We are living during a time of rapid technological change. Emerging technologies - notably information and life science technologies - have profound social, political, psychological and ethical implications. Public perceptions of emerging technologies are potentially volatile.

The Swinburne National Technology and Society Monitor (SNTSM) was developed by the Australian Centre for Emerging Technologies and Society (ACETS) at Swinburne University of Technology. It involves a representative nationwide survey of Australians, and provides an annual ‘snapshot’ of public perceptions regarding new technologies in Australia.

The 2005 Monitor is the third edition of the Swinburne National Technology and Society Monitor. It provides a snapshot of public perceptions in 2005, and how these perceptions have changed since 2003.

The Survey

The 2005 Monitor included 1013 respondents. The response rate was 25.8%. Participants in the 2005 national survey were asked:

♦ How comfortable they were about the current rate of technological change
♦ How comfortable they were in relation to various technologies, ranging from relatively ‘established’ technologies (such as the Internet) to ones that are still speculative (such as modifying plants and animals for food).
♦ The extent to which they agreed or disagreed with statements about the benefits and risks of science and technology.
♦ How much they trusted various institutions, organisations and groups for information about new technologies.

Comfort with technologies was measured on an eleven point Likert scale where 0 = not at all comfortable and 10 = very comfortable. Agreement with statements about science and technology were measured on the same scale where 0 = strongly disagree and 10 = strongly agree.

Trust was measured on a 6 point Likert scale where 0 = don’t trust at all and 5 = trust a very great deal.
Participants were also asked demographic and personal questions about:

- Age
- Gender
- Employment status
- Occupation
- Income
- Country of birth
- Parents’ country of birth
- State of residence
- Voting behaviour
- Computer and Internet use
- Life satisfaction

---

The Monitor Team

The Swinburne National Technology and Society Monitor (SNTSM) is designed, conducted and produced by members of the Australian Centre of Emerging Technologies and Society (ACETS), in the Faculty of Life and Social Sciences at Swinburne University of Technology.

The Monitor team includes (in alphabetical order) Michele Bell, Gordana Bruce, Vikki Bunton, Simone Buzwell, Christine Critchley, Karen Farquharson, Michael Gilding, Elizabeth Hardie and Lyn Turney.

Other results from the 2005 SNTSM can be found in the following journal articles:


---
KEY FINDINGS
PUBLIC PERCEPTIONS OF TECHNOLOGICAL CHANGE

1. Australians are very comfortable with the rate of technological change. Our level of comfort is very similar to what it was in 2003.

2. Most Australians believe that science and technology are continuously improving our quality of life. Since 2003 men and women have converged on a positive view of scientific and technological progress.

3. Most Australians do not believe that science and technology can solve most problems faced by human beings. Since 2003 the belief that most problems can be solved through science and technology has increased.

4. Most Australians agree that science and technology are out of control and beyond the control of governments, but since 2003 this view has declined.

5. Australians most strongly trust CSIRO, universities, hospitals and scientists for information about new technologies. They do not trust the media.

6. The digital divide is getting wider. Australians who use the Internet are very comfortable with it. Australians who do not use the Internet are becoming more uncomfortable with this technology.

7. Australians are very uncomfortable with genetically modified plants for food, and even more uncomfortable with genetically modified animals for food.

8. Most Australians are comfortable with stem cell research - but they are much more comfortable with stem cell research done in publicly funded universities than stem cell research done in private companies.
OVERALL, AUSTRALIANS ARE COMFORTABLE WITH THE RATE OF TECHNOLOGICAL CHANGE.

Australians are generally comfortable with the rate of technological change. On a scale of 0 (not at all comfortable) to 10 (very comfortable), the average score of respondents was 6.71. In 2003 it was 6.90.

Since the first survey in 2003, men have been consistently more comfortable with the rate of technological change than women.
2. SCIENCE AND TECHNOLOGY ARE CONTINUOUSLY IMPROVING OUR QUALITY OF LIFE

AUSTRALIANS BELIEVE THAT SCIENCE AND TECHNOLOGY ARE CONTINUOUSLY IMPROVING OUR QUALITY OF LIFE.

When asked whether ‘science and technology are continuously improving our quality of life’, the average score of respondents - on a scale of 0 (strongly disagree) to 10 (strongly agree) - was 7.3. Eighty percent of the respondents agreed that science and technology are improving our quality of life; that is, they scored above 5.

The belief that science and technology are continuously improving our quality of life has been consistently high since the first survey in 2003.

At the same time, men and women have converged on a positive view of scientific and technological progress.

