



Shaking the business world

TEENAGERS HAVE BEEN AN IRRITANT SINCE JAMES DEAN FIRST BEGAN MOOCHING DREAMILY IN THE FIFTIES. BUT NOW, ARMED WITH JUST A PC AND A COPY OF ADVANCED C++, THEY'VE GOT THEIR SIGHTS SET ON BIG BUSINESS. TIM GREEN REPORTS.

IF YOU PAY ANY ATTENTION TO the management gurus of the day, you will find them singing the same basic song, and it's this: employ wacky people. Tom Peters, self-styled business visionary and best-selling author, and his ilk are mad keen on the notion that in the information age it's ideas, rather than goods or processes, which give you a competitive advantage. And as we all know, ideas come from the left field, from creative people, not suits.

All very nice. Let's take off our ties, put scooters in corridors and keep a bowl of jelly beans next to the coffee machine. But there's a flaw in the gurus' big idea: Wacky creative types don't always want to work for big organisations, no matter how many chill-out rooms fill their floor space. Most of them would rather stay at home or in their college dorms and use their creative genius for their own ends.

Sometimes, of course, there's a destructive element to this. Hackers and crackers proliferate, often driven by a vaguely childish desire to knock down the piles of bricks carefully erected by the grown-ups (as Yahoo, CNN, eBay, Buy.com, Amazon, Etrade and ZDNet all found to their dismay over three salutary days in February).

But in other cases, the wildcards pursue what is ultimately an even more horrifying agenda (at least, for the powers that be). They build an alternative – something clever and commercial that can chip away at the very foundations of established companies, even industries.

Of course, young upstarts have always replaced the existing order. Let's face it, Henry Ford wasn't good news for the horse and carriage business. But in the industrial age, change took years, generations. Nowadays, it's no overstatement to say that virtually all industries are in a state of constant panic about next week. Think about it. When was the first time you heard the acronym MP3 (of which more later)? A year ago perhaps? Now there are an estimated 17 million MP3 downloads every day.

The first stirrings of this change began in the 1980s, when technological products started to become mass market. One fine example emerged in Warwickshire, the pretty heart of middle England. Warwickshire was (and still is) the home of Richard and David Darling, brothers who discovered a talent for programming in their teens. They put their skills to use making video games under the name Codemasters. They sold a lot, but their real meal ticket was a device that loaded 'cheats' on a cartridge. Slot this cart into your Nintendo and you could play and play without fear of virtual death. They called it the Game



ILLUSTRATION PHIL HANKINSON

Napster: A stricken industry despairs

Napster is software that lets users create a directory for their MP3 files and allows those files to be accessed by other users. The Napster company claims this has valuable marketing possibilities and promotes word of mouth. Pah, said the record business, phoning its lawyers, Napster is all about piracy. Comments include:

'It is the single most insidious website I've ever seen... it's like a burglar's tool.'

Ron Stone, Gold Mountain Management (represents Tracy Chapman and others) *'Not to insult anyone's intelligence, but my music is like my home. Napster is sneaking in the back door and robbing me blind.'*

Scott Stapp, lead singer with Creed

'I couldn't believe it when I found out that this Napster was linking thousands of people to the new Notorious BIG album Born Again, a week before it even hit the streets... BIG and every other artist Napster abuses deserve respect for what they give us.'

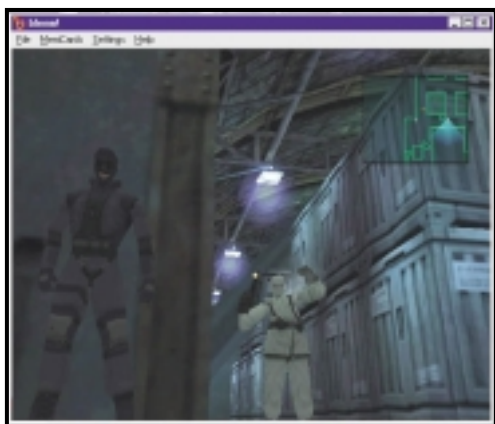
Sean 'Puff Daddy' Combs, CEO, Bad Boy Entertainment.

'If the Internet thieves are not

stopped or better regulated, it not only robs current artists but might have even more serious repercussions for the next batch of artists. I support and applaud the RIAA on their efforts to make sure that Internet companies are not stealing the rights of the people who make the music.'

