

LOOK SMART

Roger Dennis explains how to keep up to date on technological developments

IN 1943, Thomas Watson, the chairman of IBM, announced that he thought there was a market 'for maybe five computers'. Not learning from this flawed prediction, 34 years later, Ken Olson, founder of another computer giant – DEC – went on record saying 'there is no reason anyone would want a computer in their home'.

In doing so, both Watson and Olsen unintentionally proved that trying to predict the future direction of technology is notoriously difficult. Even for those who are comfortable with technology, the accelerating pace of change can present significant difficulty when trying to keep abreast of technological developments.

So how do designers begin to predict where technology is heading, or monitor the future digital landscape, in order to stay one step ahead?

Larger consultancies often have the resources to devote in-house teams to this problem. Seymour Powell has a team of eight in its Foresight unit, which trawls a range of sources deciphering societal and technological trends.

'Designers need a high-bandwidth radar, but [they also need to] be able to drill deep and quickly into a particular area of interest,' says Foresight director Kevin McCullagh. The unit sees itself as a 'lens' that provides focused research to pull together disparate threads in order to give the designers a comprehensive grounding, he adds.

While some designers see the field of design strategy as something new that encroaches on their creative territory, feedback from clients on Foresight's trend prediction has been extremely positive, McCullagh claims.

Smaller groups, however, do not have the luxury of a dedicated team and are therefore faced with a potential gap in their knowledge. But some clients may provide their own research, and there are a handful of third party consultancies that can add further insight.

For the technically literate, there is also the DIY method, but getting to grips with new developments in the digital industry can be daunting. To add to the difficulty, the technology sector breeds acronyms at a pace that would make even the most virile rabbit blush. In spite of this you don't necessarily need to know your GPRS from your GPS in order to comprehend the impact of some of the changes that are currently taking place.

Currently, one of the most interesting areas centres on networks. The Internet is an early example, and in a very short space of time has changed many of the ways in which people and businesses communicate. However, the real impact of networks has yet to be felt. For example, the mobile phone is essentially a computer connected to a network. As the computing power of mobiles increases, people will be using them for much more than just humble voice calls and text messages.

The potential of computer networks will be fully exploited when automatic machine-to-machine communication matures. There are already millions of tiny chips controlling a range of machines, from air conditioning to DVD players. Technology, which allows these chips to send information about their environment to other networks and respond accordingly, will develop some compelling products.

For example, the heating system in a home might 'learn' where to distribute the right amount of warmth based not only on environmental conditions such as temperature, but also the movement patterns of the people in the house. This information could be communicated from the alarm system to sense which rooms people use when they are at home. In this manner, less power could be directed to the bedrooms during dinner, but that measure could be increased before people went to sleep.

For designers wishing to increase their knowledge of technology, there are a couple of accessible publications to guide them through the technology quagmire. Each Thursday, gadgets and software are covered in the Online section of the Guardian. If a weekly diversion is too much, then try Wired magazine. It goes beyond computing to encompass everything from digital cinema through to the pioneers of commercial space travel.

If you want to observe technology changes first hand, then look no further than schools. Teenagers are living barometers of technology change, and are unconstrained by 'acceptable' thinking. Shawn Fanning, developer of the original Napster, was at college when he singularly derailed the business model of the music industry. Similarly, it was Scandinavian teenagers who first saw the potential of text messaging.

For a quick view of the distant future – for example, 20 years away – don't bother with esoteric academic publications, but develop an appetite for science fiction. Sci-fi authors have a history of painting futuristic worlds that have inspired numerous current technologies: Arthur C Clarke envisaged satellites, William Gibson coined the term cyberspace, and Phillip K Dick wrote about a future where retinal scanning was the accepted form of identification.

Equipped with creative outlooks, design professionals are arguably better equipped than technologists to incorporate innovative new developments into their work. Working at the intersection of technology – design and usability – designers shouldn't forget that, at the end of the day, it's not technology that makes an interesting product, but how you enable people to use it. □

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