

A week is a long time in computer ethics

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It seems the more sophisticated we become in developing and using technology the greater the risk that it will be used in a detrimental way against individuals, organisations or society at large. We seem to be constantly grappling with new concepts that simultaneously pose new opportunities and new problems, or rushing to pass through new legislation to counter some new threat or redefining societal norms for our shrinking technologically-dependant world. Is this paranoia or reality? Consider the evidence. Several major online news services were sampled for the week commencing 15 March 2004 to identify the current challenges that we face from technology. The findings were concerning.

Over 30 news items covered a range of problems and focused on three perspectives: occurring incidents, technological countermeasures and legislation. The news items fall into several broad categories.

Globalisation.

A number of articles addressed various aspects of globalisation. Controversy over offshore call centres and technology development in India was reported in one article. Those for and against such moves sadly seem to align with the political stances of the developed and developing world. In a range of articles about viruses, information access and intellectual property theft the underlying message was the extent and speed of impact due to the global nature of new technologies.

Intellectual Property.

This continues to be a hot topic. During the week Microsoft was reported as continuing aggressively to protect its trademarks across the world. Meanwhile the European Parliament passed a draft directive on enforcing intellectual property rights. It was reported that, "Campaigners still believe the move will damage activities such as the development of open source software." There were several reports on content theft. There was a spate of content theft from websites central to the activities of several companies and individuals. Peer-to Peer (P2P) file-sharing appeared in a number of reports. UK firms were shown to be lacking in recognising their professional obligations to society by allowing widespread illegal P2P. Parental obligation was under scrutiny in an article which revealed many parents were either ignorant that swapping copyrighted

files was illegal, or knew it was illegal but did nothing about it, or did it themselves having learnt from their children. In the entertainment world a movie piracy ring had been discovered through a server containing many pirate motion pictures. Finally, the music industry continues to worry about P2P and the fact it cannot control the Internet.

Identity Theft.

The growing problem of identity theft seems to be of little concern of many people. For example it was reported that one in five Britons were willing to give financial details to unsolicited contacts and were not bothered when £500 was taken from their accounts fraudulently.

Viruses and Hacking.

Computer viruses and malware are the scourge of the modern global society. During the week there were several reports on the variants of Bagle and other viruses such as MyDoom and Netsky. The Trojan horse Phatbot was wreaking havoc as computers continued to be connected to a P2P network of infected machines.

There was growing pressure to address Bluetooth security problems in mobile phones which allowed hacking into the personal data held on mobile phones. But phone manufacturers view the problem as relatively minor. Symantec's biannual Internet Security report confirmed growing severity of hacking incidents. One article reported that work had started on threat and vulnerability tests to ensure that the National Identity Register database, which will form the basis of the UK's controversial ID card scheme, is secure from hacker attacks.

Countermeasures were the subject of several articles. A new antivirus chip was reported in one, another announced that, "A public inquiry has been launched into the Computer Misuse Act (CMA), which could spell the end for current loopholes in the law", whilst one article Recognising that hacking cannot be prevented extolled the virtues of taking out adequate insurance cover.

Junk Mail and Spamming.

China was reported as the second largest target for spam with one third of all emails being junk mail. Generally the deluge of junk mail has led to frenetic anti-spam software development. The latest types were reported as using complex Bayesian techniques to weed out spam from legitimate mail.

Information Access and Denial.

It was reported that China had closed two Internet sites used by many thousands of people because they carried content deemed to be objectionable by the State. A second report explained that TeliaSonera in Sweden had closed down a web site of the Islamic

group Hamas because it violated the acceptable use policy. By contrast one article focussed on content filters to restrict access to information for school children to combat such things as plagiarism. Legitimacy of information services was the subject of a contrasting article on fake escrow sites. These spoof sites are used to dupe consumers.

Surveillance.

Warnings were given about the need to be sensitive to employees' needs when implementing and operating surveillance systems. A new software tool to detect paedophiles in Internet chatrooms was unveiled. One article gave warnings about how every day accessories such as mobile phones were increasingly used for surveillance and that such intelligence gathering was commonly shared and condoned.

Health.

Our physical health can be at risk from technology. It was reported that those using multiple workstations were at greater risk of developing RSI-type injuries.

Conclusion.

In one week the news has carried many disturbing stories about information and communication technology. Each issue has a flip side such as these.

Freedom of expression	Censorship by the state
Global reach	Local impact
Prevention of computer misuse	Cure from outcomes of computer misuse
Individual ownership	Community share
Information	Junk
Surveillance	Freedom

We need to have the ability, tools and confidence to address such issues. A week may be a long time in computer ethics but if we do not address such issues the consequences will resonate for lifetimes.

News services accessed as part of the research for this article.

Financial Times - (<http://news.ft.com/technology>)

Guardian Unlimited Online - (<http://www.guardian.co.uk/online/>)

Silcon.com - (<http://www.silicon.com>)

Tech - Reuters - (<http://www.reuters.com>)

VNU.NET - (<http://www.vnunet.com>)

ZDNET - (<http://news.zdnet.co.uk>)

Please send your views on ethical and social responsibility issues and cases of ethical dilemmas to:

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