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WEB-BASED INFORMATION SYSTEM FOR OFFICE EQUIPMENT AND INVENTORY PROCUREMENT AT BANK MANDIRI JAKARTA PUSAT

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Abstract

The manual procurement system for office stationery and inventory that has been felt so far has many shortcomings and is less effective and more time consuming, so it is necessary to develop effective and efficient goods management activities by building a procurement management information system through a web-based application, the use of which can be automatically and more familiar or very easy for the user. So the purpose of this system is to make it easier for Bank Mandiri staff to systematically monitor the procurement of equipment and investments. Interview is a process of communication or interaction to collect as much information as possible by means of question and answer. The Information System for the Procurement of Office Stationery (ATK) and Inventory has a system that automates the internet network so that it is safer and creates efficiency. Controlled the stock of incoming and outgoing goods. Facilitate monitoring of procurement and inventory data for Office Stationery (ATK) and inventory for decision making in management.

Keywords: *Equipment, Management, Web*

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INTRODUCTION

Information systems and technology in the current era are developing rapidly and are very modern. The company is expected to pay attention to and consider information systems and technology in every aspect for the advancement of its business in creating a strong and healthy business strategy, as well as innovative and creative products or businesses (Mardiana, 2021).

Companies in the business world, especially in the trade sector, currently require an information technology system as a support in every line of work unit that is useful for expediting and supporting the company's operational activities optimally and maximally. One of the good support systems is the existence of an information technology system that is in accordance with business needs and technological advances. A fast and accurate data processing information system is needed by various parties in the business world. Especially in the banking sector, procurement information systems are generally needed to accelerate the completion of administrative work in the procurement unit, designing a web-based information system as a solution to problems that arise from manual data processing. By changing the system to be computerized, it is hoped that inventory management will be more effective and efficient, the

presentation of inventory reports will be more accurate and timely (Setiawan, Arifin, & Asiyah, 2020).

PT. Bank Mandiri is a dynamic and modern bank. Almost all work is supported by a computerized system, but there are certain parts in the process that are still manual, the obstacles that are often found here are often lack of stock control and the process of recording receipts and expenditures of goods is not controlled so that the existing data and stock do not match.

A system is needed that makes it easier to procure these spare parts. Because PT. Mainstay Chrisdeco has several branches in different cities, so you *internet* and websites to implement this system.

Information systems that support the performance of an agency will be carried out properly and can handle various data processing using information technology. The information system is made to facilitate the management and accuracy of data storage so that it can produce precise and accurate information. The existence of a precise and accurate information system can reduce the occurrence of unwanted errors so as to improve more efficient performance and operational speed in an agency.

According to (Winarso & Arribe, 2017) "The system is basically a group of elements that are closely related to one another, which function together to achieve certain goals".

Definition of Information

According to Shomad in (Muslihudin, 2016) states "information is data that has been processed into a form that has meaning for the recipient and is useful for current or future decision making".

Definisi Sistem Informasi

According to (Maulana, Sadikin, & Izzuddin, 2018) revealed that "Information systems can be defined as a system within an organization which is a combination of human (HR), facilities, technology, media, procedures, and controls aimed at obtaining important communication lines, processing certain types of routine transactions, signaling to management and others on important internal and external events and provide an information basis for making sound decisions. Information is obtained from*information systems*or also called processing systems or *information processing systems.*".

Defenisi Web

According to (Julianti, Budiman, & Sopyan, 2017)“ Website is a component or a collection of components consisting of text, images, animated sound so that it is more of an interesting information medium to visit.

Definisi HTML

According to (Oktavian, 2013) in "*HTML (Hyper Text Markup Language)* is a language recognized by *web browsers* to display information more attractively than plain text writing".