[Chart showing Male and Female Trust in Science Improving our Quality of Life with data points for 2003, 2004, and 2005, with a general increase in response over the years for both males and females.]
3. SCIENCE AND TECHNOLOGY CANNOT SOLVE MOST PROBLEMS FACED BY HUMAN BEINGS

MOST AUSTRALIANS DO NOT BELIEVE THAT SCIENCE AND TECHNOLOGY CAN SOLVE MOST PROBLEMS FACED BY HUMAN BEINGS. SINCE 2003 THE BELIEF THAT THEY CAN SOLVE MOST PROBLEMS HAS INCREASED.

When asked whether ‘science and technology can solve most problems faced by human beings’ the average score of respondents - on a scale of 0 (strongly disagree) to 10 (strongly agree) - was 5.1. Only 42% of the sample agreed with this statement. Men were more likely to agree than women.

The belief that science and technology can solve most problems has increased significantly since 2003. This is true for both men and women.
4. SCIENCE AND TECHNOLOGY ARE OUT OF CONTROL AND BEYOND THE CONTROL OF GOVERNMENTS.

MANY AUSTRALIANS AGREE THAT SCIENCE AND TECHNOLOGY ARE OUT OF CONTROL AND BEYOND THE CONTROL OF GOVERNMENTS. SINCE 2003 THIS VIEW HAS DECLINED.

When asked whether ‘science and technology are out of control and beyond the control of governments’, the average score - on a scale of 0 (strongly disagree) to 10 (strongly agree) - was 4.6.

Women are consistently more likely than men to believe that science and technology and out of control and beyond the control of governments.
5. TRUST IN ORGANISATIONS AND INSTITUTIONS

AUSTRALIANS MOST STRONGLY TRUST CSIRO, UNIVERSITIES, HOSPITALS AND SCIENTISTS FOR INFORMATION ABOUT NEW TECHNOLOGIES. THEY DO NOT TRUST THE MEDIA.

Overall patterns of trust are largely unchanged since 2003. Trust in scientists has increased significantly.

So has trust in major companies and trade unions, but from a much lower base.

Trust in state governments has declined.

![Average Trust in Organisations](chart.png)
6. COMFORT WITH THE INTERNET

THE DIGITAL DIVIDE IS GETTING WIDER. AUSTRALIANS WHO USE THE INTERNET ARE VERY COMFORTABLE WITH IT. AUSTRALIANS WHO DO NOT USE THE INTERNET ARE BECOMING MORE UNCOMFORTABLE WITH THIS TECHNOLOGY.

In this study an Internet user is defined as somebody who said they used the Internet in the last week.

Internet users are also getting older. In 2003 and 2004 Internet users were significantly younger than non-users; in 2005 Internet users were significantly older than non-users.

In 2005 men were significantly more comfortable with the Internet than women.
7. DISCOMFORT WITH GM PLANTS AND ANIMALS

AUSTRALIANS ARE VERY UNCOMFORTABLE WITH GENETICALLY MODIFIED PLANTS, AND EVEN MORE UNCOMFORTABLE WITH GENETICALLY MODIFIED ANIMALS FOR FOOD

When Australians were asked how comfortable they were with genetically modifying plants for food, the average score was 3.9. Only 30% of participants were comfortable with this technology.

When asked how comfortable they were with genetically modifying animals for food, the average score was 3.1. Only 18% of participants were comfortable with this technology.

Men are significantly more comfortable with genetically modified plants and animals for food than women.

Since 2003 the level of Australians’ comfort with genetically modified animals for food has increased significantly. It has not increased significantly for plants, but the trend is in this direction.
8. COMFORT WITH STEM CELL RESEARCH

Most Australians are comfortable with stem cell research, but they are much more comfortable with stem cell research done in publicly funded universities than stem cell research done in private companies.

Since 2004 Australians’ level of comfort with stem cell research being conducted in both publicly funded universities or in private companies has risen significantly.

Men are significantly more comfortable than women with stem cell research being conducted in both public universities and private companies.
1013 respondents took part in the 2005 national survey. The following charts provide a graphical representation of the percentage of respondents in each demographic category.

Fifty eight percent of the sample were female and the average age of respondents was between 46 and 56 years.

About two thirds of the sample were Australian and 45% of the sample had completed tertiary education.
All states were represented in the sample and the majority of respondents’ political affiliation was split evenly between the Liberal and Labour Parties. One quarter of the sample had no religious affiliation and a large proportion of the respondents were either Anglican (21%) or Roman Catholic (23%). Almost half of the sample never attended church and another 17% did so once a week or several times a year.
The average reported annual income of participants was between $25,000 and $50,000 and 90% of the sample were either satisfied or very satisfied with their lives. Almost 70% of respondents had used a home computer in the previous week and 78% had access to the Internet.