

PCs and workstations

What they are and what they can do

PCs are the computers found in almost every office and many homes. Although “PC” is sometimes used to include other personal computers such as Apple Macs, the term should only really be used for machines that run the Windows operating system. (The operating system is the software that runs on the machine and controls the way that it carries out all of the basic functions, such as saving files). The Apple Mac runs the Mac OS operating system¹. Macs are not as common as PCs but are widely used in the publishing and graphics businesses where they have traditionally been considered to be better suited to the task.

Both PCs and Macs have strong proponents. In reality, there is probably little to choose between them. Macs tend to be more innovative in their design and to be slightly easier to use than PCs, whereas PCs are more common and there is therefore less likely to be a compatibility problem when sharing information with other users.

“Workstations” is the term used to describe particularly powerful variants of PCs, and they tend to run using yet another type of operating system. However, as PCs and Macs have themselves become more powerful, the boundary with workstations is becoming more blurred.

The right PC with the right applications will prove to be a very powerful tool. Using readily available applications, SMEs can control their finances, design products, produce brochures, create promotional letters and produce mailing labels, and manage a customer database. Many other applications are available, but they all make it possible for an SME to be freed from the restraints of having to be close to a supplier who can carry out these tasks – for example, small print runs are perfectly feasible in the average office. Some of the applications are described the briefing on Office Suites.



A basic desktop PC

It is difficult to give general advice about what PC (or Mac) is most suitable, since they are advancing rapidly in their abilities and the precise configuration needed depends very much on what it is being used for. The best approach is to decide what is to be done with the PC (e.g. just write letters or carry out complex graphic designs) and ask the advice of a competent supplier. A good supplier will also be able to suggest what applications can be run on the PC to carry out the tasks in mind.

One important area to consider is the monitor. If you are likely to spend any length of time looking at the monitor, you should always buy the best you can afford. Eyestrain from poor quality monitors can be a major health problem.

Many monitors are based on the same technology as TVs and, like TVs, tend to be fairly bulky. Monitors with thin flat screens are becoming widely available – these take up much less space and use much less power but are still relatively expensive to buy.

When buying a PC, it is important to always remember that you are likely to find other tasks for it to perform, once you have got used to using it. It makes sense to buy a slightly more powerful machine than you need, rather than to try to save a few Euros by buying a machine that will only just cope with the tasks you have in mind.

Key messages for SMEs

- Understand what you want to use the PC for, and then approach a competent supplier for advice.
- Always buy a slightly more powerful machine than you initially need. This is especially true when looking at how much memory (RAM) and storage (hard disk) you think you will need.
- If the deal you are being offered looks unbelievably cheap, it should probably be avoided.
- Check on what after-sales support your supplier will give and how much it costs. You will inevitably need some support.



Flat screen monitor

¹ Other operating systems, such as Linux, exist but are not very commonly used on PCs.

Advantages and Disadvantages

PCs or Macs provide a high degree of flexibility in the tasks that can be carried out by an SME.

The rapid advance of technology means that the useful life of a PC or Mac is only about 3 – 4 years.

What to buy

Make a decision to use either PCs or Macs throughout your company as this simplifies training and support. Indeed you should consider using a single supplier, at least for each batch of machines, as you can probably get a discount or at least a better maintenance deal.

Prices vary considerably, depending on what features are offered and the quality of the build. Typical prices, before tax, range from under €500 for a PC that will perform all basic office tasks to around €3000 for one that can handle sophisticated design and modelling software.

Personal computers are continually increasing in power (faster processors and larger hard disc drives) so it is impossible to recommend what specification to choose for what task. However, if you only use the machine for routine business correspondence, choose a relatively basic machine. If, on the other hand, you run a lot of applications simultaneously and you frequently cut and paste information from one to the other, go for a higher performance machine. The extra money will quickly be recovered because you will spend much less time staring at an hourglass on the screen and waiting for complex operations (e.g. image processing) to happen.

It makes sense to buy a slightly more powerful machine than you think you actually need. This will allow you to try out new applications and will put off (slightly) the day when you have to scrap² the machine and upgrade to newer technology.

All machines now come equipped with a CD-ROM drive and nowadays most of them can write, as well as read CD-ROMs. CD-ROMs are an excellent way of archiving or even backing up your files so it is worth paying the extra €20 or €30 for a read-write CD-ROM drive. An increasing number of machines also include a drive for reading DVDs. This is less useful to a small business, unless it regularly receives promotional material on DVDs.

Before buying a PC, read the PC magazines that are available in your country for reviews of what is available. Many of these also have websites that contain archives of earlier reviews. Two useful English language sites are <http://www.pcpro.co.uk> and <http://www.zdnet.com>.

Questions to ask suppliers

- Will this machine run all the applications that I use or plan to use in my business?
- What software, if any, is included in the price?
- Can you install and set up the machine(s)?
- Can you offer a maintenance and support package and, if so, how quickly will you respond to reports of problems?

² Before you scrap a machine, make absolutely sure that nobody else in the company has a use for it. It may be a significant upgrade to what one of your colleagues has on his or her desk. Alternatively it could have a long and productive retirement carrying out some routine task such as managing your local area network or acting as your mailserver.