Definition Database

Database shared *database* structured and unstructured database used as a place for permanent documentation to capture business transaction processing activities. *database* can be defined as an institution or a collection of data using a *database* that is supported by the concepts of Data *Manipulation Language*- DML and Data *Definition Language*- DDL. Where DML describes the manipulation process that uses SQL instructions such as insert, select, delete, update, etc., while DDL is a *database* that uses SQL instructions such as *table, create, drop table,* and others.

Definisi MySQL

According to Raharjo in (Siregar, Siregar, & Melani, 2018) "MySQL is a multi-threaded, multi-user SQL database management system or DBMS software. Used in storing and processing databases on computer applications.

Definisi PHP

According to (Shomad, 2019) "Hypertext Preprocessor is a scripting language that can be embedded or embedded into HTML".

Definisi CSS

According to (Ali & Ambarita, 2016) "CSS or Cascading Style Sheets is a document that contains rules that are used to separate content from layout in web pages that are created".

Definisi Xampp

According to Shomad (Lestanti & Susana, 2016) "XAMPP is a tool that provides software packages into one package. Packages. By installing XAMPP, there is no need to manually install and configure Apache, PHP and MySQL web servers.

METHOD

Data Collection Data

collection methods include:

1. Interview is a process of communication or interaction to collect as much information as possible by means of question and answer.
2. Observation. According to (Indiharto, Hilda, & Avorizano, 2016) "This technique is a technique of obtaining primary data by observing directly the data object under study".

Research Materials and Tools

Software

1. *Windows XP / 7 operating system*
1. *Google Chrome*
2. *Web server XAMPP (Apache, MySQL)*
3. *HTML, PHP, SQL and CSS*
5. *PhpMyadmin Vers 2.11.3*

Hardware

1. Processor Intel Core i5 2.0 GHz
2. Intel HD Graphics 3000
3. 15.0 HD LED LCD
4. RAM 4GB DDR3.
5. 500GB hard disk.
6. Optical Mouse
7. PS2 Keyboard 107 Keys

RESULT AND DISCUSSION

Current System Document Specifications Current System

Document Specification is a discussion about the form of the current system documents which are carried out in the warehouse procurement process. The current system specifications consist of input documents and output documents.

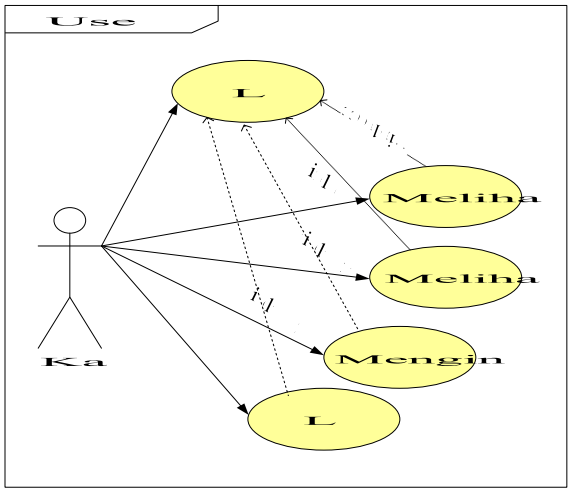

Figure 1. Flowchart Sistem Yang Berjalan

Stages of Analysis

Stages of Analysis of Information Systems for the procurement of Office Stationery (ATK) and Inventory at PT. Bank Mandiri TBK, covering the initial need for employees to use ATK continuously and Customer Service Administrative (CSA) who can immediately order goods that are not available or has gone to the supplier.

