



DEMOGRAPHICS

Smoking

Could kill 1 billion in 21st century



A 7 year old boy smoking in Beijing.

Tobacco could kill one billion people in the 21st century unless governments act now to dramatically reduce smoking, the World Health Organization said on February 7, 2008.

The UN agency said no country in the world was doing all it could to curb tobacco use, which it estimates will kill 500 million people who are alive today. It called on all nations to adopt a six-pronged strategy to dissuade people - especially women and young people - from smoking and to help them quit. Raising taxes to as high as 75% or more of the pack price would be the single most effective strategy, the WHO said. Higher taxes would also provide funds to counter tobacco industry marketing tactics.



DEMOGRAPHICS

Privacy and Information

More security, less privacy



With the emergence of global terrorism comes a growing sense of insecurity and a heightened desire for better security. The security business is booming, with strong demand for both the human element as well as technology. On the technology side, cell phone traffic is routinely tapped, and security cameras are mounted everywhere, it seems. Software programs automatically analyze the audio and image file to search for key words, phrases, and images that might convey criminal or terrorist activity.

US airport screeners are being trained to spot passengers who demonstrate “abnormal” behavior.

According to Shoshana Zuboff of Harvard, “The next thing is they’ll have cameras everywhere. They’ll have software programmed with algorithms to detect so-called anomalies. And you might be distraught because you’re flying home to your grandmother’s funeral, but the algorithm has detected an anomalous behavior, and the next thing you’re being strip-searched by a couple of FBI agents.”



Robots

Caring for the elderly



One response to the declining population that is emerging from the Japanese private sector: Robots, to fill the many jobs that be needed in the service sector, particularly caring for the elderly.

This shows how issues in one area affect others. In this context, robots are a technological response to a demographics issue, although there are of course other reasons why robots are being developed. Taken from the opposite viewpoint, demographics presents a potentially-significant new market opportunity for robot manufacturers.

David Levy recently published *Love + Sex with Robots*, in which he predicts that sex and marriage between humans and robots will eventually become common.



Toyota believes that service robots will be one of its most significant core businesses. For example, Japanese researchers are developing a robot that can spoon-feed the elderly, bathe them, help them carry groceries, or carry them over uneven terrain.

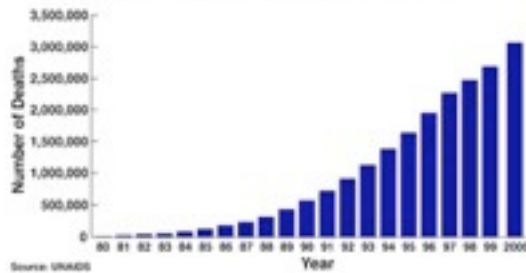


DEMOGRAPHICS

AIDS and Pandemics

The death toll is high and increasing

Estimated Number of AIDS-Related Deaths Worldwide, 1980-2000



The influenza epidemic of 1918-1919 killed between 20 and 40 million people worldwide, and the death toll from a Bird Flu pandemic could be as great. Due to modern air travel, contagious diseases are now carried from country to country and continent to continent much more quickly, so the death toll could be even greater.

The AIDS epidemic in Africa continues to decimate an entire generation. Here are some of the key statistics:

- More than 22 million people have died from AIDS.
- More than 42 million people are living with HIV/AIDS, and 74 percent of these infected people live in sub-Saharan Africa.
- More than 19 million women are living with HIV/AIDS.



- By the year 2010, five countries (Ethiopia, Nigeria, China, India, and Russia) with 40 percent of the world's population will add 50 to 75 million infected people to the worldwide pool of HIV disease.
- There are 14,000 new infections every day (95 percent in developing countries). Half of the 5 million new infections each year occur among people ages 15 to 24.
- The UN estimates that there are 14 million AIDS orphans and that by 2010 there will be 25 million.

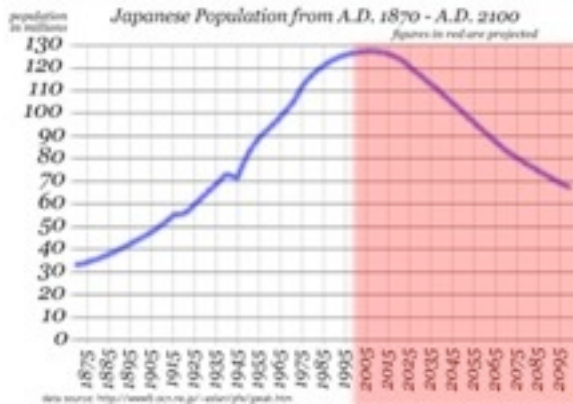
<http://www.until.org/statistics.shtml>



DEMOGRAPHICS

Birth Rate in Japan

Japan is shrinking



In 59 countries, the birth rate has slipped below the replacement level, so the population is actually declining. Japan is perhaps the most extreme example. There the birth rate is about 1.3 children per couple, which is far below the level needed to maintain the population.

Unless Japan opens its doors to foreign immigrants, which it has historically resisted, then the population will continue to decline.

An example of inter-generational conflict in the US occurs in local school districts that must fund their own funds through local taxation. In districts where there is a significant proportion of retired people funding for schools is often lower because the older people do not vote to pay taxes for education. The children, of course, do not have the right to vote.



DEMOGRAPHICS

Baby Boom in USA

78 million retirees



Source: U.S. Census Bureau, International Data Base.

In most of the developed nations there is a large of number of Baby Boomers who are getting ready to retire from the workplace, which will have a significant impact on the fiscal health of these countries.

78 million Americans are in the Baby Boom generation, and they have just begun to retire. Spending on retirement and medical benefits for them is about 7% of US economic output today. It will increase to 13% by year 2030.

Federal Reserve Chairmen Ben Bernanke refers to this as a 'vicious cycle' that will result in rising government deficits and interest rates. Since the cost of health care for older persons is often much higher, the financial burden will be significant. This is a potential source of inter-generational conflict about social priorities and government spending.



DEMOGRAPHICS

Japan, Germany, France

Declining population



Source: U.S. Census Bureau, International Data Base.

Source: U.S. Census Bureau, International Data Base.

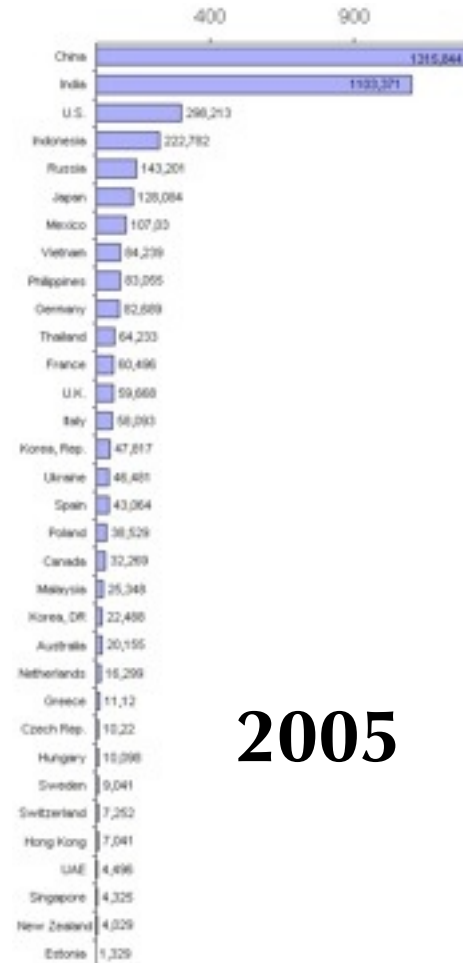
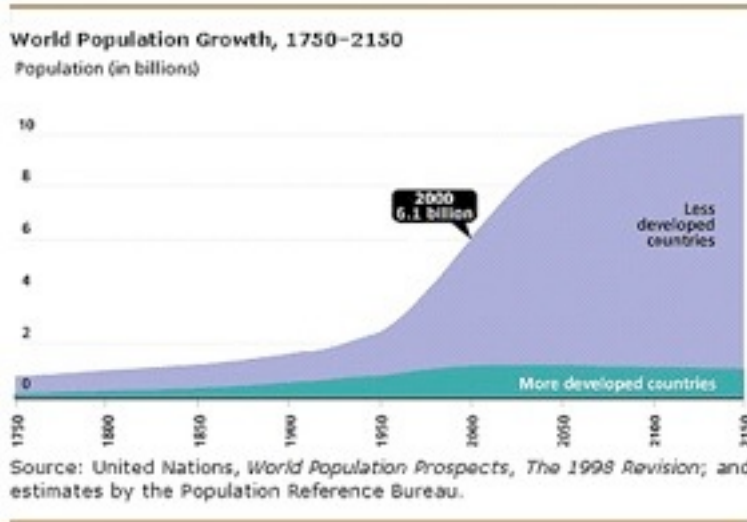
The future decline in Japan's population is evident in the rapid decline in 4 youngest age groups that are presented as the bottom horizontal bars, which show millions fewer people at ages 0-4, 5-9, 10-14, and 15-19. The same situation is true for Germany, but not for France.



