



Times are 'a changing

Putting together our 100th issue has given us a chance to look back over the history of the magazine and by association the history of technology. What struck me most was the changing attitude towards innovation over the past century.

Back in the early 1900s the advent of a new technology, such as flight, the telephone or television, was an occasion for awe and, to some extent, distrust. People would flock to see the latest gadgets expecting to be amazed by the wonders of the modern world.

Looking back further, the Great Exhibition held at Crystal Palace in 1851 attracted six million visitors to marvel at feats of industry, art and architecture. Nowadays large technology trade shows, such as CeBit in Hannover, attract closer to 700,000 visitors. And most of them are there to do business, rather than gawp at the gadgets.

Perhaps this shift from delight to disinterest in innovation has been caused by the sheer pace of change over the past few decades. Where it took the UK hundreds of years to shift from an agrarian society to a fully industrialised one, the move from a country where televisions and cars were luxuries for the rich to one where a mobile phone is a basic necessity has taken well under 100 years.

As companies frantically search for a killer app that will reignite our interest in technology, we remain hard to impress. Since fingers were burnt on the dotcom crash, our distrust may have returned but amazement remains elusive.

A right to copy?

The debate on whether consumers should have the right to copy their DVDs has been notched up a gear with the UK's MPA (Motion Picture Association) initiating action against 321 Studios - a manufacturer of DVD copying software - for breach of copyright rules. The move was expected following a spate of similar legal cases in the US, including an identical action against 321 Studios.

On one side are the movie studios, which are taking a hard-nosed approach to such software, seeing it as a direct threat to their copyrights. On the other side are the software companies, which believe consumers have the right to copy DVDs for their own use, especially as DVDs tend only to have life spans of around 10-15 years.

"Our customers are not pirates and they are not buying our software to make multiple copies or for any other purpose than their own use," says Rob Semaan, CEO of 321 Studios.

The preliminary verdict from the US favours the movie studios, but Semaan hopes the courts will not opt for such an extreme solution here in the UK. "A fair compromise can be reached but only if we are given an opportunity to listen and reason with one another. Unfortunately the MPA will not take our calls," he adds.

To show its commitment to stopping piracy, the company has launched its own DVD piracy prevention programme and has incorporated a number of anti-piracy measures, such as electronic watermarks, into its software. It is even offering a reward of £10,000 for any information leading to the conviction of any parties misusing its software to pirate movies.

Whether companies should be held responsible for how their customers use their software and ultimately whether consumers will be granted the right to copy now rests in the hands of the courts.

Microsoft axes free chat

Microsoft has pulled the plug on its free chat service in the UK. Citing a rise in spam and offensive material, the company plans to eliminate its messaging services in a total of 28 countries, while restricting access to the chat groups in the US. The changes came into force on 14 October, when MSN's chat services were suspended in most countries.

Microsoft believes the changes were required to protect customers who were being inundated with inappropriate material. "It was an effort to provide a more safe and secure online experience," says a Microsoft spokeswoman.

The company is said to be particularly concerned about the use of chatrooms by paedophiles preying on children who frequent these forums.

Other ISPs have lined up behind Microsoft's decision. AOL said that it closed its own open chatrooms earlier this year. "Internet security is a priority for us and we are pleased to see that MSN has followed suit," says AOL's Camille de Stempel. UK Online also made a statement welcoming MSN's chatroom closure.

But the move has been slammed by rival ISP Lycos. While it branded MSN's existing unmonitored and unregulated chatrooms "irresponsible", Lycos feels that "proper regulation and monitoring means children can have safe environments in which to chat online".

Lycos UK boss Alex Kovach says: "Walking away from chatrooms will only drive this underground," making children even more vulnerable. He believes MSN, as one of the biggest players in the market, has a responsibility to create secure chatrooms for children.



