IMPLEMENTATION AND EDUCATION OF GOODS RECORDING USING THE MICROSOFT ACCESS APPLICATION

Johny Budiman[1], Arianto[2]

[1,2]Faculty of Business and Management, Universitas Internasional Batam, Batam,Indonesia
Correspondence emails: johny.budiman@uib.ac.id1, 1841121.arianto@uib.edu2

Abstract

Microsoft Access is one of application that can be managed to be a simple inventory application. The implementer of this community dedication managed to use this simple application into inventory application for PT Asia Foundry & Engineering with the intention of reducing inventory lost for 50% from before the company recognized this application. This analysis study is using observation and interview to find out the company's background and problems and training for more knowledge about the application. With this inventory application in the form of Microsoft Access, then the problems faced by company can be minimized as promised and providing encouragement for the company to system information as the 4.0 industry revolution.

Keywords:
Simple Inventory Application, Microsoft Access, System Information, Industry 4.0

Introduction

The usage of information technology in a company is a major concern in almost all forms of companies, companies are required to be able to keep up with the flow of information technology advances (Setiawati & Sulastra, 2020). Information systems are organized ways of collecting, entering, processing, storing data, controlling, and reporting information in such a way that it becomes information that Precious (Fani Suci Anggraini, 2018). The usage of information systems can also provide benefits directly related to warehousing accounting (Razaluddin &evayani, 2019). The International Standard Organization (ISO) states that reporting is information that is stored in a variety of variations, including data in computers, so it has become natural when reporting is used. in the form of soft files or hard copies (Farida & Desinaini, 2021) According to Joko Saputro (2020) by using a inventory recording system in the form of a recording application, it can reduce the possibility of such supplies being lost. In the preparation of an application, the appearance and design do not need to be focused, the most important thing is that the performance and function of each menu displayed works properly and does not experience bugging or technical error (Riski Ramadhan &Endy Gunawan, 2019). The process of designing Microsoft Access applications is quite easy for IT specialists, it's just not easy for beginners, which needs to be considered in the process of designing this application is none other than simplicity

and function that works well (Sherwood Lane Lambert & Jon Holladay, 2016)

PT Asia Foundry & Engineering is a private foreign investment company in Indonesia that was established in 1995 and is growing rapidly. The company is a subsidiary of Asia Foundry Engineering Pte Ltd, founded in 1968 in Singapore. With a dedicated team, it has evolved from step by step. The purpose of community service carried out by the implementer is as follows:

a. Increase the company's awareness that the importance of the role of technology in the system of recording inventory of goods in a company.
b. Improving the quality of work in the recording activities of the inventory of goods that according to the implementer can give a small boost to the company to approach industry 4.0, which can help the performance of the company's employees to provide better results.
c. Increase the efficiency or quality of the company's work in managing the inventory of goods by reducing the risk of losing goods by 50%.
d. The creation of a simple inventory recording application in the form of features composed of Microsoft Access.

The problem faced by this company is in the warehouse, where the company has not provided adequate software systems to support employees in the warehouse, so problems such as the loss of goods supply become a threat that can harm the company. Recording the entry and exit of goods that have been applied by the head of the warehouse and his assistant is none other than using a folio book equipped, but when the implementer conducts a survey of the company, it turns out that the head of the warehouse has not implemented the recording of the entry and exit of inventory. This is of course very risky, considering that the company has a considerable number of employees (about 50 people). Based on these problems, it is necessary for an information system that can help PT Asia Foundry & Engineering, especially in the field of store management in recording inventory reports. The advantage of this application is that it can provide convenience in inputting stock data and making it easier for warehouse employees in the manufacture of inventory reports.

Method

In this community statement, the implementer designed an application for recording inventory based on Microsoft Access 365. Data collection is done by using observation methods to find out if there are supporting factors that can be used for the implementation process and interview methods to study background and problems that are being faced by PT Asia Foundry & Engineering as well as training methods to introduce inventory recording applications that have been compiled to employees, especially in the warehouse company. This community service is carried out at PT Asia Foundry & Engineering, Jl Bridgen Katamso No. 18, Tj. Uncang, Kec Batu Aji, Batam City. This community pengabdian is carried out for 3 months from August to October 2021. The budget is Rp. 2,230,000, - (Two Million Two Hundred and Thirty Thousand Rupiah).

Results and Discussions

The implementer visited the company for the first time on August 2nd and began to compile a problem formulation as well as the purpose of community service one day after the visit. The problems faced by the company are arranged by the implementer through the results of interviews with the head of the warehouse,

and the idea is approved by the company manager directly after the discussion. The result of observation and interviews is the creation of an application using Microsoft Access designed by the implementer named "Apl" with a flat and simple display.

