Information System of Office Stationery Inventory PT. Jagad Kreatif Nusantara

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Abstract

PT. Jagad Kreatif Nusantara uses the Microsoft Excel program to store inventory for office stationery, such as demand, expenditure, and stock data. That is why there are problems at PT. Jagad Kreatif Nusantara, namely difficulties in finding demand and expenditure data, difficulties in identifying initial stock, preparing reports that should be presented, and then compiling the appropriate information for the needs of inventory of ATK goods.

With the development of this Information System application, it is hoped that it can solve these problems. Besides that, the existence of a computerized system in presenting complete information and being able to access data and information quickly in terms of data processing, efficient in terms of personnel, and accurate in terms of information will make work easier.

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Keywords : *Inventory, Information System*

INTRODUCTION

The rapid development of technology is having a significant impact across various sectors, including the realm of employment within organizations. Computer-based information technology has enabled individuals to fulfill their operational requirements effectively. An enterprise that has yet to leverage information technology fully should consider implementing a novel system to supplant the existing system, which continues to pose challenges. Technology integration necessitates the implementation of various occupations, encompassing both the utilization and advancement of technology to facilitate work processes across diverse domains, particularly in information management. The current acceleration of scientific and technological advancements is predominantly shaped by the escalating influx of information across diverse domains. Efficient and accurate data collection is essential for obtaining the desired information, necessitating the provision of maintenance facilities, including computer equipment. Hence, implementing a computerized inventory system becomes imperative to facilitate data processing, stock identification, stock search, and information presentation.

PT. Jagad Creative Nusantara utilizes Microsoft Excel software to store and manage inventory data about stationery items, including demand, expenditure, and stock information.

One of the primary challenges encountered at PT. Jagad Creative Nusantara pertains to the acquisition of demand and expenditure data. This predicament arises due to using Microsoft Excel for data processing, leading to suboptimal outcomes. Specifically, the search for data is time-consuming and fails to meet expectations.

One challenge is accurately identifying the initial stock due to limitations in the Microsoft

Excel program. It is crucial to prioritize the accuracy of ATK inventory in stock, as it is imperative to ensure that the quantity of ATK inventory aligns with the initial stock. In addition, the task of retrieving up-to-date stock data is challenging due to the continued reliance on Microsoft Excel. In the context of stock management, final stock searches document stock replenishment activities, particularly when it comes to maintaining substantial reserves, especially in cases where stationery items are not readily replaceable.

The ultimate challenge lies in generating reports suitable for presentation and subsequent compilation into information that fulfills the inventory requirements of ATK. Nevertheless, the process of obtaining demand and expenditure data, as well as identifying initial and final stock, presents challenges that hinder the generation of comprehensive reports for stationery inventory. These obstacles arise due to the inadequate presentation of information, which aligns differently from the expected standards.

Mustakini (2019:2) defines a systems approach emphasizing constituent elements or components. The definition posits that a system comprises a set of elements that engage in interactions with one another to accomplish a specific objective.

Information is derived from data from one or multiple sources, subsequently undergoing further processing to yield value, significance, and advantages.

Yakub (2019:20) posits that an information system is a structured configuration comprising multiple components or elements. The components of an information system are commonly referred to as building blocks.

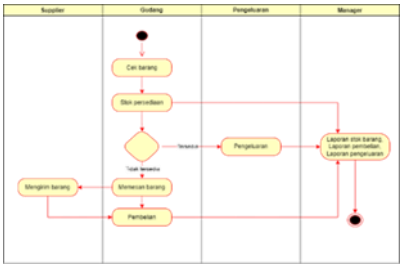
According to Ristono (2019: 4), inventory refers to the stock of goods held for future use or sale in subsequent periods. Inventories encompass three main categories: raw material inventories, semi-finished materials inventories, and finished goods inventories. Raw and semi-finished materials are typically held in storage before their utilization or incorporation into the production process. Conversely, finished goods or merchandise inventories are typically stored before their sale or marketing. Hence, it is common for most companies engaged in business operations to maintain inventory.

According to Nuraida (2019), office stationery is consumable items utilized in the routine tasks performed by administrative personnel.

RESULTS AND DISCUSSION

System Analysis and Design

a. Current System



The inventory of goods in the warehouse department is recorded based on the available stock data. In the event of stock depletion or scarcity, the warehouse department will initiate a procurement process by issuing a purchase order directed toward the supplier. The supplier receives a purchase order from the warehouse and subsequently fulfills the order by sending the requested goods. The warehouse

department is responsible for receiving and documenting the arrival of goods from suppliers. The warehouse department is responsible for documenting the shipment of goods from the purchasing department upon retrieval. Subsequently, a comprehensive report will be generated utilizing the inventory, purchase, and expenditure data to submit to the Manager. The issue pertains to inadequate data storage practices, as the current approach relies on conventional recording methods, specifically Excel. Calculation errors frequently arise within the warehouse department during the report generation process due to the absence of a container that can effectively manage said reports.