Weather watchers

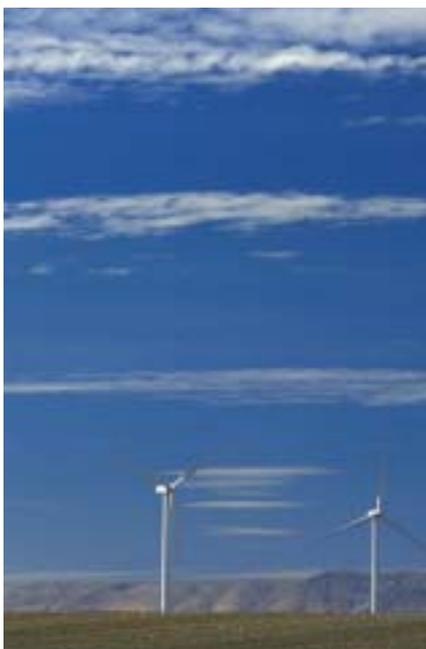
London's Science Museum is hosting the world's largest climate prediction experiment using the combined power of computers around the world to generate a probability-based forecast of 21st century weather.

Those taking part are invited to download a unique version of the Met Office's software, which simulates several decades of the Earth's climate changes.

The software runs in the background while participants use their PCs as normal. At the end of the experiment, each person must return the results generated by their PC.

"We hope to be able to say, for the first time, what the climate probably will and, more importantly, won't do in the future," says David Stainforth, the chief scientist involved.

To take part, go to www.climateprediction.net and download the necessary software.



My Technology

The Earl of Lichfield

Mac or PC? Which do you use and why?

Mac. Its compatibility with digital cameras makes it the obvious choice for ease-of-use. The Titanium PowerBook also helps make my decision as it's so fantastic - it's lightweight with a large screen and the iPhoto program is great for organising and printing photos.

When did you last get angry with a piece of technology and why?

On a recent shoot when the camera batteries died.

If you could invent a technology device for the future, what would it be?

I would like to invent a totally wireless photographic studio and include everything, from the flash-lights and camera to the sync and computer.

What technology product couldn't you live without, and why?

The Olympus C5050 digital camera, paired with my Epson 925 printer. The camera gives me flexibility and good quality for everyday photography, while the printer interprets the results faithfully and quickly turns them into perfect prints.

What's your home page or favourite website, and why?

The BBC home page as it has all the info I need, from weather and sports results to news and current affairs.

The Earl of Lichfield is Queen Elizabeth II's second cousin and also a professional photographer.

Fileswappers strike back

Following the decision by the Riaa (Recording Industry Association of America) to file suits against 261 individual fileswappers, consumers are fighting back with legal action of their own.

When the Riaa decided to go after individuals, it sweetened the pill by introducing a clean slate amnesty program, whereby fileswappers could avoid being sued. It's this olive branch that has landed it in hot water with the lawyers.

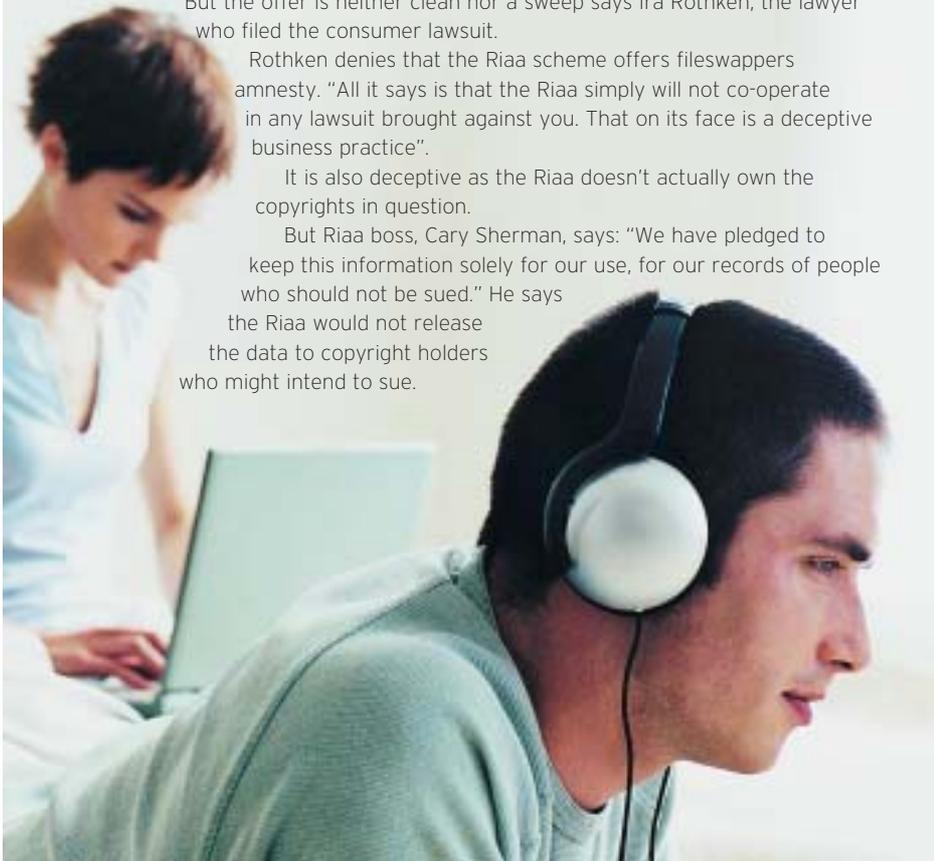
To qualify for the amnesty program, applicants must send the Riaa a sworn, notarised affidavit with their full contact details. In turn, the Riaa agrees "not to support or assist in any copyright infringement suits based on past conduct", according to the organisation.