DEMOGRAPHICS

World Population

Where we live



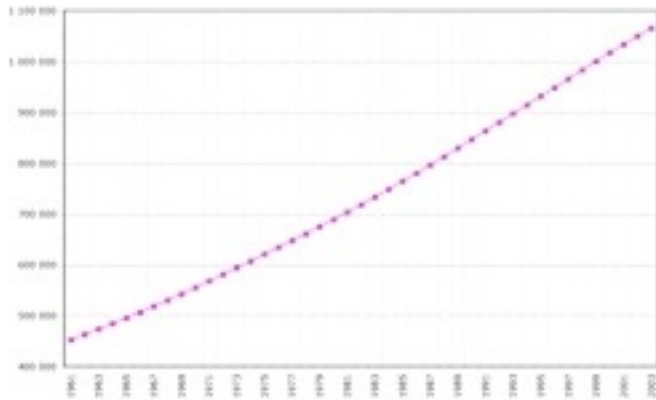
2005



DEMOGRAPHICS

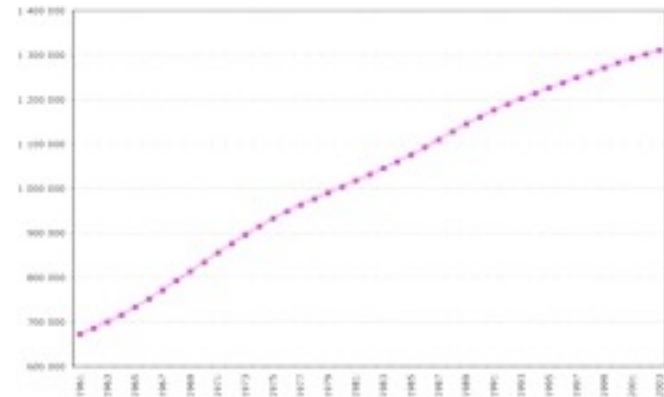
India & China

Stabilizing their populations, slowly



Population of India, 1961 - 2003

The gradual rate of growth shows a very slight slowing from 2001 onward, which demographers suggest may mark the beginning of stabilization.



Population of China, 1961 - 2003

Notice the gradual flattening from 1991 onward shows the beginning of populations stabilization. The “One-Child” policy is largely responsible. It was instituted when China’s leaders recognized the devastating impact of unchecked population growth.



The Tata Nano

Indian manufacturer introduces \$2000 car



Tata Motors is introducing a \$2000 car. It is intended for families as a replacement for the motorcycle.

In India, demand for autos is steadily increasing, and Tata Motors of India has just introduced its \$2000 car, the Nano.

The Nano is intended to provide an alternative to the motorcycle. If successful, the Nano will accelerate demand for oil, even at 47 miles-per-gallon.

[20 kilometers per liter; 1 mile per gallon = 0.425143706 kilometers per liter]

This will inevitably increase demand for oil, and therefore will put even more upward pressure on oil prices.





ECONOMY

Pollution

Air pollution is increasing worldwide



Air pollution in the world's cities is a serious health problem.

Even at 47 mile per gallon, the Tata Nano will be another source of air pollution, which is already quite bad in major Indian cities.

Respiratory diseases are rampant in India, and the impact of air pollution now also affects the countryside, because there is a permanent cloud of air pollution that hangs in the air over South India that blocks a significant amount of sunlight from hitting the ground.

As a result, in some parts of India agricultural productivity has been reduced by as much as 20%.



Sustainability

Reducing our impact on Earth's natural systems



Non-Sustainable Forestry: Clear Cutting

The topic of sustainability concerns the impact of human activities on the Earth's natural systems, and on Earth's ability to provide resources that humans depend on. Among these are of course clean air, clean water, food, raw materials, and energy.

As the human population grows and humans consume more and more resources, they also produce more and more pollution. The impact of technology and the scale of industry has become so significant that natural systems are in danger of being permanently damaged.

Many oceans are now depleted due to over-fishing, and forests are declining due to logging as well as from the impact of climate change.

In the future we can expect significant changes in how we conduct all sorts of economic activities, from product design and manufacturing, to energy consumption and recycling.



The Weakening Dollar

The world's dominant currency is weakening



As oil prices rise, economic power is shifting to oil producing nations and regions, which is another example of how creative destruction works on the macro scale.

Since 2000 the value of the US dollar has been steadily declining against other currencies. The dollar is down more than 40% against the Euro since 2000, and fell 14% against the India rupee from 2006 - 2008.

Foreign travel is much more expensive for Americans. Hence, American travel to England is down 10% for the year.

The euro has surpassed the dollar and is now the global currency with the largest global circulation. Some Chinese exporters now demand to be paid in euros instead of in dollars.



Impact of Globalization

It can help and it can hurt



Harvesting Coffee Beans

The impact of globalization will continue to be a key factor, but its results will be both variable and unpredictable. Some countries and companies benefit enormously, while others are negative.

Free trade tends to provide big benefits to nations that are dominant trading partners, but it can be devastating to countries that don't. The emergence of the "fair trade" movement is largely a response to the commoditization pressures that coffee farmers find themselves under.

But some globalization factors help small farmers. In rural India farmers have traditionally been at the mercy of middlemen who buy their crops for market. With the widespread cell phone networks in India, farmers can now check commodity prices in many towns, and obtain better prices for their crops.



ECONOMY

Climate Change

Global warming will have fundamental impact



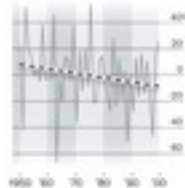
PHOTOS COURTESY OF NOAA

Water in the West

Human-caused climate change is responsible for up to 60 percent of the changes in river flow, snowpack and winter air temperatures in the western United States over the past 50 years, according to researchers.

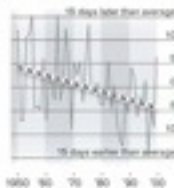
Sierra snowpack

Percentage change from 50-year average



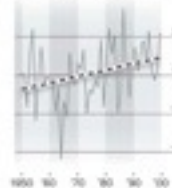
River flow

Days later or earlier that half the runoff water in the Columbia River has flowed downstream



Temperature

Change in degrees Celsius, measured in the Rocky Mountains



Source: David W. Pierce, Scripps Institution of Oceanography

Global warming will cause fundamental impact on everyone in the world, through the well-known factors of increased severity of storms and rising sea levels. British researchers from University College London announced in January 2008 that they have shown that a half-degree Celsius temperature rise in the Atlantic ocean can fuel a 40 percent increase in hurricanes.

In the US, weather-related insurance losses increased exponentially due to the cost of Katrina and other major storms. Property insurance rates in the US have increased 5x from 1971 to 2005.

Many diseases will spread more easily and be more difficult to combat, because warmer temperatures favor the spread of bacteria and viruses.

The economic response to global warming will be to increase incentives for alternative fuels such as solar and to restrict the use of carbon-based fuels, which will put more upward pressure on oil prices.



ECONOMY

Biodiesel

Shift from food production to energy production



The high oil price simulates the search for alternatives to oil, because increasing oil prices mean that other forms of energy are now more cost-competitive.

In Brazil, the biodiesel industry is well developed, and has provided a significant boon to the country's economy. In the US and other countries, the shift to biodiesel production has a negative side effect, though, which is that farmers now face the choice between growing food crops or fuel crops.

As a result, on a global basis less land is devoted to food production, and if the trend continues then the global food supply could face a reduction even as the demand for food is increasing with continuing population growth.



Medical Care

It's getting more expensive



The cost of medical care has been increasing much faster than the rate of inflation. In combination with the overall aging of the population, this means that a great proportion of all spending goes for health care.

Increased medical care cost is influenced by:

The development of new technology, which means that more expensive machines replace less expensive ones in medical treatment.

