the .Adress of CV. Aneka Mandiri Lestari at Pulau Batam V Street wayhalim Permai Bandar Lampung. CV. Aneka Mandiri Lestari It has a very competitive price, so it's only natural if these products are now increasingly in demand in the market and more and more sought after consumers. Currently the total turnover CV. Aneka Mandiri Lestari area of Bandar Lampung has climbed above us \$80 million per month

In an effort to ensure the availability of products in order to meet the needs and demand of the consumer, then the

CV. Aneka Mandiri Lestari must be able to manage the stock of its products effectively and efficiently.

The current process of the management of the stock and distribution of products that run on CV Aneka Mandiri Lestari still be done simply

using computer tools, but the system has not been used is designed specifically for such purposes. Some data related to the management of the stock and sales at CV Aneka Mandiri Lestari still organized and recorded using book so difficult in the process serving and reporting information associated. Given the importance of the process of management of stock products on CV Aneka Mandiri Lestari Hence the need for the development support system related to the process in order to simplify and improve the performance of CV Aneka Mandiri Lestari especially in the part related to the management of the stock of the company's products. Based on the background above, it needs to be built an information system data processing stock items on

CV. Aneka Mandiri Lestari .

1.2. Formulation Of The Problem

How to build information systems processing stock items resulting in more effective and efficient.

1.3. Scope of Problem

In order that this research is not expanded, then restricted to stock management of architecture product

CV Aneka Mandiri Lestari, ranging from sales to product acceptance process with its distribution

1.4. The purpose and benefits of Research

1.4.1. Research Objectives

The purpose of this research is to help

CV. Aneka Mandiri Lestari in building the information system required in the process of the management of the stock of products.

1.4.2. The Benefits Of Research

As for the benefits of this research are:

- a. Improving the performance of employees in the management system of the stock of the product on CV Aneka Mandiri Lestari
- b. Simplify and accelerate the process of reporting and presenting information related to the management of the stock of the product on CV Aneka Mandiri Lestari
- c. Increase the accuracy of the information generated relating to the management of the stock of the product on CV Aneka Mandiri Lestari.

II. The Cornerstone Of The Theory

2.1. System Development Methodology

Phases in performing design method FAST is a way of knowing the problems that will arise, the problems that arise can be known the existence of the input data in the form of goods and the type of produce. After there is input then there will be a process i.e. data processing of the goods in accordance with the kind of results the Earth. Once there is a business process then proes last is output where there will be a report from data input items and

produce the kind of. After obtained the company's business process, the next step that is creating a framwork for the application of the system technology i.e. making scope definition i.e. do pendifinisian the scope of the design of the application, problems analysis that is defining the scope of the problem in the development of applications using the tools PIECES (Performance, Information, Economy, Control, Efficiency, and Service) dan Cause and Effect Analysis, next in FAST requirement analysis where the system needs to be determined either from a functional or non functional, the next logical design that serves as a means of making the model to describe the system as a network of functional processes that are connected to each other with the data flow, and the final physical design which is the stage of the translate logical design into the physical form of an application.

2.1 Programming Methodology Object Berioentasi object-oriented development strategy is a system of organizing the system as a collection object that contains the data and the operations that are enforced against him (Sukamto & Shalahuddin, 2014).

2.2 Framework the Application of System Thinking Framework Application of System Thinking or FAST is an intelligent framework flexible enough to provide for different types of projects as well as the strategy and practice of combined practice contains the use of system development method that can be found in many commercial and BGG method (Whitten & Bentley, 2007).

FAST composed of several phases, each phase produces a finished product that is used in the next phase. The resulting products in each phases documented forassist the development process. The number of phases used include phase 8, phase analysis and Design (definition of scope, an analysis of the problems, the needs analysis/requirements, logical design), a transitional phase (decision analysis), and implementation (design phase and the integration of physical, construction and testing, and installation and shipping).

Table 1. Fase FAST

FAST Phases	Classic Phases			
	Project Initiation	System Analysis	System Design	System Implementation
Scope Definition	X			

2.2.1 Scope Definition

The first phase on the FAST method definition scope or Scope Definition. This phase determines the size and limits of the project, the vision of the project, all restrictions or limits, the project participants needed, budget, and schedule (Whitten, et al., 2007).

2.2.2 PIECES Method PIECES It is the framework that is used for the classification of existing problems based on categories mentioned in the letter of each Performance, Information, Economic, Control, Efficiency, Service (Whitten & Bentley, 2007).

2.3 Problem Analysis

Problem analysis or the analysis of the problem is the next phase of definition of scope. Phase analysis of the problem of studying the existing systems and analyze the findings – findings to provide the project team with a deeper understanding of the problem of the issue will trigger the project (Whitten, et al., 2007).

2.4 Requirement Analysis

Requirement Analysis Fase next after the analysis of the problem is the analysis of requirements/needs or requirements analysis. This phase is very important in creating a new information system. The new system will always be evaluated, especially how great the requirements have been met by the system. Therefore, this phase may determine the requirements in a new system.

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2.8 Information Systems

Information system is a system in an organization to meet the needs of daily transaction processing support functions of the nonprofit organization managerial operations with the activities of an organization to be able to provide the necessary reports by outside parties.

information systems can be defined as follows:

1. System made by a human being consists of the components in the Organization to achieve a goal that is presenting the information.

2. Set of procedures carried out at the time the Organization will provide information for decision makers and/or to take control of the organization.