b. New System Proposal

1. Use Case Diagrams



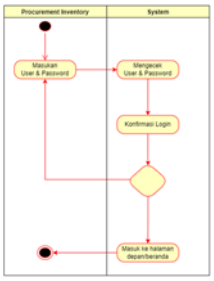
2. Explanation of Use Case Diagrams

Aktor	Nama *Use Case*	Deskripsi *Use Case*
Admin, Gudang	Mengelola data barang	*Use case* ini berfungsi untuk mengelola data induk atk
Admin, Gudang	Mengelola data pembelian	*Use case* ini berfungsi untuk mengelola data pembelian ATK
Admin, Gudang	Mengelolaan data pengeluaran	*Use case* ini berfungsi untuk mengelola pengeluaran ATK
Admin, Gudang	Pengelolaan Laporan	*Use case* ini berfungsi untuk melihat pengelolaan dan pengeluaran
Admin	Mengelola data pengguna	*Use case* ini berfungsi untuk mengelola data lengkap user serta mengaktifkan pengguna baru
Admin, Gudang	Mengelola data pribadi	*Use case* ini berfungsi untuk mengedit data pribadi pengguna

3. Scenario Tables

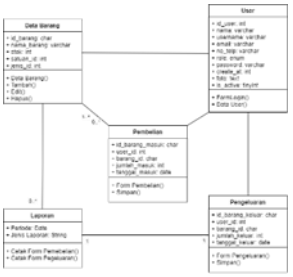
Identifikasi	
Nomor	SIPA-01
Nama	Login
Tujuan	Masuk ke halaman utama
Deskripsi	Proses login merupakan proses autentikasi untuk menggunakan kewenangan sebagai *member* dalam menggunakan sistem.
Aktor	Admin, Gudang
Use case yang berkaitan	-
Aksi Aktor	**Reaksi Sistem**
1. Memasukan *username* dan *password*	2. Mengautentikasi data *login* pada basis data.
	3. Bila sesuai, sistem menampilkan halaman utama.
Skenario Alternatif	
Kondisi Akhir	Sistem menampilkan halaman utama

4. Activity Diagrams



c. System Design

1. Class Diagrams



2. Main Menu Structure



3. Database Design

Nama Field	Type	Size	Key
id_user	int	11	*
nama	varchar	50	
username	varchar	50	
email	varchar	100	
no_telp	varchar	15	
role	enum	('gudang','admin')	
password	varchar	100	
create_at	int	11	
foto	text		
is_active	tinyint	1	

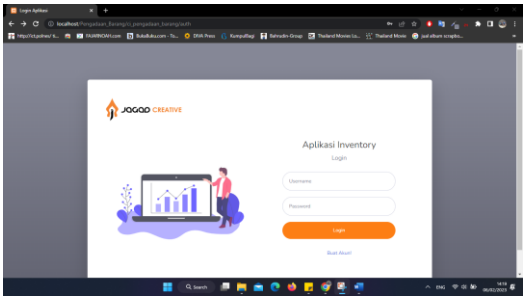
4. Interface Design



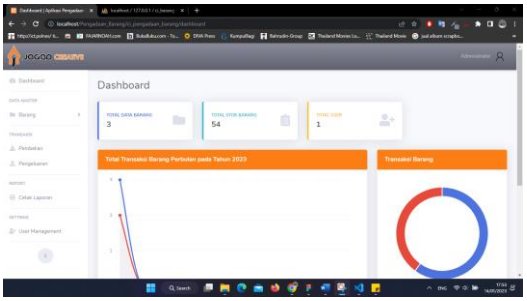
System Implementation

The system implementation stage is carried out after the system has been analyzed and designed in detail and this stage is the stage to explain the system so that it is suitable for operation.

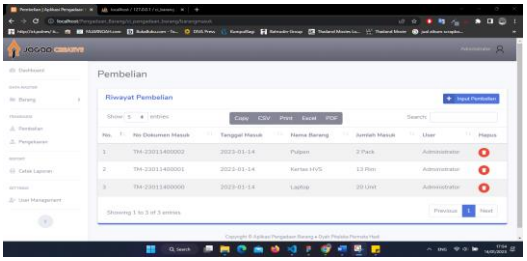
Login Form display



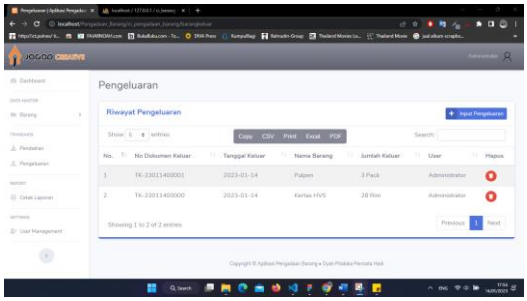
Display Main Menu Form



Display Purchase Management Form



Expenditure Management Form Display



CONCLUSION

Based on research results from the ATK Inventory Information System at PT. Jagad Kreasi Nusantara which has been implemented. So the following conclusions can be drawn:

a. Using the ATK inventory information system can make it easier to identify initial stock.
b. Using an ATK inventory system can make it easier to find final stock.
c. Using an ATK inventory system can make it easier to create reports.

Based on the conclusions above, the ATK Inventory Information System at PT. The Jagad Creative Nusantara that was created is very good and in line with the company's desired goals. There are suggestions put forward for researchers.

Others that will develop this system much better include the following:

a. Carry out further development by comparing the use of other methods for inventory control to obtain better results.
b. Provides menu results of ongoing processes. So that you can see what ATK items are. How far have these ATK items been processed?
c. Carry out maintenance on computer equipment both in terms of hardware and

software so that the computerized system can run well.

There are many other facilities that can be developed in this software. Developers can create new ideas to improve the quality of software that is more in line with the demands that must be met.

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