The growth in airplane travel, which spreads diseases faster today than in the past

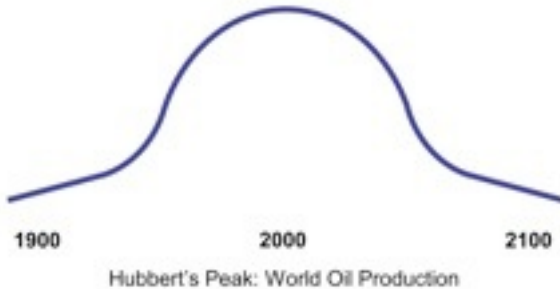
Global warming, which enables many bacteria to survive in more parts of the world, thus spreading disease even more.



ECONOMY

Oil, Energy, & Economics

Capitalism creates and destroys



In 1969, the American geologist M. King Hubbert published a forecast of the future of world oil production, which suggested that oil production would peak around year 2000. Although many people ridiculed the idea at the time, in hindsight his prediction has proven to be remarkably prescient. The terms “Hubbert’s Peak” and “peak oil” are used commonly in the oil industry today, and they refer to Hubbert’s work.

Since the global economy depends on oil, the decrease in oil production is one of the most significant factors of the coming decades.

Oil prices will inevitably increase, and the impact will be felt everywhere. Just as the global airline industry was recovering from the effects of 9/11, rising jet fuel prices have hurt them. Now demand for air travel is high, but the airlines are struggling to profit because of high fuel costs.

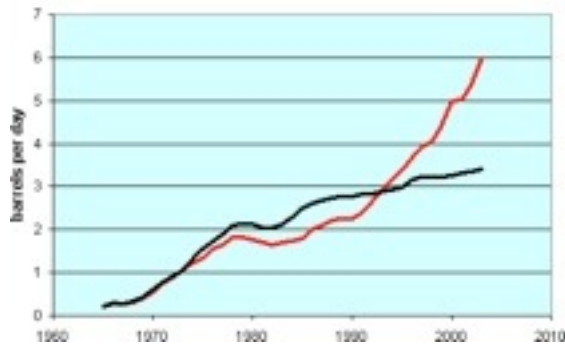
So they cut costs and service and cram more people into their aircraft. The price of oil is a key factor in the development of the Airbus 380.



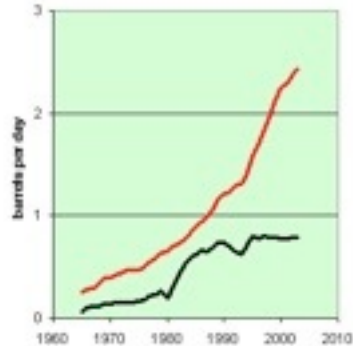
ECONOMY

Oil Consumption in China & India

Demand increases as global supply decreases



China



India

Black Line: Production
Red Line: Consumption

In China and India, rapid economic growth is driving up demand for oil and all other forms of energy as well.

Since global demand for oil is increasing while supply is decreasing, prices will rise, and competition for resources may turn bitter.



ECONOMY

China will surpass the US

By 2020 China will have the world's largest economy

Table 5: GDP ranking of the world's largest economies

	GDP (US\$bn, at Purchasing Power Parity)			
	2005	World rank	2020	World rank
United States	12457	1	28830	2
China	8200	2	29590	1
Japan	4008	3	6795	4
India	3718	4	13363	3
Germany	2426	5	4857	5
United Kingdom	1962	6	4189	6
France	1905	7	3831	7
Brazil	1636	8	3823	8
Italy	1630	9	2884	10
Russia	1542	10	3793	9
Spain	1151	11	2427	14
Canada	1071	12	2423	15
South Korea	1067	13	2837	11
Mexico	1059	14	2459	13

Source: Economist Intelligence Unit

india



GLOBAL SOCIETY

Fear and Creativity

Responses to the modern world



Two trends, fear and creativity, define opposite responses to the modern world. Fear brings the need for security, and on the other side is creativity and the desire to create and experience new things. Almost everyone experiences both at one time or another, and many of us switch between these feelings, depending on what's happening at any given moment.

Research by the firm Henley Centre calls the modern world 'the risk society,' because there is so much uncertainty, change, and a loss of traditional institutions and support structures. Some people react by becoming afraid to take risks, pessimistic, and constrained in their lives. But many individuals also feel they have the power and freedom to live as they want and to shape their own lives. They embrace risk and assert control in their lives. They feel free, and they are optimistic.



GLOBAL SOCIETY

The Virtual World

Living in second life



What if you are too frightened to go outside of your house? Then what? Well, you might be able to live a pretty interesting life in the virtual worlds like Second Life. And even if you're not exploring the virtual possibilities out of fear, you may still find a lot of interesting things there.

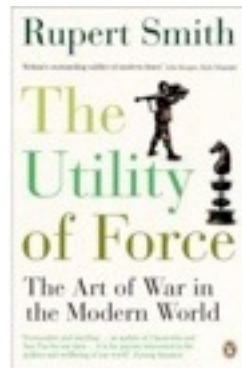
Many companies are also using Second Life to conduct meetings so that people don't have to travel. British Petroleum has its own private island in Second Life where an advanced research group is experimenting with meeting spaces and project team rooms. If people stopped going to real meetings, and only went to virtual ones, what would happen to the travel industry?



GLOBAL SOCIETY

War Among the People

The trend in modern warfare



British General Rupert Smith has written a very interesting book about the evolution of warfare throughout history, *The Utility of Force*. He points out that in the past, war was fought between nations, largely over the control of territory, today the roots of war are different. World War II, was the last big territorial war. Now, war is not predominantly between nations, but between ethnic or religious groups. And the goal is not to gain more territory, but to impose cultural, ideological, religious, or ethnic values.

He cites as examples the Balkan War of the 1990s, which was driven by ethnic conflict, as well as the current conflicts in Afghanistan, which is an ideological conflict. There is also the continuing conflict in Israel, and of course the War in Iraq.

The many conflicts in the Middle East today are all examples of war between the peoples.

As long as any of these conflicts persist, the possibility of terrorism and the risk of terror attacks cannot be forgotten, and the risk to all businesses in the travel industry remains significant.



GLOBAL SOCIETY

Corporations, Churches, and NGOs

Shift of power



While government remains critically important in the modern world, many other forms of social organization have increasingly significant social impact.

Corporations wield increasing power through the control of resources. The giant corporations are now thought of as global entities, and they are less and less tied to the values or policies of a particular nation. Similarly, religious groups have increasing influence over the beliefs of their members.

The Catholic Church, for example, has more than a billion members. And non-governmental organizations such as Greenpeace are increasingly influential in shaping world opinion



GLOBAL SOCIETY

Turning Points

Important events change how we think



While the experience of accelerating change is what we feel when a lot of events happen one after another, there is a second type of change that also affects how we feel. This is the huge event that in one moment changes how everyone thinks. Sometimes this is called a 'turning point.'

Examples of these big events from past could include the attacks of 9/11. Following 9/11 millions of Americans were sad and even depressed for many months. Other big events could be, for example, the day of the first atomic bomb was exploded.

What would happen if there was another large terrorist attack like 9/11? What if it happened in Europe?

What would happen if the governments of the world instituted environmental regulations to halt global warming that changed how everyone lived and did business?

What if there was a massive Global Economic Recession on the scale of 1929 - 1935?

What if the food supply is poisoned? It happened in 2007. 800 metric tons of poisoned wheat was smuggled into the US from China to be used in pet food. More than 4000 pets died.



GLOBAL SOCIETY

Urbanization

People are moving to cities



There is a major global trend toward urbanism, which has been a factor for thousands of years, and has now reached an interesting point of transition. Some time in the next few years, more than half of humanity will be living in cities for the first time. Cities continue to grow, and fewer and fewer people are living in the countryside.

People move to cities for economic opportunity and for upward mobility. Rural living is static, while there is opportunity in cities.

When people move to cities they have fewer children because children do not provide any economic advantage as they do in agricultural regions.

Therefore, the trend toward urbanization could mean the end of the population explosion. The world's human population is expected to stabilize by 2050.

In India, an average of 30 million people each year move from poverty toward the middle class.



GLOBAL SOCIETY

Squatter Cities

Soon 2 billion squatters



One billion humans live in squatter cities that lack running water, sewage service, trash removal, reliable power, etc. Soon they will number 2 billion.

And today there are 428 metropolitan regions with more than a million residents.





GLOBAL SOCIETY

The Multi-Polar World

Power shifts from the US to Asia and Europe



Since the collapse of the USSR, the US has stood alone as the most powerful economic and military nation in the world. This dominance is fading, however, and it's clear that a new, multi-polar world is emerging. China's economic power is increasing very rapidly, which brings with it more military power as well. Similarly, the European Union is gaining economic strength, and India is also growing rapidly.