But the offer is neither clean nor a sweep says Ira Rothken, the lawyer who filed the consumer lawsuit.

Rothken denies that the Riaa scheme offers fileswappers amnesty. "All it says is that the Riaa simply will not co-operate in any lawsuit brought against you. That on its face is a deceptive business practice".

It is also deceptive as the Riaa doesn't actually own the copyrights in question.

But Riaa boss, Cary Sherman, says: "We have pledged to keep this information solely for our use, for our records of people who should not be sued." He says the Riaa would not release the data to copyright holders who might intend to sue.



Snooping laws toned down?

The government has released tighter controls on the controversial Ripa (Regulation of Investigatory Powers Act), which gives permission to certain government and public bodies to access communications data. It claims to have radically revised the original proposals following an outcry from consumers, civil liberties groups and ISPs over the amount of bodies that would have access to private data.

According to a statement from the Home Office, the new requirements will restrict the information public authorities are granted access to; curb the reasons why public bodies can be granted access; ensure regular checks on public bodies by an independent commissioner to guarantee access is not abused; and only allow senior designated people to access the info.

But the FIPR (Foundation for Information Policy Research) believes the proposals do virtually nothing to change existing laws. Only one of the 24 bodies originally granted access has been dropped and three new ones - the charity commission, the serious fraud office and the gaming board for Great Britain - have been added.



My Technology

Neil & Adrian Rayment

Mac or PC? which do you use and why?

N. PC. Gaming on a PC is superior.

A. PC. My brother introduced me, as he's a gamer.

When did you last get angry with a piece of technology and why?

N. I did get angry in the beginning as I am a self-taught PC user. But one learns patience over time.

A. Yesterday, when using my PC to access Hotmail. It crashed just as I was about to send a long email.

If you could invent a device for the future, what would it be?

N. Direct cerebral plug-in play.

A. I would invent a device that would redress the balance of the planet, putting Mother Nature back where she belongs - above all parasitic species.

What technology product couldn't you live without and why?

N. My life would be a pain without my PC and its multimedia accessories.

A. I couldn't live without my mobile. My whole existence revolves around communication.

What's your home page or favourite website and why?

N. I don't have a particular favourite as the web for me is information and communication on tap, not a pastime.

A. Metoffice.com. I can see whether or not it's worth driving two hours to go surfing or a blast in the VX220T with the roof off - in a perfect world both.

Neil and Adrian Rayment play the Twins in the *The Matrix: Reloaded*.

Apple updates iPods and iMacs

Apple updated its iMac range and boosted the storage found in its iPod digital music players. The iMac has gained faster G4 processors running at up to 1.25GHz with 333MHz DDR RAM, improved nVidia graphics and USB 2.0. The new iPod offers 40GB capacity for a total of £399.

CRTs on the way out

Monitor maker CTX says that by the year 2005 CRT screens will be a rarity, with flat-panels taking their place. In 2001 flat-panels made up six percent of CTX's sales; they now make up 42 percent. This finding is backed by analysts figures, which estimate that flat-panel sales have increased by 300 percent since last year.

