



THE TECHNOLOGIST

Prof Peter Cochrane, 56, co-founder, *ConceptLabs* (consultant to and creator of new companies)

Background: Degrees in electrical engineering, telecoms, cable technology and systems from Nottingham Trent and Essex Universities; former chief technical officer and head of research for BT

I SEARCH AROUND LABS, TO SEE WHAT PEOPLE are playing with. I brainstorm: what technologies could we produce if we tried? It's important to look at other people's forecasting, too, and that includes sci-fi books and movies.

If you want an accurate prediction of the future, the best person to ask isn't an expert, it's a man on the street with a bit of imagination. It doesn't matter what age they are, so long as they've got the mind of a nine-year-old child.

Another important tool is linear extrapolation. For example, it's a racing certainty that Moore's Law (that the power of computer chips doubles every year) will continue or be exceeded for at least the next 15 years, and the same will apply to wireless and optical technology, nano-technology, sensors and memory storage.

The technology already exists to put every movie ever made on a single DVD. But why have discs and boxes and packaging cluttering up your room? Why not store everything you ever want to watch or hear on a 10-terabyte server?

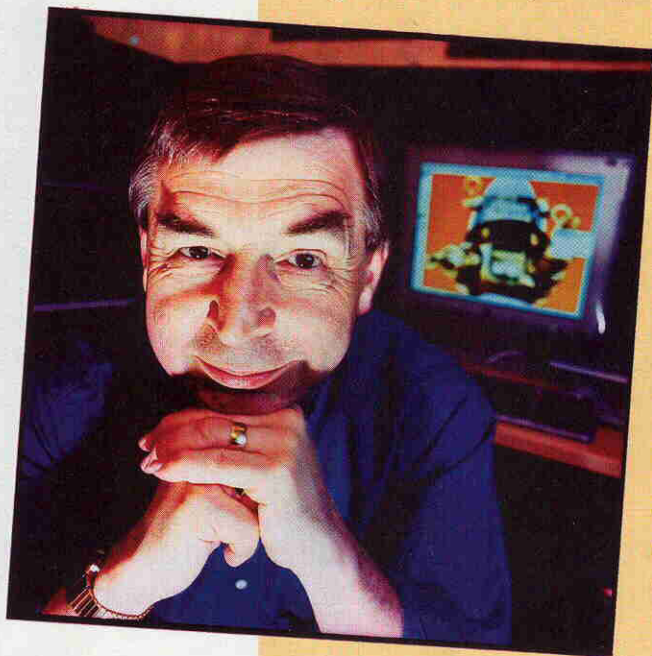
The MP3 revolution is the thin end of a very thick wedge. The music industry were stupid trying to

stop Napster, but then they tried to stop cassette-tape and CD, and the movie studios tried to stop video and DVD. It may not be possible to sell content in the same way any more, because it is so easily copied. So the entertainment industry will need a new model. But consider this. By the time *Toy Story* had taken \$200m at the box-office, it had cleared \$1bn in merchandise. Perhaps if the film had been given away, Disney might have made \$5bn. Where's the value proposition?

After B-to-C, B-to-B and peer-to-peer markets, I expect to see C-to-B. If you look at the multimedia capabilities of kids today, there's a wealth of talent out there. They can produce industry-standard movies, music and graphics, from their bedrooms. There will be a huge shake-out in advertising agencies and design consultancies. The logo on my business card was designed by a five-year-old.

People will have to fend for themselves more. Pension funds will collapse and people will have to work longer. Health care will be a huge growth area. Remote monitoring will enable doctors and hospitals to track patients even when they've gone home and may even be able to look after patients without bringing them in for surgery: like mechanics repairing an F1 car while it's still on the track.

There will be many more artificial body-parts. But will they be made of bits of tin and batteries, or will they be grown from stem cells? I can envisage a two-tier society. The degree of repair to the body will be based on the ability to pay. The rich will have perfect replacements that are better than the originals, and the poor will get cheap, fallible mechanical parts.



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