Simon Renshaw, Senior Management (manager of the Dixie Chicks)

Genie and Nintendo hated it. The might of the games company's legal department came down on the Darlings from a great height. But the boys held firm. In 1990 Warwickshire won and went on to gross around £150m from the device. Today, Codemasters turns over close to £100m a year.



Accentuate the positive, emulate the popular games consoles... Sony found it hard to see the positive side of bleem!'s and Connectix's PlayStation emulators

Over a decade later and the video games industry still can't shake off the 'irritants'. Now, it's emulation that causes the most angst. At the time of writing Sony is fighting lawsuits with both bleem! and Connectix, both of which sell software that lets PC and Mac gamers respectively run PlayStation games.

Of the two, bleem! is the classic upstart outfit, hatched in 1998 when programmer Randy Linden had a little think about the PlayStation and resolved to 'keep the code alive' long after machine itself was phased out. Not long after he was knocking out bleem! software packs for £18 a throw.

In the knowledge that Sony might disapprove, bleem! spread the message that its software did not emulate the circuitry of PlayStation, but merely mimicked its functionality. Then it positioned its product as a PlayStation accessory that would allow users to run Spyro et al on their laptops, while increasing software sales for Sony.

Unsurprisingly, the manufacturer saw it differently. It was none-too-pleased to see PCs emulate its expensively developed hardware for the cost of a budget game. A temporary restraining order followed. This failed – as did the one filed against Connectix months later. At the time David Herpolsheimer, head of sales and marketing for bleem!, said: 'We've always held that bleem! will be good for Sony, since it expands the PlayStation's reach to millions of PC gamers. We've always worked to respect the interests of Sony and all PlayStation developers,

and have repeatedly reached out to address any legitimate concerns they might have. In spite of Sony's recent actions, our door remains open.'

Quite acquiescent really. Well, time passes and now bleem! is countersuing Sony for monopolising the games market and conspiracy in restraint of trade.

This ongoing affair poses big questions about intellectual property. But it pales beside the potential ramifications of a lawsuit that pitches a relatively small software developer called Napster against no less an opponent than the Recording Industry Association of America.

Napster is the latest and perhaps the most explosive spin-off of the music industry's nightmare du jour, MP3. Jointly programmed by college students Shawn Fanning and Sean Parker only last summer, this downloadable application turns users' computers into servers, which can then swap MP3 files. As a Napster user, you designate a folder on your hard drive to store these files and then, when you connect to the central site, other users can take what they like and you can do the same back.

It's extremely simple and very robust. And because of this, Napster is reckoned to be just about the fastest growing Internet service since Hotmail. Although no-one can be certain, there may be millions of users already – and Napster has not even been officially launched yet.

All of which got the music industry mightily spooked (see box). The lawsuit that was filed in December, claimed: 'Napster is similar to a giant online pirate bazaar... it provides its users with all the facilities and means to engage in massive copyright infringement.'

Needless to say, Napster – now staffed and run by hard-headed business types – rejects this analysis. It legitimately claims that, no matter how many illegally copied files are flying about the system, it holds none of them on its server. It is merely a matchmaker and therefore utterly innocent of any wrongdoing. No, this is not about piracy, it's about community.

'People are naturally passionate about music, naturally want to share it; artists naturally want to create and share their music and find their



Comic capers with the source-code papers

Traditionally, when the big corporation takes on the little guy a 'squishing' ensues. But in the new economy it's often the 'suits' that flounder. Take the case of the lawyers who

accidentally published the code they were seeking to keep secret.

The blunder occurred in the case of the DVD industry versus the hackers who reverse-engineered the CSS

scramble code. Lawyers representing the industry included the protocols in court documents and forgot to ask the judge to keep them out of the public domain. The hackers leapt

and published the offending material the Internet. One claimed more than 21,000 people downloaded it before the hapless lawyers returned to court and requested an injunction.

fans: That's what music is all about,' said Napster's CEO, Eileen Richardson. 'Now we have the Internet - why can't we do some of that there? But everyone in the music industry is saying, "No, these are the rules, and I own the music." They're just pretending to be about copyright.'

Richardson may be totally sincere, even though Napster is undeniably used to exchange illegally ripped MP3 files. But one company's culpability is not really the issue here. Instead, it's about distribution and how far the record company's ownership of a recording extends.