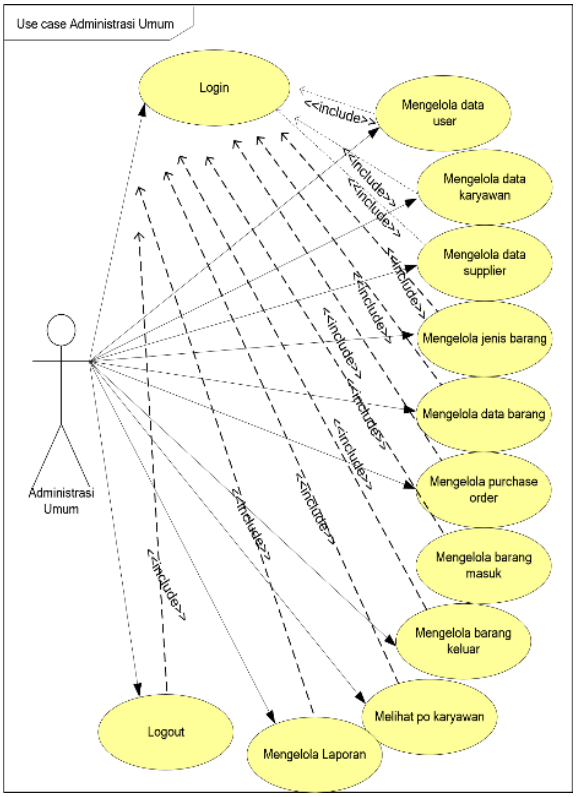

Figure 2. ***System Flowchart Proposed***

SYSTEM DESIGN

Activity

diagram or activity diagram describes the workflow or activity of a system or business process.

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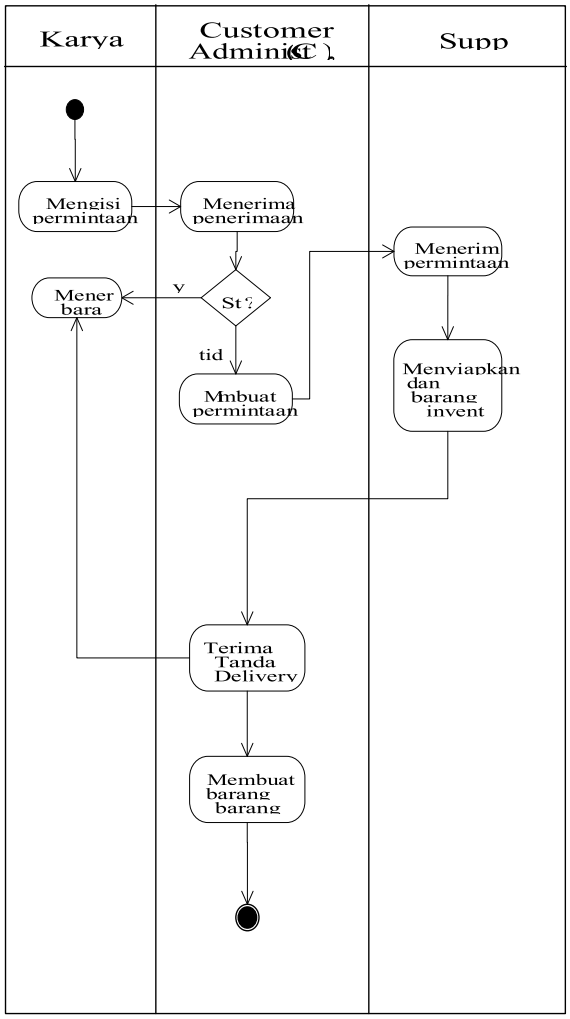


Figure 3. Activity Diagram running

Logical Record Structure

Record Structure is "a system model depicted with an ER-diagram that will follow certain modeling patterns or rules in relation to conventions to LRS.

