Introduction

Cindy Bells is a small wedding shop situated in Brownhills, West Midlands that makes and sells its own dresses.
The orders are usually made in person, as a fitting is necessary.

All accounts are done by hand, and copies of orders for materials (usually obtained from Los Angeles), and customer invoices, are all kept in a filing cabinet at the rear of the shop.

With orders, the proprietoress, Cindy Costello, makes purchases over the phone, writing down what she has ordered on a piece of paper.
The problem with this is that this system is error-prone and unreliable. Post-It notes are usually just stuck on a desk or pieces of scrap paper are left lying around the office. For this reason, some essential work is sometimes forgotten.

When the order arrives, if the order has been written down to confirm the placement of the order, the piece of paper is filed, along with the order received documents.

When billing customers, she hand writes a bill, photocopies it, then gives the original to the customer, and files the copy.

<u>The current system</u>

Mrs. Costello is happy with the way that she does her invoices and orders, but acknowledges that this is very time consuming.
There is no log of stock, and the only way to tell if there is any stock, is to check the material box labels.

As the dresses are made by the shop, this leaves little time for accounts, with Mrs. Pearl Westwood (Mrs. Costello's mother, shop worker and dressmaker) working up until 2am most nights.

Ideally, they would like a system that keeps a log of their current stock, whilst also being able to process orders and invoices using Information Technology.

They would also like to be able to save and enter the order details, without changing any pre-set information in the database. This would only take up a small area in the office, rather than a large desk and filing cabinets.

The program would need to be very easy to use and just as easy to retrieve particular data, such as order forms or fitting-times, etc.

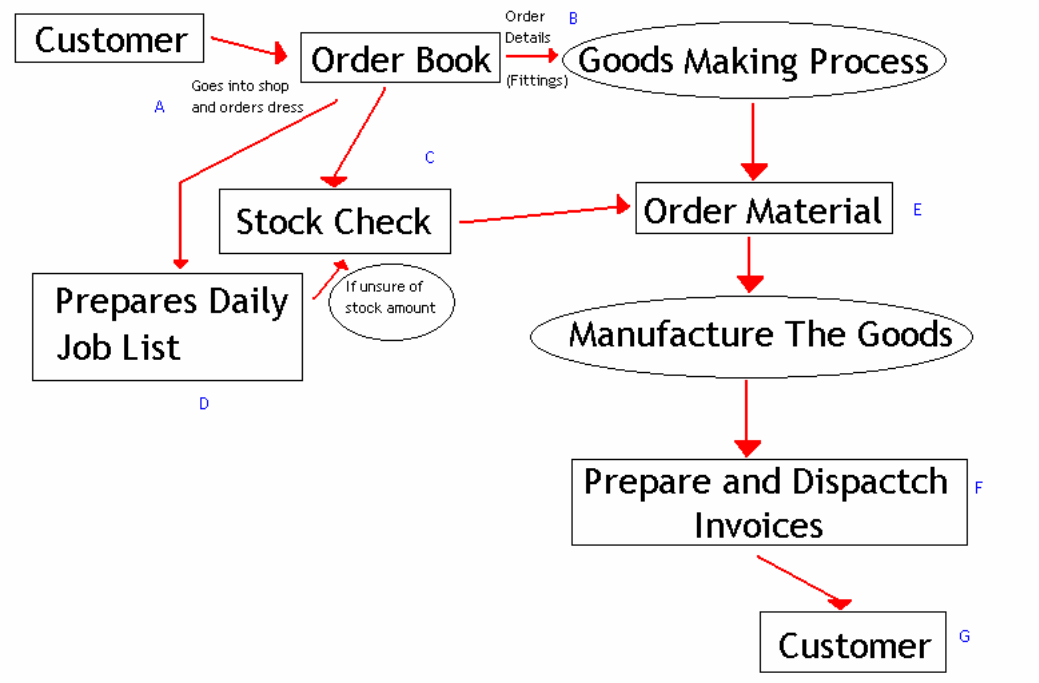
If this was achievable, a lot less time would be consumed doing this during the day, enabling workers to finish work earlier, as the shop opens at 9am every morning.

Objectives of the new system

The new system should be able to:

- Allow data from invoices and orders to be saved easily, without altering the original database.
- Allow data from saved invoices and orders to be easily retrieved if needed for future reference.
- Produce a stock list of materials available, for example if you entered data into the system describing how much material is used on one particular dress, you should be able to click on a separate file, that says how much material you have left, without checking in the store-room.

Data Flow Diagram of Current System



A: The usual process of ordering a dress is face to face, rather than over telephone.

B: After the order has been placed, a fitting is needed, as all dresses are made to order, and therefore the sizes are individual

C: After the fitting, a stock check is made to see how much material is left.

D: A Daily job list is needed and is not in place at the moment.

E: After a stock check is made, the customer has a choice of which fabric to use. If the selected fabric is not in stock, it needs to be ordered via phone from Los Angeles (a very time consuming activity)

F: A deposit is made on the dress before it is made, and after the dress has been made, an invoice is prepared (with materials, fabric and labour included).

G: When the invoice has been paid in full, the dress can either be picked up from the shop, or delivered (for a small charge). No drivers are employed, as they would not be needed, so either of the workers delivers the dress, if this is preferred.

Boundaries of the system

Problems with putting in a new system are that certain problems will be unavoidable. These include software and hardware restriction, and the user's skill level.

Performance Indicators

- It should not take very long to obtain information whether about stock or a specific customer's requirements.
- The program needs to be simple enough so that the primary users will soon pick up the necessary skills to use it.
- The program must be made, so that errors can easily be erased.
- Also, the original document should not be able to be deleted or altered accidentally.

Software and Hardware Restrictions

Because the business is functioning fairly well without the aid of a computer, not much money will be paid out for an item that would just be more convenient.

For this reason, only between around £100 and £200 will be spent on getting a computer.

This will mean that it will not be very fast, but it will still do an adequate job, with the possibility of upgrading the hardware later in time.

The company have already obtained copies of Windows XP and Office 2000, so software will be top of the range and if problems with software do arise, problems would be able to be easily solved either by a quick phone call or by looking in a manual.

User's Skill Level

Both of the primary users have a basic understanding of information technology but will need to get used of the system over the first few weeks as they progress with the new system, as would be the case for anyone.

Mrs. Costello is familiar with Windows XP and has it at home; however Mrs. Westwood has little to no computer knowledge. This problem will be soon overcome with Mrs. Costello helping her with the basic day to day use.

If need be, I will pop into the shop every now and again to make sure that the system is running to its optimum performance level.

Design

Choice of Software

As the computer will have Office2000 put on it, the system will be implemented using Microsoft Excel. This program is perfect as it will provide many features that are needed for the system, and will also not be too complicated for basic use, a potential problem with using other programs.

Microsoft Excel contains features that can be used in the system such as:

- Ability to create a blank worksheet, which you can input data.
- Ability to link 2 workbooks together. For example an order that needs to be processed and stock page can be checked together to see if any material needs to be ordered.
- Ability to protect documents and workbooks from accidents such as altering formulae or deleting sections unintentionally.
- Customised menus and toolbars.
- Formatting to help make it clear to the user where to enter data.

Worksheet Design

The system will be based on two workbooks, 1 containing the stock details, and the other with the order forms.

At the beginning of each workbook, there will be a chance to either open a new worksheet in which new data can be entered or to load existing data from the database.

From this, the user will be able to view things such as order sheets/forms and notes on stock. The data will also be accumulated and viewed monthly and annually in order to check for things such as past orders and contact details of clients.

Data Flow Diagram of proposed new system