All of these nations/regions have a strong incentive to cooperate to support their continued economic success, even as they are also in competition with each other in global markets.

But the possibility of ideological conflict cannot be forgotten. For example, the Chinese have always maintained that Taiwan is a province of the greater Chinese People's Republic, but the Taiwanese insist on their independence. If China were to try to control Taiwan by force, how would the US respond? How would Europe?



GLOBAL SOCIETY

Accelerating Change

Power shifts from the US to Asia and Europe



The most significant global trend is the acceleration of change itself. Social change, economic change, and technological change reinforce one another, resulting in an overall rate of change that is continuing to increase.

When we look to the past, most of us tend to see a world that seems more stable and more predictable than today's world. We already know what happened in the past, so there's much less drama and uncertainty about it. In contrast, we don't know what's going to happen in the future, but we have the sense that things are changing quickly. This often makes us feel insecure or outright afraid.

The existence of so many instantaneous mass media makes it possible for new trends to spread throughout the world very fast. New trends emerge very fast, and then most of them also die away very fast as well. This only makes it seem that change is occurring faster and faster.

As a result of this, many people feel anxiety about the future. As change continues to accelerate, the world seems to be even more risky and more frightening.



GLOBAL SOCIETY

Future Shock

Life can be depressing



Change causes high levels of stress, which can lead to both physical and mental illness. In the US, for example, an estimated 50 million Americans (more than 15% of the population) suffer from depression each year, and some of this is caused by stress and the fear of change.

In the 1970s, Alvin Toffler wrote an important book called *Future Shock*. His main idea was that accelerating change would shock people and cause all kinds of social and cultural problems, and this is certainly true.

An indication of how stressful modern life can be is the frequency of mental health crises just in the city of Los Angeles. The mental health team of the Los Angeles Police Department, the Crisis Response Support Section, respond to about 100 calls each day that involve mental illness (including Britney Spears). Of those 100 calls, the police place 20 to 25 persons per day on involuntary holds, in which they are held in local hospitals for up to 3 days for psychiatric evaluation.



GLOBAL SOCIETY

Fundamentalism

A reaction to the modern world



Some psychologists believe that many of the people who feel increasing fear and anxiety turn to fundamentalist religions as a way of dealing with their anxieties. There are fundamentalist movements in nearly all major religious traditions.

The extreme fundamentalists in the MidEast oppose change, and they want to stop the spread of Western values into Islamic culture, which they view as corrupting.

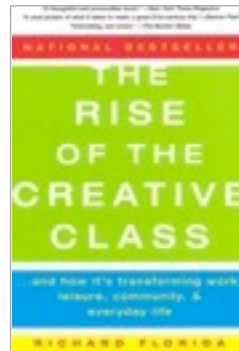
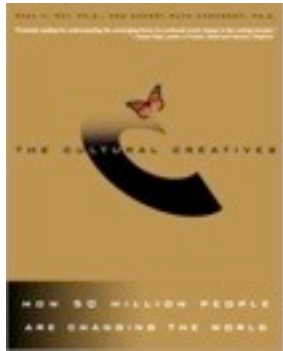
In the US, many fundamentalists believe that modern life is also corrupt, and they want to return to a simpler time. Some groups want to ban books like Harry Potter, which they consider to be dangerous.



GLOBAL SOCIETY

The Creative Class

Very influential



In 2000 psychologist Paul Ray wrote a book called *The Cultural Creatives* about the millions of people who feel that their lives are a creative process. These people look for opportunities to make and experience new things. They enjoy adventure travel, eco-travel, and many also donate their time to support causes they believe in.

A recent book by Richard Florida called *The Rise of the Creative Class* explains the rise of a new social class whose members include scientists, engineers, architects, educators, writers, artists, and entertainers. These people create new ideas, new technology, and new creative content. Many in this group share attributes like creativity, individuality, and appreciation of diversity. Florida estimates that there are 38 million of them in the US, who constitute more than 30 percent of the U.S. workforce. This group profoundly influences work and lifestyle issues because they are influential and they explore new ideas.



GLOBAL SOCIETY

Terrorism

Growing fear and insecurity



The most extreme form of Islamic fundamentalism is terrorism, and of course the events of 9/11, the London bombings, and Madrid train bombings are all attributed to them. A goal of terrorists is to make everyone feel more insecure, and they have been unfortunately very successful in this.

Looking towards 2015, the key question is how successful will society be in preventing or stopping terrorist attacks. If the terrorists are successful and there are a lot of attacks, then the sense of fear will increase. If the terrorists are not successful, then perhaps people will be less fearful.

At the most basic level, terrorism has a big impact on travel. More terror attacks tends to make people less willing to travel, while fewer attacks could make people more willing to travel. So following 9/11, the air travel and hotel industries lost billions because people simply didn't feel safe traveling.



LEARNING

Multiple Intelligences

People are intelligent in different ways



The theory of multiple intelligences was developed in 1983 by Dr. Howard Gardner, professor of education at Harvard University. It suggests that the traditional notion of intelligence, based on I.Q. testing, is far too limited. Instead, Dr. Gardner proposes eight different intelligences to account for a broader range of human potential in children and adults.

http://www.thomasarmstrong.com/multiple_intelligences.htm

This list of intelligences was identified by Howard Gardner:

1. **Linguistic Intelligence** - language, speech, reading, and writing.
2. **Logical-Mathematical Intelligence** - this intelligence is found in the confrontation with the world of objects. Through the manipulation of the objects one works into the realm of pure abstraction which is science and logic.
3. **Spatial Intelligence** - the capacity to perceive the visual world accurately-to transform, modify, and recreate aspects of one's visual world.
4. **Bodily-Kinesthetic** - the ability to think in movement-one who is skilled with one's body.
5. **Musical Intelligence** - the ability to think in sound-to hear without auditory stimuli-to be able to manipulate and combine elements of music without necessarily expressing them on a musical instrument.
6. **Interpersonal Intelligence** - the capacity to notice and make distinctions among other individuals-how you relate to others.
7. **Intrapersonal Intelligence** - the knowledge of self-the ability to draw upon your own feelings to guide your own behavior.
8. **Naturalist Intelligence** - the appreciation of the natural world of the natural world.
9. **Existentialist Intelligence** - the appreciation of context of where humankind stands in the "big picture" of existence. This intelligence is seen in the discipline of philosophy.



Learning Styles

People have different learning styles

Visual:

Learn through seeing

Kinesthetic:

Learn through moving about and touching

Auditory

Learn through listening

Learning styles are simply different approaches or ways of learning. What are the types of learning styles?

Visual Learners: *learn through seeing...*

They need to see the teacher's body language and facial expression to fully understand the content of a lesson. They tend to prefer sitting at the front of the classroom to avoid visual obstructions (e.g. people's heads). They may think in pictures and learn best from visual displays including: diagrams, illustrated text books, overhead transparencies, videos, flipcharts and hand-outs. During a lecture or classroom discussion, visual learners often prefer to take detailed notes to absorb the information.

Auditory Learners: *learn through listening...*

They learn best through verbal lectures, discussions, talking things through and listening to what others have to say. Auditory learners interpret the underlying meanings of speech through listening to tone of voice, pitch, speed and other nuances. Written information may have little meaning until it is heard. These learners often benefit from reading text aloud and using a tape recorder.

Tactile/Kinesthetic Learners: *learn through, moving, doing and touching...*

Tactile/Kinesthetic persons learn best through a hands-on approach, actively exploring the physical world around them. They may find it hard to sit still for long periods and may become distracted by their need for activity and exploration.