3. A system in an organization to meet the needs of transaction processing, supporting operations, managerial in nature, and the activities of the strategy of an organization and provides a certain outside parties with the necessary reports.

2.9 Data Flow Diagram (DFD)

is a graphical representation that illustrates the flow of information and the transformation of information is applied as the data flows from the input (input) and output (output). " There are several stages of design using DFD, namely: context Diagram: Context Diagram is part of a data flow diagram that function to map a model environment, presented with a single circle that represents the whole system. Rosa dan Shalahuddin (2013:70).

1) DFD Level 0: DFD Level 0 explain or elaborate on some of the activities or processes on the diagram context.

2) DFD Level 1: DFD Level 1 is used to describe the process which need to be developed from DFD Level 0 highly depends on the level of the process. The addition of each level is only done when necessary. When the process is enough detail and detail, then the process does not need to be developed more.

2.10 Visual basic. Net

A Programming language and as the means (tool) to generate a windows-based application programs. Some of the abilities or the benefits of Visual Basic include:

1. To create a windows-based application programs.

2. To make the objects helper programs, such as Active X Control, Help files, Internet applications and so on.

3. Test program (debugging) and generate the final program ends with "EXE" executable that is or can be directly executed.

2. Research Method.

Research methodology is a mechanism used in the completion of a research problem and can explain the methods used during this research. Stage used in this research is the study of literature, observation and data collection, analysis of the scope, definition of problems, needs analysis, logical design, testing, and the conclusions and suggestions.

3. Discussion.

4.1 THE BUSINESS PROCESS

Stock items information system is a system that was built to facilitate the management of data on CV. Aneka Mandiri Lestari. This system can be utilized to help the decision

making process for the procurement of goods. At first, the administrator must login first to be able to access the system. After that an admin can menginputkan data suppliers and data items. When there are transactions procurement of goods from the supplier admin daoat menginputkan transaction process in the form of no-receipt, item code, code supplier, the amount of the goods and the overall price of goods. If any items are damaged or whether it came out for sale, Admins can update the data stock items with menginputkan in the form of goods out. After an update, the admin can find out the amount of stock owned. Admin can create reports per unit time, In the scope definition will be defined the scope of information systems application architecture stock items to be created. The next stage is the problem analysis. The purpose of the analysis of the problem is studying the problems that occur. Stages does is define the problem using Cause and Effect Analysis. The goal of problem analysis is the study of the problems that occur. Stages does is define the problems using tools Cause and Effect Analysis.

Table 2 Cause and Effect Analysis

CAUSE AND EFFECT ANALYSIS	
Problem or Opportunity	Causes and Effects
Manual systems are unable to provide quick information to the admin to manage your data stock items and information needs of the warehouse	Manual systems cannot provide fast informasiyang to admin in terms of granting of stock items and info needs warehouse.
Difficult to find the archives and history come out and the entry of goods	Systems that do not neatly stored so that the difficulty experienced in history_data information find out incoming goods

4.2 Desain of Context Diagram

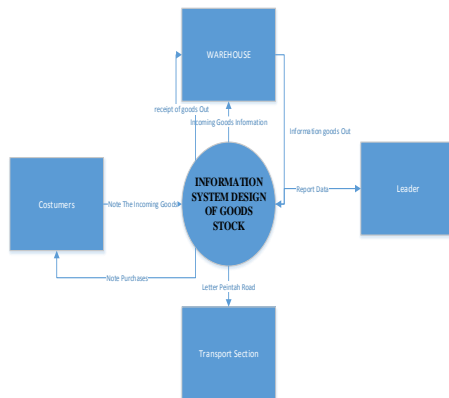


Figure 1 Diagrams Kontext Design

4.3 Desain Database

The proposed database in the application of data processing revenue and expenditure items can be shown in the picture below.

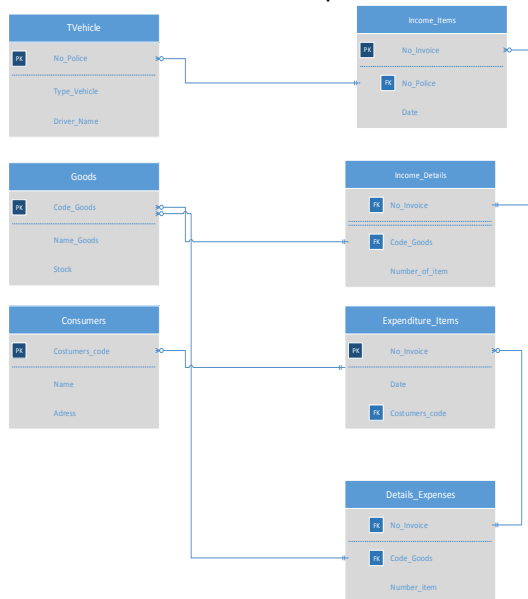


Figure 2 Database design

4.4 Transaction Menu Display

The following menu display the main transactions in the system

Figure 3 Transaction transaction Menu

4. Conclusion.

Based on the conclusions above suggest that CV. Aneka Mandiri Lestari:

1. Optimize the system program used and to avoid mistakes, should provide training to the user who will operate the system.
2. The use of computers to better harnessed as well as improved human resources enhanced
3. The need for back-ups (backup) data on other storage media such as compact disks, and also backup the data in the form of files – files to keep the possibility of missing data. Such damage to the hard drive and the data stored is damaged or lost due to infected computer.

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