This is also being tested by another company MP3.com. It is fighting a parallel lawsuit with the RIAA over MyMP3.com, a site that acts as a remote 'locker' for users' files. Here, the RIAA alleges that a massive database is being compiled without permission or payment. MP3 contests that users have paid for those recordings and the RIAA has no right to dictate where they keep them. MP3's CEO Michael Robertson said: 'You don't have to pay more royalties to listen to a CD in your living room; why should you pay more royalties to listen to your CD in your living room on your computer?'

There is a chance the RIAA will win its suits, of course. But even if Napster is shut down by the RIAA, it won't be long before some new whippersnapper takes its place. The netheads are too clever. And, perhaps more importantly, they care too much.

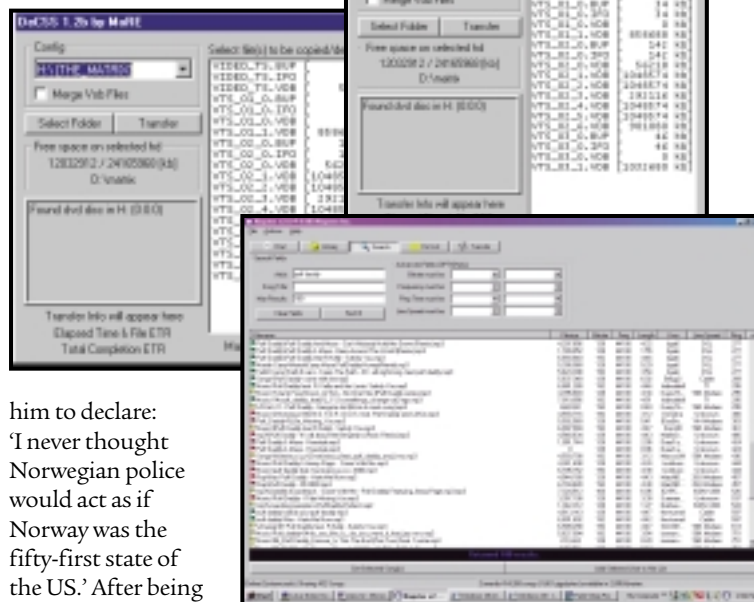
Take the recent protests waged by the open-source and hacker communities against Hollywood's efforts to clamp down on software that cracks DVD encryption codes. After the police arrested Jon Johansen, the 16-year-old Norwegian hacker who first published the codes, protests were organised outside cinemas and video shops across 100 cities worldwide.

The teenager's achievement rocked a film industry that thought it had safely locked up the secrets of its new format. Johansen led a team of programmers called MORE (Masters of Reverse Engineering) in first unravelling and then publishing DeCSS, the code which circumvents the Content Scrambling System embedded in DVD discs and prevents unauthorised players from playing them.

They were able to do so thanks to an oversight by one of DVD's hardware licensees - another illustration perhaps of the 'old' economy's inability to grasp the realities of the wired age (see

box). Basically, the hackers needed a five-byte decryption key to unlock DVD's secrets. Every hardware and software vendor has its own - and they should encrypt them. And they all did except Xing Technologies. So when MORE cracked Xing's key, they were able, by trial and error, to work out 170 more.

Just days after publishing the code, the Motion Picture Association of America filed two federal lawsuits against MORE. And on 25 January 2000, a stunned Johansen was frogmarched out of his home, prompting



Top two: DeCSS lets you rip movies from DVDs, while Napster (bottom) is used for trading MP3 files

him to declare: 'I never thought Norwegian police would act as if Norway was the fifty-first state of the US.' After being released, Johansen explained that his real reason for publishing was to make DVD available to those who want to run discs from Linux which - thanks to its open-source philosophy - is not, and most likely never will be, an authorised DVD licensee.

This case has still to be decided. But whatever happens, Johansen and his kind will not go away and Big Business will have to learn to live with the threat posed by them. But then the target doesn't have to be megacorps such as the MPAA. The new boys will do just as well. It's one of the supreme ironies of this whole issue that the mirror was turned on Napster when college senior David Weekly reverse-engineered the Napster protocols and posted them on the web. Infuriated, Napster demanded he take them down. Weekly ploughed on regardless and the biter was bitten.