Time line: 100 years of technology



1903



1923



1947



1962



1964



1972



1975



1982

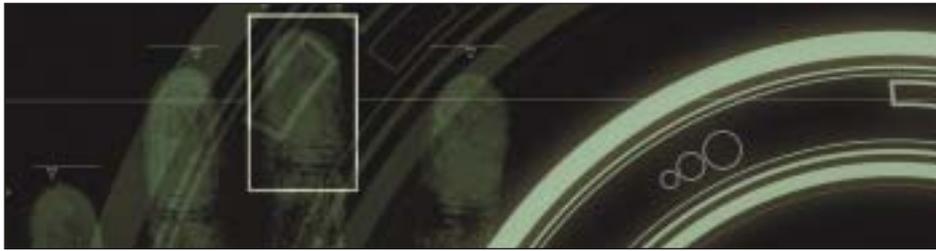


1985



2002

- 1903** ▶ The first airplane flight in history piloted by Wilbur Wright.
- 1923** ▶ Television invented by John Logie Baird.
- 1947** ▶ Dr Edwin Land introduces the Polaroid camera.
- 1962** ▶ Goonhilly Earth Station, the largest operational satellite station in the world opens in Cornwall.
- 1964** ▶ IBM rolls out the OS/360, the first mass-produced computer operating system.
- 1965** ▶ Digital Equipment introduces the world's first computer to use integrated circuit technology, the PDP-8.
- 1972** ▶ Nolan Bushnell, founder of Atari, develops the world's first mass-produced video game - Pong.
- 1973** ▶ Martin Cooper develops the portable handset, making him the first person to make a call on a mobile phone.
- 1975** ▶ Bill Gates and Paul Allen join forces to create Microsoft.
- 1976** ▶ Cray Research introduces the first supercomputer, the Cray-1.
- 1982** ▶ First audio CDs released by electronics giants Sony and Philips. The CD-ROM followed some two years later.
- 1985** ▶ Microsoft releases its first Windows operating system.
- 1993** ▶ Intel introduces the Pentium Processor.
- 2002** ▶ First wireless Bluetooth headsets hit the market.
- 2003** ▶ AMD Athlon 64, first genuinely backwards-compatible 64bit processor.



Lose your identity online

Several leading IT companies, including Microsoft and eBay, have joined forces with leading financial service providers such as Visa to form a coalition to fight online identity theft.

ID theft is a growing problem, costing US lenders around £1bn per year. Figures from analyst Gartner Research show that seven million consumers were victims of some form of online fraud last year alone.

"Most identity theft comes from offline sources such as personal information and documents thrown away by the trusting consumer in their usual trash disposal," says Harris Miller, president of Itaa (Information Technology of America Association).

"While a small percentage of the problems come from online sources, recent email frauds have involved notifying a consumer about fictitious account problems and asking the individual to supply a user ID and password or other sensitive data.

Miller says industry, government and consumers must share responsibility for identity security. To prevent identity theft consumers need to be more aware, government needs to enforce stronger penalties for offenders and law enforcement agencies and vendors need to co-operate more.

Other members include the Business Software Alliance, Itta which will be responsible for the group's administrative functions, McAfee, RSA security, TechNet, Verisign and Zone Labs.

BT launches Yahoo Broadband service

BT's latest consumer broadband service, using content from Yahoo, has gone live. It is available for £29.99 per month and includes intelligent personalisation, a personalised radio service, Launchcast and security features including anti-spam, antivirus and a free firewall. For more information visit www.btyahoo.com.



Palm-sized snappers from Panasonic

Panasonic has launched two tiny cameras: the SV-AV100, a compact camcorder, and the SV-AS10, a digital stills camera. The SV-AV100, which captures Mpeg-2 or Mpeg-4 footage to a Secure Digital card, has been shrunk to just 33x90x65mm and 156g.

The camcorder features an 800,000 pixel CCD (charge-coupled device) sensor and there is also a 10x optical zoom lens and a 2.5in LCD. Still images are recorded in Jpeg format. The device is due to ship this month for around £900.