LEARNING

Brain/Mind Learning Principles

Education on the edge of possibility

The following principles are taken from *Education at the Edge of Possibility*, by Renata and Geoffrey Caine [1997, ASCD Publication] with comments by Michael Kaufman

Principle 1: The brain is a complex adaptive system. *Everything is connected. The dynamic inter-relationships of our brains mirror those of the world around us.*

Principle 2: The brain is a social brain. *Interpersonal relationships in the form of design teams, houses, learning teams, clubs, sports teams, and peer mediation provide opportunities to feel connected to a larger whole, a larger community.*

Principle 3: The search for meaning is innate. *Human beings have a natural tendency towards learning, improvement, enrichment, and meaning.*

Principle 4: The search for meaning occurs through "patterning". *The brain can sense when the emperor has no clothes.*

Principle 5: Emotions are critical to patterning. *When we combine a challenge in an area where there is personal investment and/or personal interest people will engage and participate fully.*

Principle 6: Every brain simultaneously perceives and creates parts and wholes. *The key here is "simultaneously." If this is true (and it is), then our lock-step, sequential method of delivering information needs an update.*

Principle 7: Learning involves both focused attention and peripheral perception. *The awareness and implementation of focus-diffusion is crucial, as is the use of content peripherals.*

Principle 8: Learning always involves conscious and unconscious processes. *Conversations about the process of learning, the internal constructs, mental models, how we came up with a solution, what thinking prompted that behavior, and why the model was constructed in that way stimulate reflection and establishes constructs for future learning.*

Principle 9: We have at least two ways of organizing memory. *The focus on the memorization of skills and knowledge turns from what should they memorize, an important question, to how they memorize.*

Principle 10: Learning is developmental. Development occurs in several ways. *Building a "better" brain happens as learners are immersed in a complex, dynamic, relevant environment.*

Principle 11: Complex learning is enhanced by challenge and inhibited by threat. *Encourage and model learning from mistakes. Dignify student responses. Create a respectful environment where everyone's contributions are valued.*

Principle 12: Every brain is uniquely organized. *Celebrate the differences your learners bring. The diversity of perceptions, mental models, ways of solution finding, etc. provide a rich and stimulating learning culture.*



6 Thinking Hats

People have different thinking strategies

Each 'Thinking Hat' is a different style of thinking.



Edward de Bono's thinking hats were developed in order to illustrate the various methods of thinking utilized by individuals within problem solving processes. Each of the hats represent a method of thinking commonly used by individuals within problem solving. It is hoped that through such representations more individuals will be able to recognize the various methods of thinking that they utilize and therefore better understand their own thinking processes.

White Hat:

With this thinking hat you focus on the data available. Look at the information you have, and see what you can learn from it. Look for gaps in your knowledge, and either try to fill them or take account of them.

This is where you analyze past trends, and try to extrapolate from historical data.

Red Hat:

'Wearing' the red hat, you look at problems using intuition, gut reaction, and emotion. Also try to think how other people will react emotionally. Try to understand the responses of people who do not fully know your reasoning.

Black Hat:

Using black hat thinking, look at all the bad points of the decision. Look at it cautiously and defensively. Try to see why it might not work. This is important because it highlights the weak points in a plan. It allows you to eliminate them, alter them, or prepare contingency plans to counter them. Black Hat thinking helps to make your plans 'tougher' and more resilient. It can also help you to spot fatal flaws and risks before you embark on a course of action. Black Hat thinking is one of the real benefits of this technique, as many successful people get so used to thinking positively that often they cannot see problems in advance. This leaves them under-prepared for difficulties.

Yellow Hat:

The yellow hat helps you to think positively. It is the optimistic viewpoint that helps you to see all the benefits of the decision and the value in it. Yellow Hat thinking helps you to keep going when everything looks gloomy and difficult.

Green Hat:

The Green Hat stands for creativity. This is where you can develop creative solutions to a problem. It is a freewheeling way of thinking, in which there is little criticism of ideas. A whole range of creativity tools can help you here.

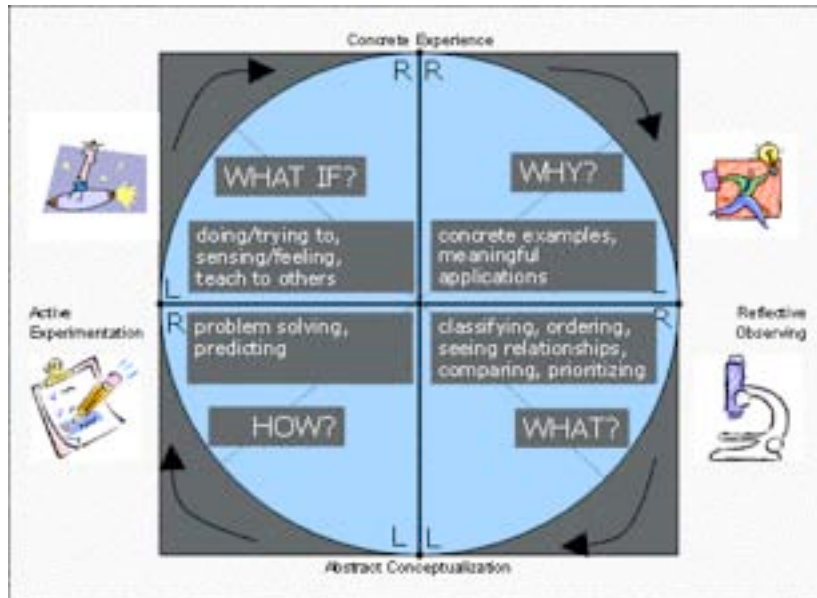
Blue Hat:

The Blue Hat stands for process control. This is the hat worn by people chairing meetings. When running into difficulties because ideas are running dry, they may direct activity into Green Hat thinking. When contingency plans are needed, they will ask for Black Hat thinking, etc.



Personal Thinking Styles

People have different thinking styles



Not only do we have our preferred learning and working styles, we also have our favorite thinking styles. Professor Anthony Gregorc, professor of curriculum and instruction at the University of Connecticut, has divided these into four groups:

Concrete Sequential Thinkers tend to be based in reality. They process information in an ordered, sequential, linear way.

Concrete Random Thinkers are experimenters.

Abstract Random Thinkers organize information through reflection, and thrive in unstructured, people-oriented environments.

Abstract Sequential Thinkers love the world of theory and abstract thought.

We stress that no thinking style is superior; they are simply different. Each style can be effective in its own way. The important thing is that you become more aware of which thinking style works best for you. Once you know your own style you can then analyze the others. This will help you understand other people better. It will make you more flexible. And perhaps we can all pick up tips from each other on how to be more effective.



Situational Leadership

People have different leadership styles



Developed by Paul Hersey and Ken Blanchard, situational leadership theories in organizational studies are a type of leadership theory, leadership style, and leadership model that presumes that different leadership styles are better in different situations, and that leaders must be flexible enough to adapt their style to the situation they are in.

Blanchard and Hersey characterized leadership style in terms of the amount of direction and support that the leader provides to their followers. They categorized all leadership styles into four behavior types, which they named S1 to S4.

S1: Directing/Telling Leaders define the roles and tasks of the 'follower', and supervise them closely. Decisions are made by the leader and announced, so communication is largely one-way.

S2: Coaching/Selling Leaders still define roles and tasks, but seek ideas and suggestions from the follower. Decisions remain the leader's prerogative, but communication is much more two-way.

S3: Supporting/Participating Leaders pass day-to-day decisions, such as task allocation and processes, to the follower. The leader facilitates and takes part in decisions, but control is with the follower.

S4: Delegating Leaders are still involved in decisions and problem-solving, but control is with the follower. The follower decides when and how the leader will be involved.

No one style is considered optimal or desired for all leaders to possess. Effective leaders need to be flexible, and must adapt themselves according to the situation.

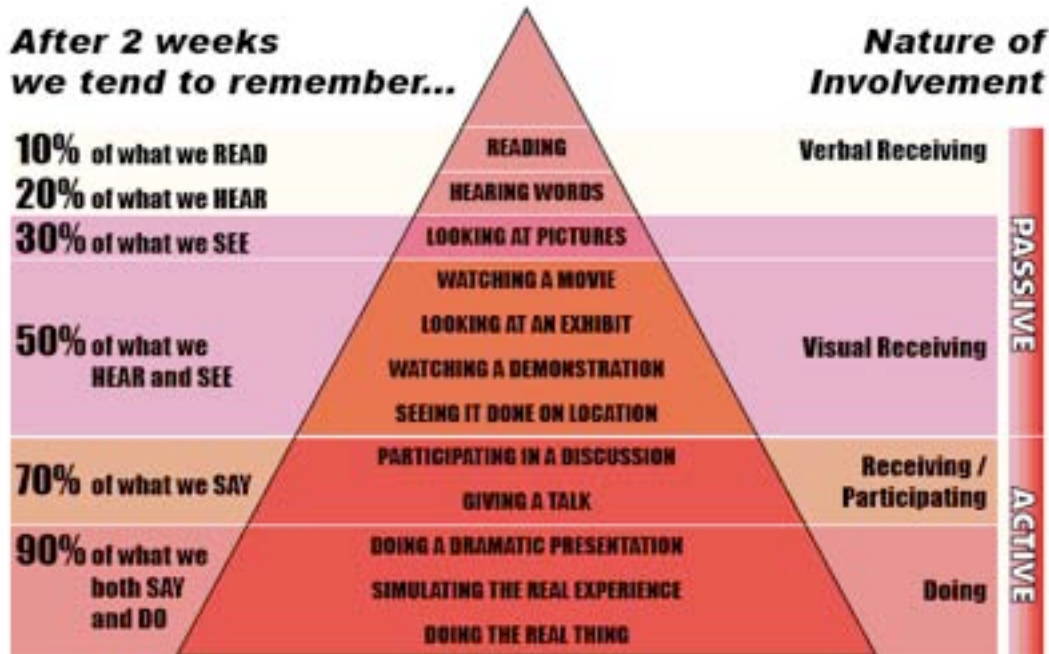


LEARNING

Retention Rates

Teaching styles influence retention rates

Cone of Learning (Edgar Dale)



Edgar Dale, Audio-Visual Methods in Technology: Holt, Rinehart and Winston.

