

## **STOCK CONTROL**

Item stock level is how many of the item are available in a shop. There are several reasons why shops need to keep count of how many stock they have:

To ensure that there aren't too many items in stock - they can turn bad or be out of date;

Not enough space to store reserves;

Ensure that too much money has not been tied into stock

Ensure that enough stock is available

Shops know how many of a particular item they usually sell and it must be ensured that enough are available.

A good stock control system can keep track of how many of each item are in stock, when and how many to order and the best or least selling items.

A sales terminal, where the barcode of each item is scanned, can keep count of how many of each item are sold and as they are sold the stock level is immediately changed. The system can also see when items need to be reordered and count how many need to be ordered. Sophisticated systems can automatically prepare an invoice to the shop headquarters on electronic form using EDI (Electronic Data Interchange).

Companies can accept an order over the phone or by post - someone would have to enter the data into a computer; or they could receive an e-mail via the internet. The information on the order is verified and validated before it is processed. When goods are delivered, the customer is sent an invoice. As the invoice is processed the stock levels are updated.

### **Inputs**

Barcode reader scans at the sales terminal.

PDET - Portable Data Entry Terminal to count how many of each item are left on the shelves by making an occasional stock check.

A stock system is a combination of real time process and batch-processing.

A sales terminal system keeps count of the stock available in real time - the situation can be checked at any time to see what is in stock.

The system prepares an order of what needs to be ordered using batch-processing, which is sent at particular occasions.

### **Outputs**

Lists of how many of each item are in stock.

A list of the items to be ordered.

Electronic order to be sent using Electronic Data Interchange.

Sales patterns.

### **Advantages**

Keeps the latest count of the items in stock.

Warns when to reorder.

Prepares and sends orders automatically.

Purchase and sell goods on-line.

### **Disadvantages**

Barcode needed on each item.

Installation cost.

## Stock Control and Order Processing

The stock level of an item is the number of that item in store.

When a shop sells items, it is sometimes important that the shop..

- does not stock too many of an item eg The item might be perishable and those not sold will become unsellable.
- does not stock too few. A customer may want to buy one and there are none available.



For these reasons shops set reorder levels and reorder quantities. When the number of items is reduced to the reorder level, then more of that item are ordered. The number of items ordered is determined by the reorder quantity.

**Stock Control** is the administration of stock levels.

A good stock control system will...

- keep track of exactly how many of each item are in stock.
- be able to say which items need re-ordering.
- analyse which items are selling well or needed most and which are not.

All businesses which store items (in shops, warehouses etc) will need a stock control system.

Some shops use barcodes and POS terminals for automatic stock control. A computer stores a master file with records of every item held in stock. One field would be the item's stock level.

Every time an item is bought, the barcode is scanned and the computer will deduct 1 from the stock level for that item. The computer will know exactly how many of that item are in stock.



A similar system would operate in a warehouse. Each item removed would be logged and the stock level automatically adjusted.

This would be an example of a **real-time system**. Data is processed as soon as it is received and the system is always up-to-date.

## Order Processing.

Customers may buy goods from a business by sending an order - which will have details of which items they want to buy and how many.

Orders may be received...

- ...through the post on order forms. These will need to be entered onto the computer as records on the orders file.
- ...online. Customers send orders by email or over the Internet. These orders would be saved in the orders file.

The orders file would have fields with information about ...

- the date of the order
- customer details
- item details and quantities
- money owing or received from the customer.

Appropriate data validation will take place when the orders are entered.

When the goods are dispatched, an invoice is sent requesting the amount of money due for the order. The customer may then pay by cheque.

Online orders are usually paid for using credit (or debit) cards.

When an order is processed....

- stock levels are adjusted for the items sent.
- financial information is stored and analysed. Who owes what and how much has been received etc
- statistical information is updated - numbers of sales, best selling products etc...



Portland Taiko's Making Waves CD  
**Order Form**

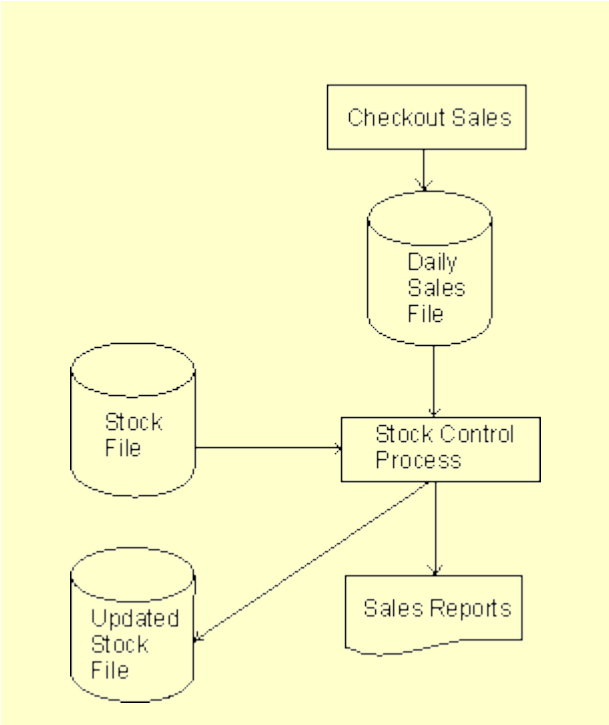
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip Code: \_\_\_\_\_  
Email or phone: \_\_\_\_\_

Please send me \_\_\_\_ Making Waves CDs at \$15 each  
plus shipping/handling (\$2 per order). Total enclosed: \$ \_\_\_\_\_

Please make checks out to Portland Taiko and send a completed form with  
your check to 3230 NE Columbia Blvd., Portland, OR 97211. Thank you!

If goods are paid for online over the Internet, there would need to be a secure system in place to avoid problems with credit card details being stolen.

Study the diagram which shows a typical supermarket stock control system.



(a) In the diagram, the Daily Sales File is the transaction file and the Stock File is the master file. Explain what you understand by the terms:

(i) transaction file [2]

(ii) master file [2]

(b)(i) Name the field that appears in both the Daily Sales File and the Stock File. [1]

(ii) Give two other possible fields kept on the Stock File. [2]

(c) Explain, in detail, how the supermarket stock control system ensures it does not run out of stock. [3]