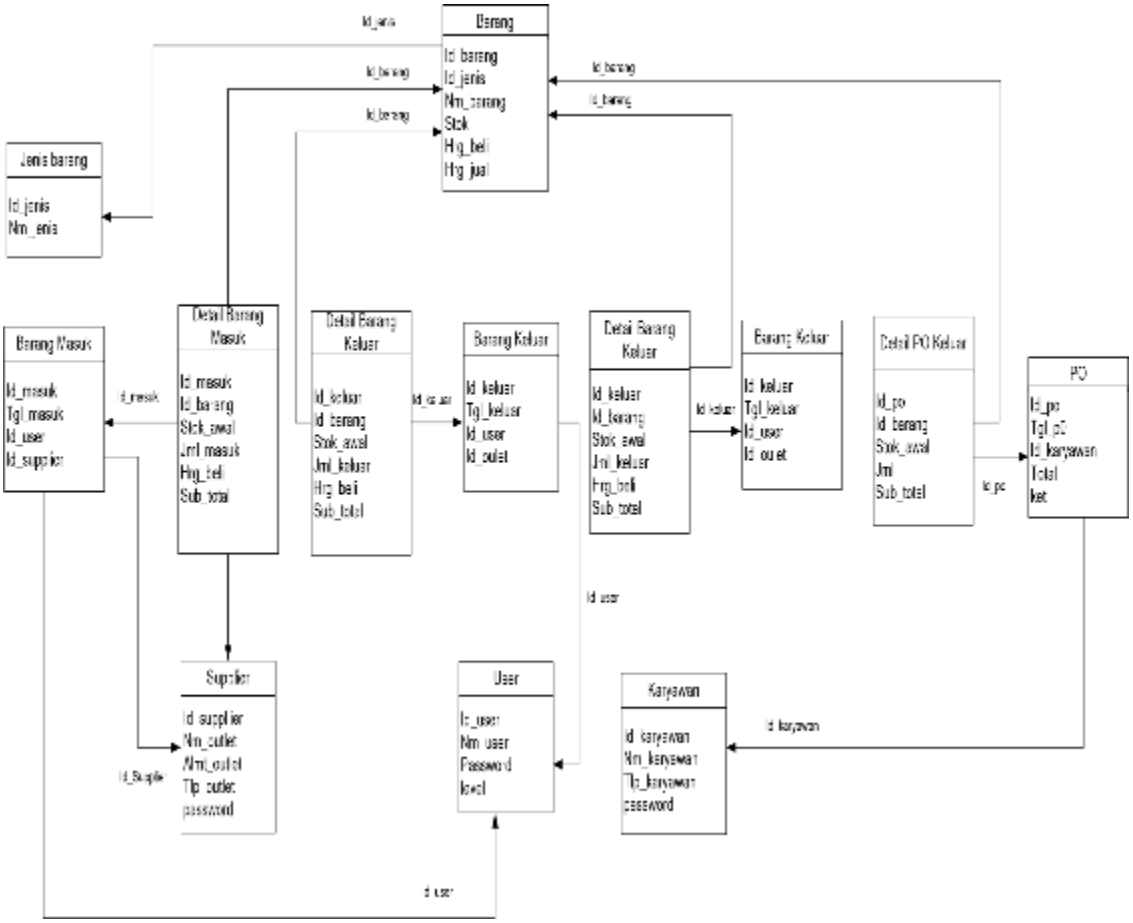


Figure 4 : *LRS* (*Logical Record Structure*)

ERD (entity relationship diagram)