Different teaching styles can influence the amount of retention a learner experiences. Original research done by Edgar Dale shows that the effectiveness of learning or the learning retention rate based on the learning experiences and the media that was used for the instruction is shown in the following table. From Dale's research, additional studies were performed by the National Training Laboratory Institute for Applied Behavioral Science and many other universities researchers.

According to Dale's research, the least effective method, the top of the cone, involves learning from information presented through verbal symbols, i.e., listening to spoken words. The most effective method, the bottom of the cone, involves direct, purposeful learning experiences, such as hands-on or field experiences.



Cisco's TelePresence

Who needs to travel?



There is a need for a technological solution that allows the same type of face-to-face business interactions, without the constant need for global travel. That's where the concept of Cisco TelePresence comes in. It allows for real-time, face-to-face communication and collaboration over the network with colleagues, prospects, and partners, even if they're in opposite hemispheres

http://www.cisco.com/en/US/products/ps7060/products_category_business_benefits.html

Recently Cisco CEO John Chambers commented that he had reduced Cisco's 2008 travel budget by \$250 million because Cisco people would not have to travel as much due to their own use of TelePresence.

That's roughly the equivalent of 10,000 trips not taken. If every large company reduced their travel this much, how much impact would it have on a hotel business? What could a hotel do to compensate for the lost revenue?

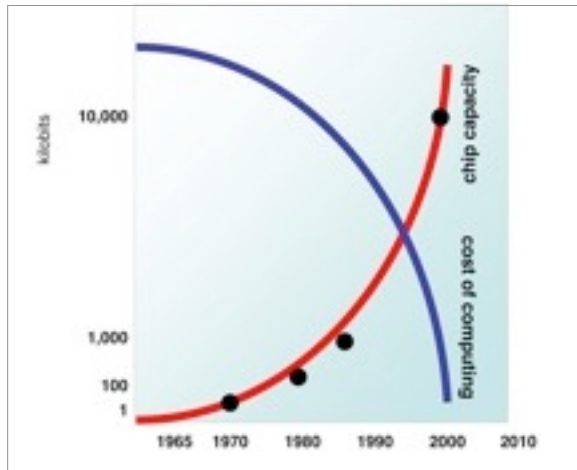
And by 2015 will TelePresence be so common that millions of business trips might never be needed?



TECHNOLOGY

Computer Chips

Twice as powerful and cheaper ever 18 months



Moore's Law

The key factor that drives the evolution of technology is the continuing improvement of computer chips. For four decades, the computer chip industry has been following a pattern called "Moore's Law," which shows that chips double in speed roughly every 18 months. Moore's Law is named after Gordon Moore, one of the founders of Intel, who identified the phenomenon in 1963.



So much of our social, cultural, and economic life is now based on computers, and the continuing evolution of technology will undoubtedly play a major role in our lives through 2015 and beyond.

Chips will get smaller and less expensive even as they become increasingly powerful. Soon there will be chips in everything.

How powerful will computers become? BY about 2020 computers will have the computational capabilities of the human brain; by 2050 computers will have the computational capability of the human species.



Media Platforms

Everything is about media now



A car is now a media platform ...



and so is an airplane.

Any kind of device can now be connected to the internet. A product that's connectable to the internet is sometimes called a "media platform," and media platforms are everywhere.

Products that used to operate completely on their own now can be connected to the internet.

A car is no longer just a transportation device. It's a media platform. The driver might use the GPS navigation system while talking on a cell phone, while the passengers watch movies or TV.

It's the same with airplanes. On Jet Blue you can watch about 30 channels of live TV, and on India's Jet Airways, a digital TV system enables you to choose from a huge variety of TV, movies, videos, and games on demand. So the airplane is now a media environment.



TECHNOLOGY

Wired Home

Everything is about media now



Did you forget to turn off the lights in the kitchen at night? Then you can do it instantly from your bedside computer.

Ready for that first cup of coffee? Just say "coffeemaker on," and your voice activation system will start it brewing. Voice commands will trigger lights, video and sound systems and more.

Your medicine cabinet uses face recognition to identify you. It tells you today's pollen count and reminds you to take your medication.

Meals provide a chance for virtual quality time with friends and relatives. Screens built into dining tables allow everyone to see each other as they talk and eat.



Cell Phones

3.3 billion subscribers and growing



According to the ITU, some time in 2008 more than half of all the people in the world will be cell phone users, totaling 4 billion subscribers worldwide. About one billion of them live in Brazil, Russia, India, and China. In comparison, only 12% of the population had cell phones in 2000. How many cell phones will be there in 2015?



TRAVEL

Adventure Travel

No limits



A new generation of space travel entrepreneurs has emerged, and they are developing new technologies that they hope will be the foundation of a private space industry.

Virgin Galactic is planning to offer adventure flights as soon as 2009. The flights will take 6 passengers above 62 miles into space, where they will experience weightlessness and enjoy the view before returning to Earth.

The technical system is being developed by Scaled Composites, a pioneering aerospace firm led by Bert Rutan.



TRAVEL

Impact of Terrorism on the Travel Industry

Downward spiral



The travel industry was severely impacted by the September 11 terrorist attacks. Here is a summary of the direct and indirect consequences. This is sometimes referred to as a downward spiral, where one bad thing leads to more bad things.

- The hijackings shook people's confidence in air travel.
- A huge number of travelers cancelled their flights. Demand for air travel plummeted. Demand for hotels, travel agents and other travel-related services did also.
- Travel service producers were faced with a supply that far outweighed demand. Airlines reduced ticket prices and cut back on flights.
- This led to massive layoffs.
- Laid-off workers reduced their spending.
- Etc.



The Age of Instant Communication

Changing how we live, work, and learn



The world is becoming one gigantic information exchange, and our homes will reemerge as vital centers of learning, work and entertainment.

This will in turn transform our businesses, our shopping centers, our offices, our cities, and in many ways therefore our entire concept of education and of work.

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



The Age of Information Abundance

Finding what matters



A CD-ROM can be mass-produced now for about \$1 per disc in the United States and well under 50 cents in China.

That's 50 cents for 500 interactive books, soon to be 5,000.

And as we all know, a few minutes on the internet with Google can turn up hundreds or thousands of references on unlimited topics, more information that anyone could hope to grasp in an entire lifetime. So today the problem becomes not accessing information, but filtering it to find what matters.

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



A World Without Economic Borders

A single world economy



The world is undoubtedly going towards a single-market world economy. While we have the counter-trends of protectionism along the way, the main over-arching trend is to move to a world where there's free trade among all countries.

President Clinton's first Secretary of Labor, Robert B. Reich, writes at the start of *The Work Of Nations*, "We are living through a transformation that will rearrange the politics and economies of the coming century. There will be no national products or technologies, no national corporations, no national industries. There will no longer be national economies, at least as we have come to understand that concept. All that will remain rooted within national borders are the people who comprise a nation. Each nation's primary assets will be its citizens' skills."

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



The End of Manufacturing

More products made by fewer people



We have moved beyond an industrial society. John Naisbitt notes, "When I got out of college in the fifties, 65% of the workforce in America was blue-collar. Now it's down to about 13%, and it's falling. That doesn't mean we're producing less. About 24% of America's gross national product is in manufacturing, about the same as it has been every year for 40 years. The difference is that 40 years ago 65% of the workforce was manufacturing these products, and today only 13%. Now obviously that 24 percent represents many more products as our economy has grown tremendously.

The big change is: we're now manufacturing with information, rather than people - with computers, automation and robots instead of workers. And that industrial workforce will continue to shrink, just as the agricultural base has shrunk.

