

The Problem

StuartBooks buy goods in bulk from the manufacturer or supplier at *wholesale price*. These are then sold on to the customers who order small quantities at the (slightly higher) *retail price*. The profit of the company comes from the difference between these two prices. In order to satisfy its customers, the company must maintain the current stock at a high enough level to meet the incoming orders, but at the same time it must not buy too much in case demand changes and the goods cannot be sold. The success of the company depends critically on being able to manage the level of stock.

Requirements

You are asked to design a stock control system for StuartBooks which trades from a little known industrial estate on the outskirts of Leicester. The system will be used to:

- maintain a record of current stock levels, prices and sales for a range of product items;
- process deliveries when they come in;
- process customer orders and prepare invoices to be sent out with the goods;
- provide management information in a variety of forms.

The details of financial transactions are all handled by the cashiers department so these do not need to be addressed.

The system is to be used by people with little or no computer training. It is therefore important to make it as clear and easy to use as possible. You need to design the layout of the worksheets and provide enough instructions so that they may be used to accomplish the tasks listed.

You will need to decide what data to store and what formulae to use in the calculations. Imagine how the system is to be used and think what might be expected from it. For instance, in preparing an invoice, you would expect the price and description of an item to be looked up automatically from its *reference number*, you would expect the system to warn you if the item is not available in stock, and so on.

The details of the items in stock will be recorded in a spreadsheet. Although this can only be updated manually, it is important to make the process as easy as possible. You should give clear instructions on how to use the spreadsheet commands which are needed. If you use an *advanced filter* then you should set up the criteria range in advance.

There are many different aspects of the data which could be of interest to the company management. For instance, they might want to know

- the total value of current stock;
- the sales figures and income generated for recent months;
- the most and least profitable product lines;
- the proportion of sales in each of the categories: pc's, laptops and cd's and memory sticks.

You should set up calculations to supply this information, give instructions as appropriate and include some charts to illustrate your figures. Be sure to include enough sample data for your solutions to be tested.

NB You can of course use the computers in the usual Open Access Computer User Areas of our University to complete this assignment.