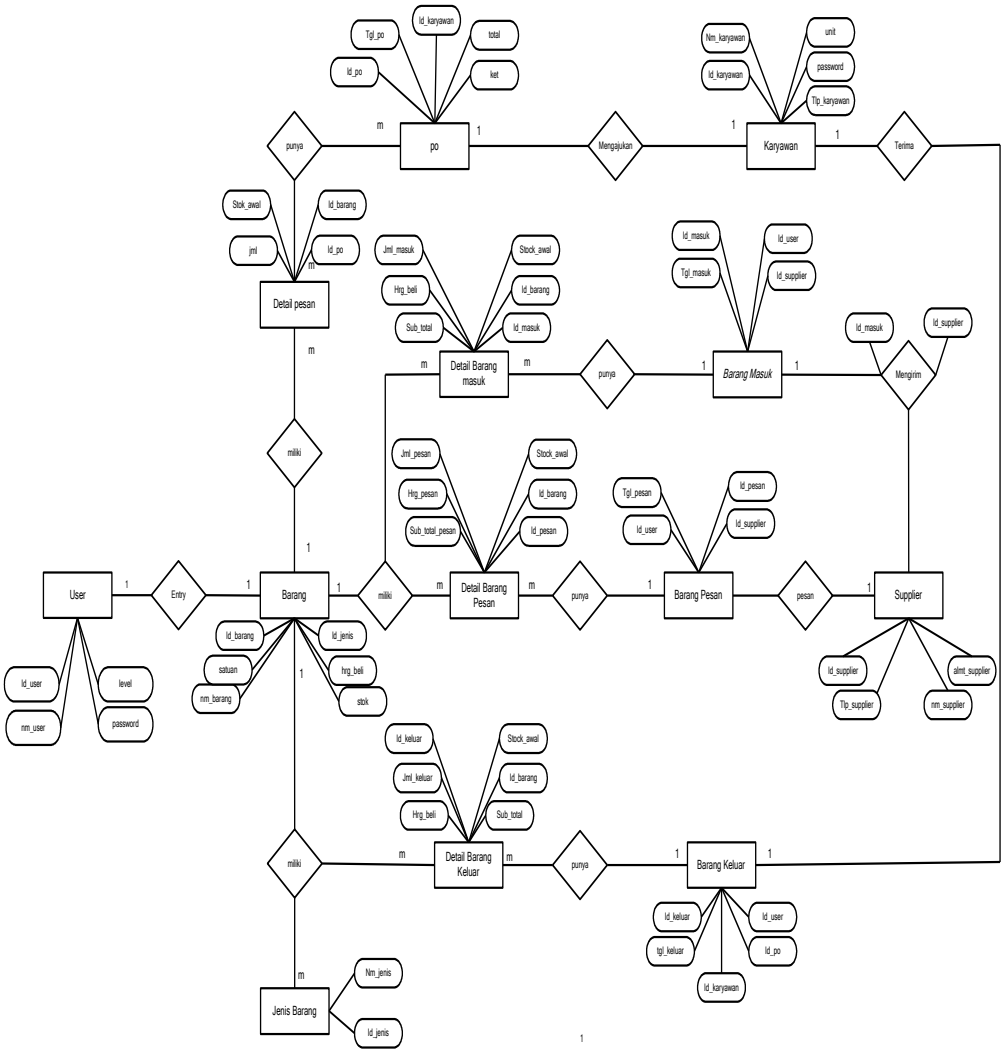


Figure 5. Entity Relationship Diagram

Table Design

Employee Table

No	Data Element	Name Field	Type	Size	Description
1.	Employee ID	id_karyawan	Varchar	16	Primary key
2.	Employee Name	Nm_karyawan	Varchar	30	
3.	Phone	Tlp_employee	Varchar	12	
4.	Password	Password	Varchar	6	

Supplier Table :

No	Data Element	Field Name	Type	Size	Description
1.	Supplier Identity	Id_supplier	Varchar	16	Primary key
2.	Supplier Name	Nm_supplier	Varchar	30	
3.	Supplier Address	Almt_supplier	Varchar	100	
4.	Tel Supplier	Tlp_supplier	Varchar	12	

Item Table

No	Field Name	Type	KdInventar	Description r
1	Sizeis	Varchar	10	Code (PK)
2	Kd_Barang	Varcha r	8	Code Item (FK)
3	Kd_Unit	Varcha r	8	Unit Code (FK)

4	Date	Varcha of	8	Date Inventory
5	Price	of Varcha r	12	Price

User table

No	Data Element	Field Name	Type	Size	Description
1.	User Identity	Id_user	Varchar	16	Primary key
2.	User Name	Nm_user	Varchar	25	
3.	Password	Password	Varchar	6	
4.	Level	_	Varchar	15	

