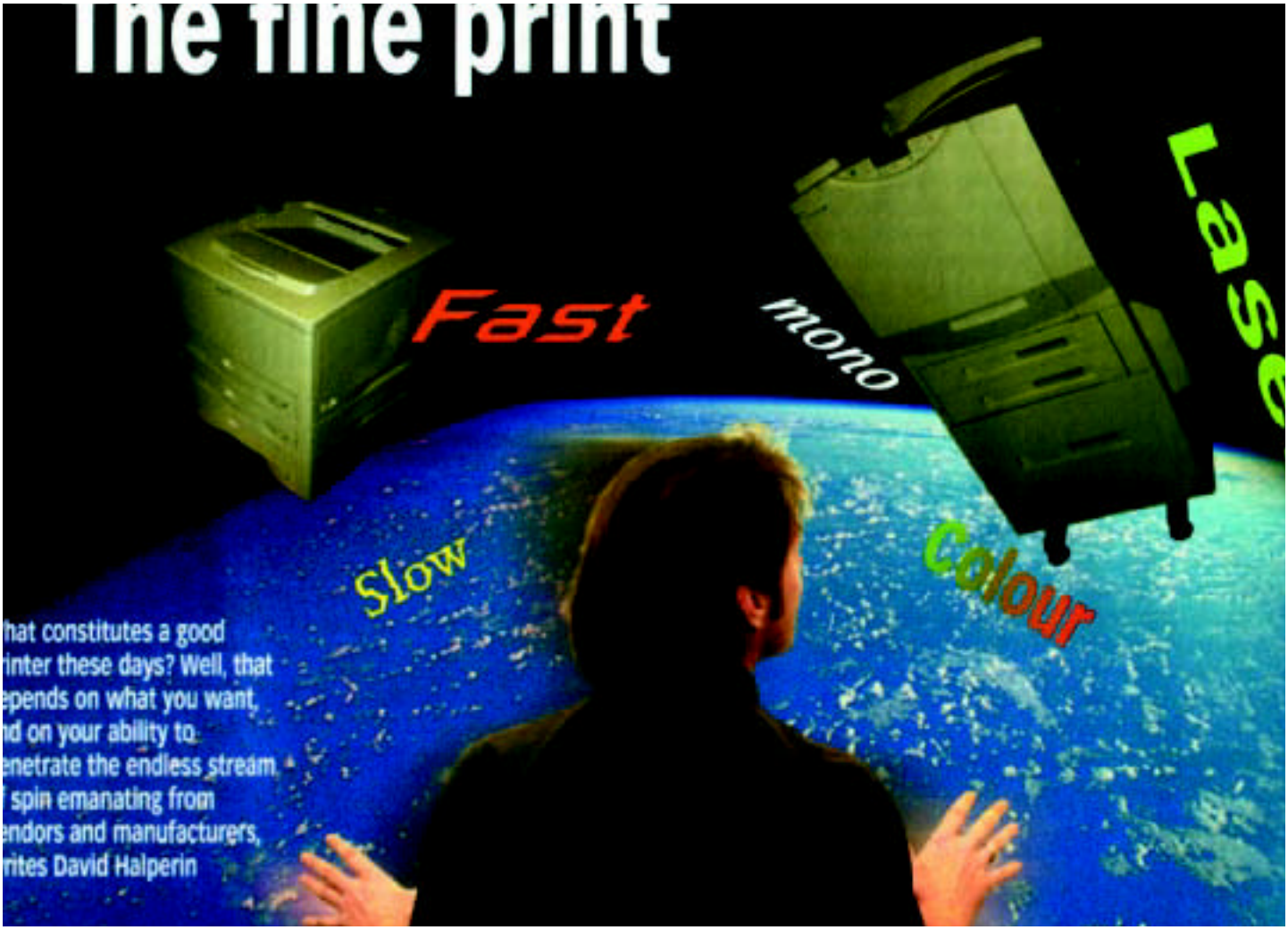
The fine print



So much for the paperless office. As we now know, those claims of a few years go that we'd soon be working xclusively in the electronic ealm were pure fantasy. We ontinue our love-hate relationhip with paper, and for the oreseeable future, forests will ontinue to fall to feed our apetite for it.

Which means that for better or vorse, printers will continue to e part of our lives. While raphic designers, marketing epartments, ad agencies and re-press bureaux are fussy bout their printers and spend uch time and energy getting iem right, in the office envionment we tend to take them or granted as long as they are vorking well. We shouldn't: toay's lasers and inkjets; are echnological marvels and we hould probably be happy that iey work at all.

As good as they usually are, owever, printers are real mahines in the real world. and as uch they have faults, limitations and failutres. There are differing design philosophies behind them, and in some cases they don't live up to the claims of manufacturers and vendors — at any rate, a buyer has to be able to read between the lines. To make educated purchasing decisions we first need to understand our own needs and how they match the characteristics of each printer system, and we need to decode the marketing hype to understand what we can actually expect in practice.

What kind of printer should you have? That depends on what you need to accomplish and how much you can spend. For example, take the very basic choice between laser and inkjet. That decision depends on the answers to questions like: Do we need to print colour? Will we be printing photos? How great will our monthly usage be? How long do we expect to keep the printer?

Colour lasers are expensive upfront, but cheaper to run over long periods with high turnover. For shorter runs with photos, a photo-grade inkjet may give a better result for a lower investment, but they're relatively slow, and expensive to run. What about permanence? Most inkjet inks are quite unstable and will start to fade after a few months' exposure to light. A few latest-generation models specialised for photos, however, use inks and papers said to be good for from 25 to 200 years.

Other points to check include speed, resolution, text and graphics quality, paper handling, ink/toner cartridge life, memory capacity, network interface, and the cost and availability of maintenance and spare parts. At every stage, you'll need to analyse your own organisation's requirements and match them to the qualities of the printer in question.

Reading between the lines

Even if you check and double-check all these specs and features, there may be ways in which your printer doesn't meet your expectations once you sta using it. Often, they are due t the way manufacturers expres the specifications of their proc ucts. Two of the commone such 'performance gaps' ar page-per-minute speed, an toner or ink usage. Both ar among the most important crite ria for users' satisfaction.

The page rate figures quoted b manufacturers and vendors ger erally measure the number c sheets of paper the machiner can chew through. Processin time is extra, so a lot of printer real-world speed depends ho fast its CPU can turn the instruc tions it receives from the com puter into instructions unde stood by the printengine. Inev tably the first page will tak considerably longer. For som years now, manufacturers hav been offering models equippe with a RISC (Reduced Instruc tion Set Computing) processo and in real-world applictior these can outstrip nominall much faster non-RISC ma chines.