The SV-AS10 still camera is even smaller than the camcorder at 10mm thick across most of its body, 13.5mm thick in the area around the lens, 52mm wide and 104mm high. It weighs just 57g. This model comes with a 2Mp CCD sensor, a 1.5in monitor and a digital music player with support for MP3, AAC and WMA files built into the camera. It can also be used as a voice recorder. The SV-AS10 is priced at approximately £228.

they say, 
we say

Sequoia GPS Antenna

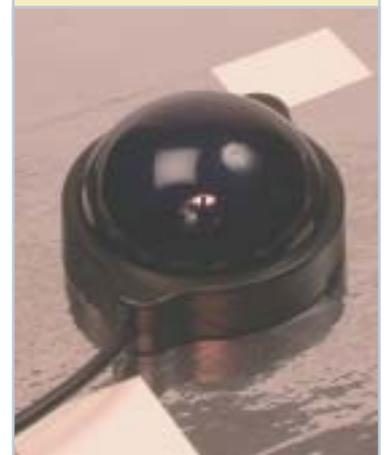
➤ They say: Universal GPS mouse capable of providing fast-access position information for any USB- or RS-232-equipped laptop or other portable computing device. Can identify its exact position within a minute.

➤ We say: In what way is this a mouse? It lives up to all the other claims. Once installed, the Sequoia hooked us up with a satellite and located us in AutoRoute in 20 seconds. But it's just not a mouse. It can't be used to point and click, nor is it even hand-operated. It's a small blue Perspex dome with a magnetic base so you can put it on your car roof to navigate (and pretend you're driving an unmarked police car).

➤ They say: Positional accuracy is 25m with currently available satellite data.

➤ We say: So do not use in conjunction with cruise missiles or other munitions requiring greater accuracy.

- www.sequoia.co.uk
- £99 inc VAT



INTEL DEVELOPER FORUM SPECIAL



Intel held its regular Developer Forum in San Jose, California, in September and *PC Advisor* reviews editor, Will Head, was there to report on all the important news

To kick things off, Intel gave us a special presentation on "IDF eve" (before the show officially started) to let us in on what its techies had been working on in the development labs.

We were quite excited about the Personal Server at first - a small hard drive with Bluetooth connectivity, on to which you can store all your personal information and access it from a kiosk or Bluetooth-enabled PC - until we remembered we could just use our brains for the same purpose.

On the wireless front there was WiMAX - basically wireless broadband - and UWB (ultra-wide band), the latest wireless standard.

There was plenty of digital home kit on display, although apart from DTCP-IP (see right) no one has any firm plans as to how to make it all work. PCI Express, the next generation of expansion and graphics cards, was big - but then it was big at the last IDF. It's coming real soon now. Honest.

Finally there was PlanetLab, the next internet - because the current one obviously doesn't work - and Intel announced a new chip, coincidentally just before AMD's Athlon 64 debut.

Pentium gets Extreme

Intel used the Developer Forum to confirm that it will launch a slightly tweaked Pentium 4 chip, titled Extreme Edition, but refused to be drawn on whether it was a sweetener aimed at stopping Dell defecting to archrival AMD.

With AMD's Athlon 64 processor, launched in September, taking the technological lead (see Behind the news, page 30), Intel's announcement couldn't have been better timed to steal some thunder. Wooing Dell to produce Athlon 64 systems would be a coup for AMD, handily dispatching the final Intel-only shop in the process.

Despite its rather grand name, Pentium 4 Extreme Edition's main difference over its more sedentary sibling is an extra 2MB of Level 3 cache. Sadly for Intel, the fact that details of the processor leaked out on to the web hours before the official announcement proved more interesting than the product itself.

Intel's pitching the chip at gamers and enthusiasts, a group that accounts for less than five percent of the market by its own figures. The chip giant claims it will be the fastest processor available, but wouldn't release specific performance scores before its launch which the company said would be in October or November this year.



Digital home content delivery

In the not-too-distant future we will pass digital content around our homes from device to device, depending on where we want to consume it. But that requires a set of communication protocols that balance security with ease of use.

Announced at Intel's Developer Forum, DTCP-IP (digital transmission content protection over internet protocol) extends an established secure digital distribution mechanism into the home, providing embedded digital rights management to protect content but that's transparent to the consumers enjoying the content.

DTCP-IP provides a secure digital link from media server to output devices like TVs, keeping content safe while en route to the playback device.

The system works on the basis of trust. The server providing content negotiates with the client and, once it establishes that it's a trusted device, sends content data in encrypted form. As the system is entirely secure there's no need for draconian copy-protection measures.

DTCP-IP sets a secure network environment, within which the content protects itself. To the user it's completely transparent, providing they don't try to move it off their own network, and for the content provider it offers a secure environment into which they can supply digital content with as much, if not more, protection than in the analogue realm.