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



Women in Leadership

Increasing influence and authority



Of the 22 million new jobs created in America in the 1980s, two thirds were taken by women. The increase of women in leadership positions in America is now reaching critical mass. “40% of all managers are now women. 35% of the computer scientists are women. Half the accountants are women, as are an increasing number of lawyers and doctors. If you go to medical schools or business schools, half of the freshman class are women.

And women are creating new companies at twice the rate of men.”

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



Learning How to Learn

How to use your head ...



Tony Buzan puts it into perspective. To anyone studying education, he would seem a typically bright product of an excellent education system. He graduated in 1964 from the University of British Columbia, Canada, achieving double honors in psychology, English, mathematics and general sciences.

But looking back today, he is staggered at what he wasn't taught. "At school I spent thousands of hours learning about mathematics. Thousands of hours learning about language and literature. Thousands of hours about the sciences and geography and history. Then I asked myself: How many hours did I spend learning about how my memory works? How many hours did I spend learning about how my eyes function? How many hours in learning how to learn? How many hours in learning how my brain works? How many hours on the nature of my thought, and how it affects my body? And the answer was: none. In other words, I hadn't been actually taught how to use my head."

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



Experiential Education

Learning better by doing more



The days of students sitting passively and listening to teachers lecture to them is well past.

Students learn best in the same way that all people learn best, which is through *experience*. Hence, experiential education is a term that describes the process of learning by doing, which includes learning what your body can do, in a ropes course such as the one pictured at right, or learning what your mind can grasp through a science project, or a history simulation, or the creation of a new business, or an athletic competition, or an art show

As adults look back at their own education chances are the most important impressions came from what they did, not through the countless hours of lectures they endured.



The Aging Population

More older people



The active aging of the population
Just as economies are dramatically changing, so are demographics. And the most striking trend in developed countries is the active aging of the population. A hundred years ago, only 2.4 million Americans were over 65, less than four in every 100. Today there are over 30 million - around one in eight. By 2050: over 67 million - almost 22 % of the population.

At current rates of growth, by the year 2025, the world's over-60 population will have increased to one billion. Little wonder that many are calling 60-plus The Third Age. Others are challenging us to abolish the word "retirement" from our vocabularies.

The over-60s generation also represents one of the greatest untapped resources for the future of education.

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



Cooperative Enterprise

Optimizing staff involvement



Nearly every company listed in the 100 Best Companies To Work For in America has pioneered new forms of staff involvement: partnerships, stockholding, profit-sharing, continuing education, job-sharing, flextime, project teams and many more.

“If you want to see what the new company looks like,” says John Naisbitt, “you look at the young companies, not the old household word companies that are shrinking and are often slow to change. And in the new companies you find a high degree of participative management and decision-making. You find everyone involved in sharing the profits, including the people in the mailroom and the receptionist. You can't work for many of these new model companies unless you own stock. If you don't have the money, they lend you the money interest-free to buy stock, because you have to have literal ownership. They pay for any kind of education the people take in order for them to grow personally. And they create environments where people can nourish personal growth and educational growth.”

From: *Unlimited: The New Learning Revolution* by Dryden and Voss



Democratic Schools

Students choose



A **democratic school** use democratic principles and participatory democracy with "full and equal" participation from students and staff. These learning environments position youth voice as the central actor in the educative process by engaging students in every facet of school operations, including learning, teaching, and leadership. Adult staff support students by offering passive and active facilitation according to students' interest.

Democratic schools give students the power to choose what to do with their time. There are no required classes, and sometimes there is no requirement to take classes at all. Students are free to choose an activity. They are free to continue activities for as long or short a time as they see fit. In this way they learn both self-discipline and self initiation. They also gain the advantage of the increases in both learning speed and learning retention that accompany engagement in an activity that one is passionate about. The students at these schools are responsible for and empowered to direct their own education from a very young age.



Collaborative Learning

It's how the world works



In the old world, when students worked together it was often called “cheating.”

But in the world of business, it's called “collaboration,” and its essential to the effectiveness of businesses of all sizes all around the world.

Learning how to work together effectively is one of the most important of all educational outcomes.



Teacher as Facilitator

Control shifts to student initiative



In the linear and sequential school, the teacher is the undisputed master of the classroom. His or her word is law, and the role of the students is to listen with rapt attention to soak up wisdom. (This is only a slight exaggeration.)

But in a world of experiential education and in the democratic school, the teacher becomes a facilitator, a coach, a mentor, a guide, helping students find the resources that they need to conduct their own, self-directed learning activities.

Teachers also play a role to protect each learner and to ensure equity and fairness, on those occasions when things are getting out of hand.



Lifelong Learning

Half of what you learned is wrong. But which half?



In an age of accelerating change, it's no longer possible to consider that what you learned in school will suffice for the rest of your life.

In medical school, in fact, it's well known that of all the myriad things that incoming first year students will learn during the course of their schooling, fully half will be wrong. The problem is, no one knows which half!

So, in subsequent years as a practicing physician, doctors will discover what "learning" they must discard as new knowledge displaces old beliefs that turned out not to be true.

The same dynamic is true in every field of endeavor. Learning must be a lifelong process.



Education in the Community

Opening education



Schools used to be like hermetically sealed environments. Children arrived in the morning and were locked away in seclusion until evening.

But once we understand that learning is experiential, that students choose, and that they are not second class citizens just waiting to grow up, then we realize that schools must open and vibrant parts of the community, places where people of all ages engage together in the learning process.

Likewise, towns and cities *become* the school, and students flow through them, interacting with people of all ages as they pursue the knowledge that they want.



Globally Linked Education

Experiencing other peoples and other cultures



In a globally connected world, we must understand many different cultures, value systems, and societies if we are going to be successful. So we should not wait until adulthood to learn about those who live in other countries, to engage with them in experiences, and to participate with them in learning processes.

Learning must be global learning.



Health Care

The Brown Cloud

Carbon dust fills the air over Asia



A noxious cocktail of soot, smog, and noxious chemicals is blotting out the sun, fouling the lungs of millions of people, and altering weather patterns across southern Africa, the Amazon basin, North America, and Asia. The byproduct of automobiles, slash-and-burn agriculture, wood-burning cook stoves, and coal-fired power plants, these plumes of carbon dust are most pronounced over Asia, where so-called Brown Clouds are dramatically reducing sunlight in many Chinese cities by as much as 20%, and leading to a 5% decline in crop yields in swaths of India.



Health Care

The Cost of Air Pollution

Billions of dollars and thousands of lives



Fresno, CA

Using data and methodologies accepted by the US EPA, researchers have determined that the cost of air pollution in California's San Joaquin Valley comes to more than \$1600 per person per year, or a total of nearly \$8 billion. In Southern California the cost is \$1250 per person, a total of more than \$22 billion. Air pollution contributes to more than 3,800 premature deaths, 141,000 asthma attacks, 2,800 emergency room visits, and 466,000 lost work days.



Health Care

Risk of Disease Rises

Water temperature increases leads to health risks



A 1991 cholera outbreak killed thousands in Peru was eventually traced to plankton growth in warmer-than-usual coastal waters, an early indication that climate change is leading to significant increases in water-borne disease throughout the world. From 1948 - 1994, heavy rainfall was correlated with more than half of the nation's outbreaks of waterborne illness.

Higher rainfall leads to sewage overflows, contaminating drinking water and fouling beaches in US cities such as New York, Washington, Chicago, Milwaukee, and Philadelphia.

Sewage overflows contaminate seafood as waste is diverted to open waterways.

Higher lake and ocean temperatures cause bacteria, parasites, and algal blooms to flourish.

Warmer weather means more virus-carrying mosquitoes.



Health Care

Public health education

Increasing interest in epidemiology, public health, and global health



Courses in epidemiology, public health and global health -- three subjects that were not offered by most colleges a generation ago -- are hot classes on campuses these days.

They are drawing undergraduates to lecture halls in record numbers, prompting a scramble by colleges to hire faculty and import courses. Schools that have taught the subjects for years have expanded their offerings in response to surging demand.

At Johns Hopkins there were 159 students studying the field 10 years ago; this year, there are 311 majors. At the College of William and Mary, a freshman seminar called "Emerging Diseases" is so popular that it is offered in two sections each semester. "It fills up instantly," said Beverly Sher, the immunologist who teaches it.

"We see exponential growth in the interest in these subjects," said Richard Riegelman, an epidemiologist at Educated Citizen and Public Health Initiative, which was put together two years ago by several higher education organizations and advocates undergraduate study of public health.