Table of Specifications File Table of Item Type

No	Data Element	Field Name	Type	Size	Description
1.	Id Type	Id_Type	Varchar	16	Primary key
2.	Type Name	Nm_Type	Varcha	30	

Table Specifications File Table Items

No	Data Element	Name Field	Type	Size	Description
1.	Item Identity	Id_barang	Varchar	16	Primary key
2.	Type	Id_Type	Varchar	10	
3.	Item Name	Nm_barang	Varchar	30	

4.	Stock	_	Int	11	
5.	Purchase Price	Hrg_beli	Int	11	

Outgoing Items File Specification Table

No	Data Element	Field Name	Type	Size	Description
1.	Exit ID	Id_keluar	Varchar	30	Primary Key
2.	Exit	Date_out	Date		
3.	Id User	Id_user	Varchar	16	
4.	Id Po	Id_po	Varchar	30	
5.	Employee id	Id_employee	Varchar	16	

File Specification Table Outgoing Item

No	*Data Element*	*Name Field*	*Type*	*Size*	*Description*
1.	Number	No	Int	11	-
2.	Id Exit	Id_luar	Varchar	16	
3.	Item ID	Id_barang	Varchar	16	
4.	Initial Stock	initial_stock	Int	11	
5.	Number of Exits	Int_out	Quantity	11	

6.	Purchase Price	Hrg_beli	Int	11	
7.	Sub Total	Sub_total	Int	11	

Table of Specifications File Table of Items Entered

No.	Data Element	Field Name	Type	Size	Description
1.	Login ID	Id_enter	Varchar	16	Primary Key
2.	Date Entered	Date_Entrance	Date		
3.	User	Id_user	Varchar	16	
4.	Id Supplier	Id_supplier	Varchar	16	

File Specification Table Incoming Item Details Table

No	Data Element	Name Field	Type	Size	Description
1.	Number	No	Int	11	-
2.	Login Id	Id_enter	Varchar	16	
3.	Item ID	Id_barang	Varchar	16	
4.	Initial Stock Initial	Int	Stock	11	
5.	Number of Entry	Int_Number of	Int	11	
6.	Purchase Price	Hrg_beli	Int	11	

7.	Sub Total	Sub_total	Int	11	
8.	Time	Time	Timestamp		

File Specification Table Item Temp Detail Table

No	Data Element	Field Name	Type	Size	Description
1.	Number	No	Int	11	-
2.	Id Transaction	Id_trx	Varchar	30	
3.	Item ID	Id_barang	Varchar	16	
4.	Total	Quantity	Int	11	
5.	Price	Int	Price	11	
6.	Sub Total	Sub_total	Int	11	
7.	Time	Time	Timestamp		

The following is a program view of the proposal system:

1. Employee Login Page



Figure 1. Login Page Display

2. User Home Page

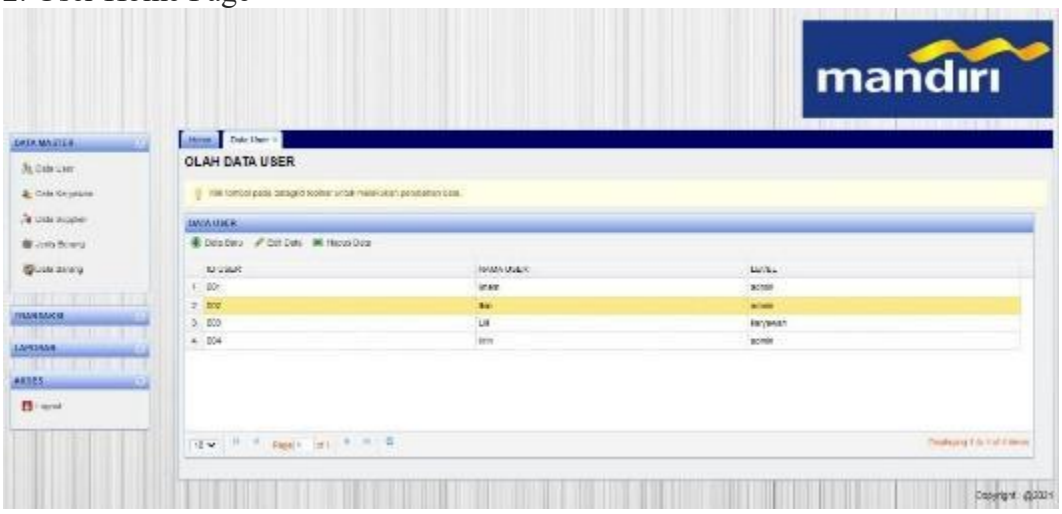


Figure 2. Employee Home Page Display

3. Goods Submission Page



Figure 3. Goods Submission Page Display

4. Admin Login Page



Figure 4. Admin Login Page Display

5. Admin Home Page



Figure 5. Admin Home Page Display

6. ATK Goods Data Page

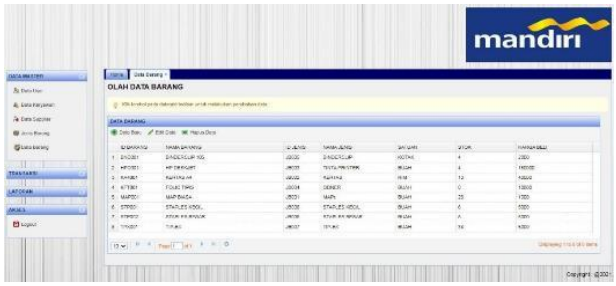
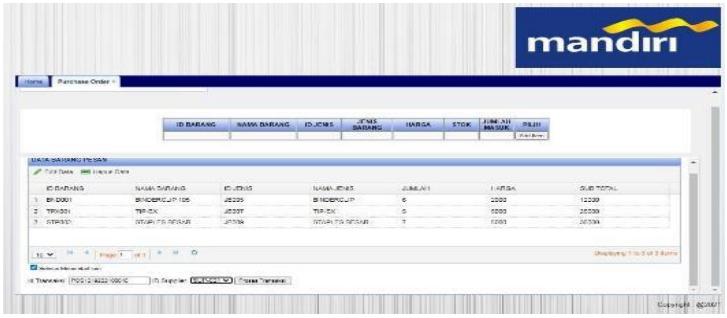


Figure 6. ATK Item Data Page Display

7. Purchase Order Items



Page Figure 7. Purchase Order Items

8. **Admin Login Goods Page**



Figure 8. Admin Login Goods Page Display

9. Admin Exit Goods Page



Figure 9. Outgoing Goods Page Display

10. ATK Goods Report Page

a. Incoming Goods Report



Figure 10. Incoming Goods Report Page Display

b. Outgoing Goods Report

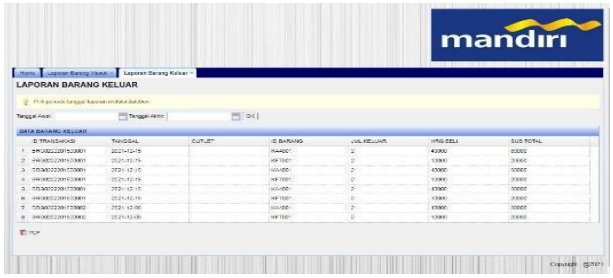


Figure 11 Display of Outgoing Goods Report Page

c. Stock Report



Figure 12. Inventory Report Page Display

CONCLUSION

Based on the descriptions in the previous chapters, the authors try to give some conclusions as follows:

The Information System for the Procurement of Office Stationery (ATK) and Inventory has a system that automates the internet network so that it is safer and creates efficiency. Controlled the stock of incoming and outgoing goods.

Facilitate monitoring of procurement and inventory data for Office Stationery (ATK) and inventory for decision making in management.

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