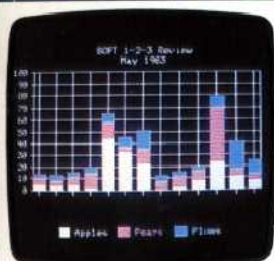WHAT DO I WANT MY COMPUTER TO DO?

Balance The Books

Accounts Package

Since computers can handle mathematical operations, it is hardly surprising that many programs are available to help the businessman. The range of accounting software is impressive, from automated bookkeeping to full accounting. Programs like these usually have to handle large amounts of information and need to store large numbers of records. Consequently they usually require at least one floppy disk drive to cope with the large storage requirements.

Accounting programs generally work through a system of questions (displayed on the computer screen) and answers (supplied by the computer operator). The information typed in by the operator is manipulated by the computer program, all the necessary calculations are done and the results are stored on the floppy disk or printed on the printer as appropriate.

Such programs include the automatic issuing of invoices, reordering of stock, keeping ledgers and keeping track of work in progress. Prices of software range from about £50 to well over £1000 per program. Such expensive software may be a good investment for a business as it saves on labour costs and gives quicker results

Filing

Databases

Computers can search through files of information far quicker than people can; the more massive the amount of information you need to search through, the more a computer can help. At its simplest (and cheapest) a database may be little more than a computerised address book that can look up names, addresses and telephone numbers. More sophisticated and expensive database programs can perform far more complex operations.

To give an idea of the power of a database, consider a botanist who is compiling information for a book on exotic and poisonous mushrooms. He will have built up extensive files on various species and their habitats. He may also have notes on a wide variety of reference books, and an endless list of individual specialists.

Before the days of an affordable computer, this information would have been written out on cards and filed in a card index system. With a database program and a computer, the information can all be stored in the computer's memory. Using the power of the database, the botanist can get instant answers to his problems. If he needs to have a list of all the fungi ever recorded in Sussex, the database can give it to him. If he needs a list in alphabetical order of all the books containing the word 'poison' or 'poisonous' and 'mushroom', 'mushrooms' or 'fungi', the database can give him that too.

Databases need to handle massive amounts of information and are usually available only on floppy disks. They tend to be expensive, with prices ranging from £50 to over £500 per program

Handle Numbers

Spreadsheets

The spreadsheet is the computer's answer to all those 'what if' questions that used to be tackled with a calculator and reams of paper. Any business with a product to sell has many variables. Changing any one of them will generally affect most of the others.

Consider the questions a cinema proprietor might ask. "If all the seats were sold, how cheap could we make the seat price?" or "Would we get more revenue by reducing the price of ice cream with the same number of usherettes, or should we increase the price and employ two more people?". Each decision is likely to affect the entire business — lower prices may mean increased sales but lower profits. A spreadsheet is a special program that can give instant results to questions like these

All the essential numbers to be manipulated are arranged in a grid of rows and columns and the relationship between each row and column is specified (for example, the numbers in each row of column C is the result of subtracting the number in column A from the number in column B). Once all the real and hypothetical data is assembled, any single figure can be altered and the 'impact' on all the other numbers can be seen instantly.

The people who use spreadsheets are usually businessmen working out costings or engineers and scientists with very variable numerical data to manipulate. Spreadsheets range in price from £30 to over £500 and usually require both disk drives and a printer

Entertain

Play Games

Computers are not only good for processing numbers and words. They can also provide many hours of entertainment if used with one of the many games programs available. These cover a wide range from chess and backgammon to arcade style games and simulations (such as 'lunar lander' and flight simulators). There are also extraordinarily complex adventure games that can take days or weeks to play (see page 14). Many computer games are not only fun, but have considerable educational value too.

Computer games are highly interactive. In other words, they require constant attention and input from the player. This input is usually via the keyboard; a key might be used to fire a 'laser' or a 'missile' or to control the movement of something on the screen. The number of keys used will vary, depending on the game being played, and how much control the program requires.

A popular alternative to keyboard input is the joystick. These are plugged into the computer and operate somewhat like aircraft joysticks. They give greater control, and make playing computer games even more fun