Team 5 Project: SWATS

Aaron Hong, Paul O' Meara, Alex Gjurich,
Collin Rausch, Jonathan Helms

Introduction

- Warehouse Management Systems (WMS) is a system that utilizes software and control mechanisms to manage supply and chain operations within an organization.
- Cost effectiveness and efficiency are key.
- Inventory management is an important aspect of WMS as well.
- Informing customers and clients about their orders helps ensure less confusion, less hassle related to human error, and less time wasted.

https://www.mhasistemas.com.br/en/2018/08/29/implementing-a-wms/

The Problem

https://videohive.net/item/busy-warehouse/9333780

- Warehouses are busy places, stock is coming in, orders are getting pulled, and customers are picking up orders.
- Most WMS systems are able to keep an order moving throughout a warehouse, but when orders get stored for immediate pickup issues can arise as most systems do not include functions for storing orders to hand to customer or commonly called "dispensing orders".
- Completed orders that are stored within the warehouse can be tracked on paper, but the possibility for an order to leave the premises without proper sign out procedures increases with the business of the workers.
- Caterpillar dealers are a prime target of interest as they manage orders through the dispensing stage entirely through paper invoices.

Our Product

Separate Warehouse Archival Tracking System (SWATS) is a web based order tracking system designed to help companies better track orders coming from and to customers.

What it Does

SWATS uses common barcode scanners to accurately track when a order enter or leaves a warehouse making archiving orders simpler and helps both the company and customers track their orders.

https://www.amazon.com/Motorola-MC40-Part-MC40N0-SCJ3R00/dp/B01AQAR9WA

Key features

- Tracking orders to customers
- Confirmation of orders being delivered to customers
- Provides proof of receipt in dispute cases
- Easy collection and retrieval of pickup details

Other Features

- Elegantly designed GUI
- Auto backup feature that prevents data loss if server goes down.
- Web based lookup portal

How This Solves the Problem

Warehouses are able to figure out if a customer had received their product with confirmation as well as track where the order has been. This also solves the problem of not having to manually write down product information which could lead to human error or products being lost.

The Dataset

Sample order forms are used for both testing and debugging purposes using real products sold on the market and customer invoices.

The Conclusion

SWATS is a perfect replacement for paper forms by keeping digital copies on local business web servers along with customer pickup details such as a signature for receipt.