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# Megatrends Report Highlights Our Changing Society

Gary Breed  
Editorial Director



While collecting news items for this issue's Technology Report, I discovered a recent report from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) of Australia, "Our Future World: An analysis of global trends, shocks and scenarios." This report identifies five *megatrends*—trends that represent fundamental changes in society's behavior.

Usually, reports like this make brief news splashes then disappear, because they typically come from individuals seeking publicity for a new pop-culture book. However, this report is the work of a major national scientific organization, and is considered to be an evolving work, ready to incorporate and reflect on future events.

Here are the five megatrends identified in the report—five interrelated ways that society is changing:

1. *More from less*—The extreme exploitation of natural resources that began with the Industrial Revolution, boosted by rapid population growth, has reached the point where it has become very difficult and expensive to extract them. Even those resources that are renewable, e.g., fisheries, are not able to keep up. As a result, the world is not only shifting toward conservation, but also acknowledging the burden of greater costs. This trend will accelerate, driven by necessity and shaped by conflicts that will inevitably arise from competition for increasingly scarce commodities.

2. *A personal touch*—The wealth and political stability of developed nations has created a growing services sector. CSIRO notes that services were 30% of the Australian economy in 1900, 55% in 1970, and have now reached 75% of gross domestic product. What makes this a megatrend is the next phase: tailoring services to the individual needs of the clientele. This is made possible by the huge amount of data collected digitally, plus the ability to sort and analyze that data, aided by location information from GPS-enabled devices. The two sides of this megatrend are major concerns for privacy versus the value of timely, precisely focused services.

3. *Divergent demographics*—In short, developed countries are aging, while poorer nations have high birth rates. Each has different needs for nutrition, health care, housing and personal activities. Although some countries are experiencing economic growth that will shift the balance, the report's authors see a growing gap between wealth and poverty—not just between nations, but also between economic and ethnic groups within a nation's population.

4. *On the move*—Especially since the end of WWII, transportation and lifestyle trends have made people more mobile. In Asian countries like China and India, economic opportunities have brought rural citizens into the cities in dramatic numbers. Entire cities must be built to accommodate the workers needed for industrial development. Western nations have high mobili-

ty for business, recreation and employment opportunities, and the overall migration from rural to urban areas continues. Moving from the central city to the suburbs had slowed, but has again resumed as communications technologies require less time “in the office.”

5. *iWorld*—Powerful computers, ubiquitous communications and “digital everything” are combining to create a society of interconnected people, and a network of interconnected machines. Driving the early stages of this megatrend are e-commerce, social networking, remote sensing and control, plus government policies to expand high speed connectivity. Perhaps it is best to describe this recent megatrend as the one that is now “going viral.”

### **The Technology Connection**

It is impossible to read about these megatrends and not see the

influence of technology. The Industrial Revolution was powered by coal and new machinery; today's megatrends are enabled by wireless communications, high speed computing, advanced network architectures, sensors, and many other technological contributions. These are also tools that help us deal with the social aspects of these megatrends.

Of course, many of these enabling technologies were invented and continue to be developed in engineering laboratories staffed by you, our readers. It's exciting to work in an industry that is leading the way, developing new concepts and designing products that will shape the future.

The report can be found at: [www.csiro.au/resources/Our-Future-World.html](http://www.csiro.au/resources/Our-Future-World.html)