Figure 1
Apl Started View
Source: Implementer 2021

From the picture above is a front display when Apl is run, the first impression looks no creativity in designing (not interesting) however, the menu contained in Apl is quite simple. and easy to understand.
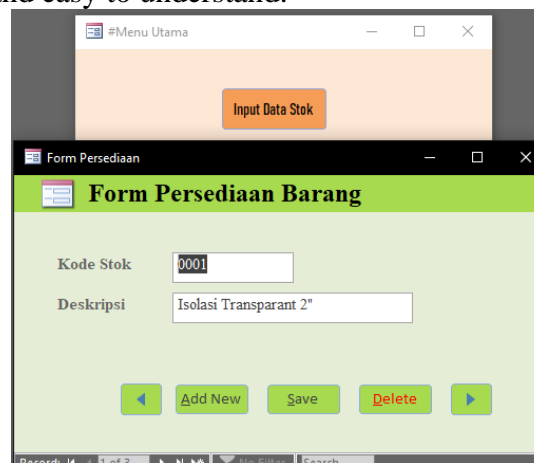

Figure 2
Stock Data Input Menu View Source: Implementer 2021

From figure 2 above shown is the inventory form of goods. The function of this menu is to create records or add new supplies. By giving code to each supply can make it easier to find a supply later.
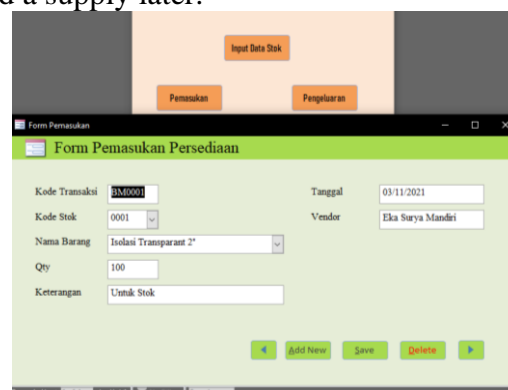

Figure 3
Inventory Income Menu View Source: Implementer 2021

Figure 3 shows the Inventory Entry Form, which serves to record incoming inventory accompanied by dates, vendors and the amount of inventory entering the warehouse. Due to the policy implemented by the company, that the warehouse section is not allowed to be shown the price of inventory, the implementer does not provide a column "harga barang". The transaction code introduced by the implementer to warehouse employees begins with the letter BM which stands for "Barang Masuk".

Figure 4

Inventory Spending Menu View Source: Implementer 2021

Figure 4 shows the Inventory Expenditure Form, which serves to record outgoing inventory accompanied by the date and amount of inventory that comes out with a description for each item expenditure. The description column can provide information on where the goods are issued, usually the expenditure of goods can occur if employees of the production section request the inventory. The transaction code introduced by the implementer to warehouse employees begins with the letter BK which stands for "Barang Keluar".

Figure 5

Item Inventory Report Menu View Source: Implementer 2021

On this menu it aims to display the remaining inventory available in a storage warehouse per one period, so it can be concluded that this inventory report serves to see the number of admissions. and the exit of supplies in 1 period, along with the remaining stock available in the warehouse. From the explanation above, the weakness of this application is the design that is classified as not attracting attention. And the advantage of this application is that it is easily understood by adults who roughly do not have far knowledge about information technology.

The level of difficulty in this community service process can be said to be easy in observation and interview and training to introduce this Apl to managers and warehouse heads at PT Asia Foundry & Engineering. It's just that in the creation of this application, it is quite difficult because the implementer must learn the information system that is relatively simple, to compile the features available in the

application. Microsoft Access to produce output in the form of a inventory recording application called this app. The following are some of the results of implementing documentation as well as a table of schedules for the implementation of community service activities at PT Asia Foundry & Engineering:

Figure 5 Documentation of Community Service Implementation Source: Implementer (2021)

Table 1 Schedule of Community Service Implementation

ACTIVITIES	August 2021				September 2021				October 2021				November 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Preparation Stage																
Location Survey	▓	▓														
Proposal Project			▓	▓												
Consulting Lecturer Supervisor			▓	▓	▓	▓	▓	▓	▓	▓	▓	▓				
Implementation Stage																
Goal Setting			▓	▓												
Identify problems			▓	▓												
Implementation					▓	▓	▓	▓								
Evaluation								▓								
System-wide trials									▓	▓						
Reporting Assessment Stage																
Training of the system					▓	▓	▓	▓								
Report Drafting					▓	▓	▓	▓	▓	▓	▓	▓				
Finalization													▓			

Source: Implementer (2021)

Conclusion

The results of implementation and training conducted by implementers to PT Asia Foundry & Engineering are quite good. According to the head of the warehouse who has been using this Apl since October 2021, resulting from the purpose of implementing this community service, the less inventory is lost and easy enough to check the amount of remaining inventory making it easier to report to the

purchase department for the purchase of inventory for stock.

Recommendations for implementing the next *Program Kreativitas Mahasiswa* (PKM) activity, are expected to improve the design of Microsoft Access applications, so that it can seem attractive and not flat like Apl. Also, consider more employee knowledge of technology before providing solutions in the form of applications or other information systems, because not all industry employees have knowledge. deep technology, so that training can be done longer (at least 3-4 times in one week).

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