



## Ready-To-Wear Software

Most off-the-shelf software is sold as a disk or cassette with a manual describing how to use and get the most from the program. Apple Writer is a typical word processor program, costing £120. It comprises a single floppy disk and a comprehensive manual explaining how to use the program. The manual includes a quick tutorial so that beginners can start to use it right away. Standards of documentation vary enormously. Some software comes with manuals so incomplete and badly written that the software may be difficult or impossible to use. It's an important point to watch out for when shopping for software

Atari 800 will not work on the Spectrum (unless a special Spectrum version has been produced), so you have to buy software that has been produced specifically for your machine.

Even now you're not ready to make a purchase. The next considerations are the physical limitations of your machine. Check how much memory your computer has. If it has 16K of ROM see if the game you want needs extra memory to be added. As a rule, the more interesting and sophisticated games require longer programs, so you will need more memory in the computer. And don't forget that software comes in a number of different physical forms (see previous page). If a program is supplied only on floppy disk, but all you possess is a cassette player, you will not be able to use it without first buying a costly disk drive. Some software (particularly games) requires other extras such as joysticks. You are not likely to need a printer for your games, but business software frequently requires one in order to print results.

Finally, there's how much you can afford. Games on cassette start at under £5, but prices can rise rapidly after that. Some business packages on disk cost hundreds of pounds.

## Types of Software

In some ways, games are a class apart. The function of a game, after all, is to entertain. Most other software is designed to make a particular job easier and quicker. The ways in which writers of software have managed to increase profitability and efficiency are legion. Consider the poor copy-typist whose ability doesn't satisfy the boss. With a microcomputer and a piece of software called a word processor, the computer takes the place of the typewriter and the corrections are all made on screen. Once all the words are seen to be correct, the whole page can be printed out on paper, automatically and at the touch of a switch. The savings in time and frustration are enormous.

Another tiresome task that lends itself to computerisation is financial administration. Many of the activities that used to keep armies of clerks busy — working out salaries and balancing the company books — can now be performed by specially written software. The programs themselves are quite specialised, so it's unlikely that a single piece of software will answer all of a business's needs. Categories include 'payroll' programs to calculate wages and print pay slips, 'stock control' programs to keep tabs on what goods have been sold or used (sometimes the program can order new stocks automatically) and there are even programs to help work out the most economical sizes and qualities of paper on which to print books and magazines.

Another task computers can do spectacularly well is to file and sort information. This type of program is called a 'database'. Databases can replace whole filing cabinets and can do all the arranging and cross-referencing for you.

The final broad category of software is that known as the 'spreadsheet'. A spreadsheet program allows complicated budgets or financial forecasts to be laid out and endlessly tinkered with, replacing reams of paper and the familiar calculator.

All the types of software we have been talking about are sold 'off the peg'. They are ready-made in the sense that the original writer had a specific set of solutions in mind for the problems as he or she envisaged them. There may come a time, however, when no piece of commercially available software will make your computer do exactly what's needed — and then what do you do? One solution, albeit an expensive one, is to hire a computer programmer to write a program exactly tailored to your needs. The other way is to learn how to write programs yourself. Armed with a language such as BASIC it is possible to generate programs that make your computer do all kinds of amazing things. And the only expense is the time it takes you to write the program.

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