The group argues that the subject is essential knowledge in the flattened, crowded and worried world of the 21st century.

David Brown
Washington Post
Friday, September 19, 2008; Page A01



Health Care

Personal genomics

Opportunities and risks



The plunging costs of gene sequencing technology, combined with powerful computers, has created a new business, Personal Genomics, the analysis of an individual's unique genome.

This will provide immeasurably more information than has been available in the past, and lead to advances, such as personalized medicine, as doctors will be able to prescribe more precise dosages of powerful drugs to reduce medication risks, and to more accurate predictive models of various disease risks.

But there are obvious side effects, such as the potential loss of privacy, and even the loss of privacy for relatives. It will also raise the possibilities of change in how insurance premiums are determined, or even in how insurance is designed.



Health Care

Negative results suppressed

Manipulating the data



According to a Boston court case, top Pfizer marketing executives suppressed a large European study suggesting that a medication under study was ineffective, and strategized how to silence a researcher who wanted to go public with the data.

“We must delay publication of the study,” wrote a senior marketing executive. Over time, the evidence suggested that the company systematically suppressed negative studies of the drug, Neurontin, and tried to create a more favorable impression of the drug, which earned \$2 billion in the US.



Health Care

Half of doctors prescribe placebos

Despite AMA guidelines to the contrary



About half of 679 US doctors surveyed recently say they regularly give placebo treatments to patients, often without informing the patients that they are placebos.

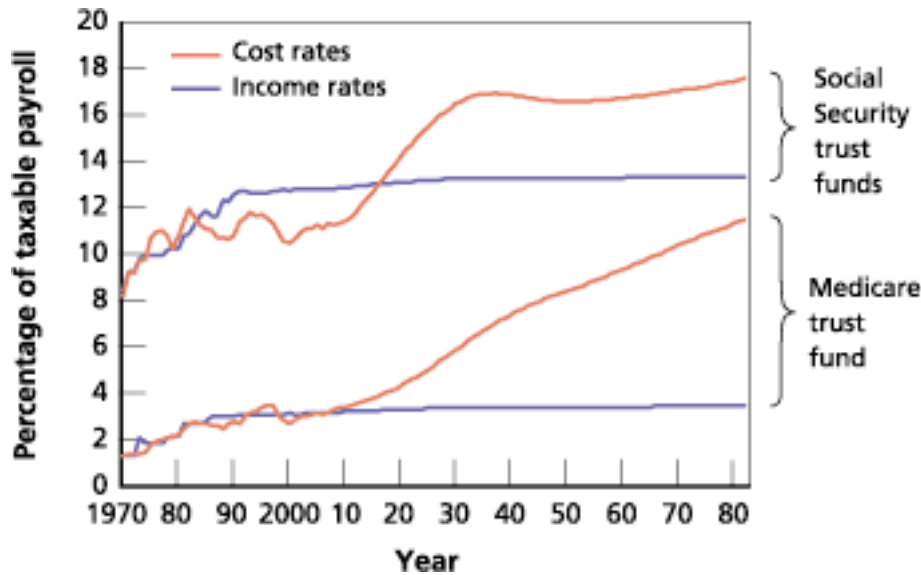
Scientists have long known of the 'placebo effect,' in which patients given a fake or ineffective treatment often improve anyway, simply because they expected to get better.



Health Care

Unfunded Retiree Benefits

A \$40.9 trillion obligation over the next 75 years



In the 1960s, 5 workers paid into the system for every retiree. Today only 3 pay for each retiree. The retirement of 77 million baby Boomers will reduce the ratio to 2-to-1 by 2030.

(The added burden of steeply rising health care costs puts a greater burden on the Medicare Trust Fund.)

Clearly the system will be changed, or the process will bankrupt the nation.

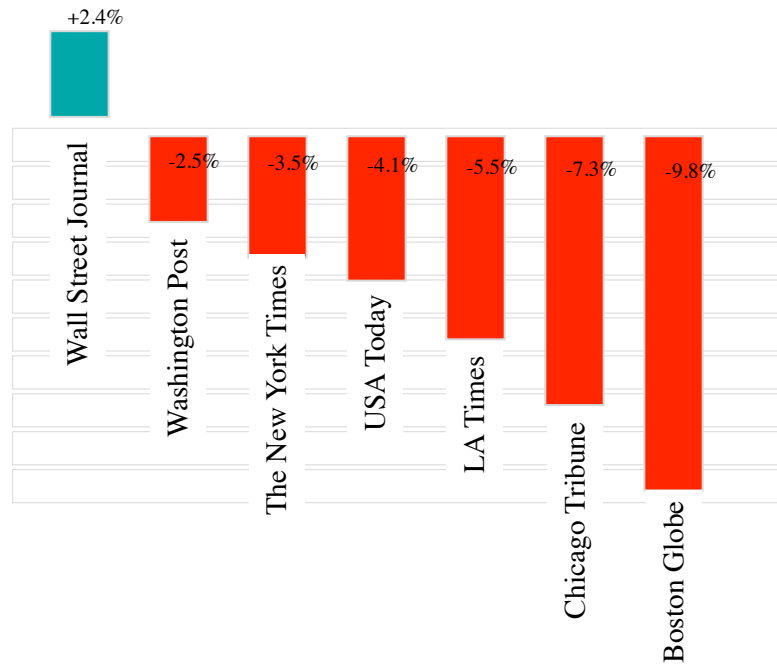
Graphic: Rand Corporation



Business

Newspaper Subscription rates

Circulation of most big city papers is declining



Individual paid circulation growth year over year



Business Strategy for Climate Change

Dramatic acceleration in productivity is required



According to a McKinsey report, if current climate science holds true, then current greenhouse gas emissions will need to be reduced by 90% by 2050 in order to contain global warming to 2 degrees centigrade. To reach this goal, the global economy's carbon productivity would have to improve by 5 to 7% per year. The historic improvement rate is 1%, which means that an average annual improvement of 5 to 7 times is needed.

Incremental improvements of current technology and energy consumption patterns can have an impact, but will not come close to realizing the necessary gains. New, low-carbon technologies will have to be developed and widely implemented.

McKinsey suggests three critical steps:

1. Optimize the carbon efficiency of existing buildings, transport, and products.
2. Maximizing used of non-carbon solutions, including carbon-avoidance.
3. Regulation must drive the process.



Business

Crowdfunding

Would you like to buy a share?

catwalk
Genius 
own fashion



Catwalk Genius

(www.catwalkgenius.com) is a website featuring fashion accessories from independent designers. Their Adopt-a-Designer program allows you to buy a share of someone's work for 15 Euros. When 5,000 shares have been sold, the designer gets 70,000 Euros to create a new collection.

At launch, profits are split between the designer, the investors, and catwalk Genius.

Crowdfunding is also being applied to tourism, up-and-coming rock bands, soccer clubs, and also to presidential election campaigns (sort of).



Society

Webcam Suicide

Others watch and comment as a young man dies



MIAMI, Florida (CNN) -- With his webcam trained on him, a Florida teenager died in his bed of a drug overdose while others watched over the Internet. Some of those watching urged him to take more drugs while others debated whether he had taken enough to kill himself. Hours passed before someone finally notified authorities that he appeared lifeless. As the teenager was lying on his bed, people were typing things like, "Oh, that's not enough to kill you." Others, she said, were egging him on, saying things like "Go ahead and do it." Still others thought it wasn't real.

About 11 a.m. Wednesday some viewers began to get concerned, writing things like, "He's not moving" and "He's not breathing." One contacted the site's moderator to get the youth's contact information and the police were notified.



Economics

Protest Greet Mortgage Bankers

Annual convention a target



The Mortgage Bankers Association 95th annual convention in San Francisco in October 2008 was met by angry protesters who chanted slogans and carried signs demanding help for struggling homeowners.

“Hindsight reveals what perhaps should have been obvious a long time ago: the combination of little or no regulation, little or no supervision, new products designed to expand mortgage lending, and an incentive structure independent of the market discipline of a long-term customer relationship is a combustible brew. Clearly the unchecked misuse of legitimate credit products has resulted in a supervisory failure that justifies the additional regulation of mortgage originators that are neither insured depository institutions nor affiliates of an insured institution.”

Testimony of Edward L. Yingling
On Behalf of the American Bankers Association
Before the Committee on Financial Services
United States House of Representatives
October 21, 2008



Economics

Financial Regulation in the Crisis

Systemic flaws exposed



“It is now clear, however, that we have reached a “tipping point” in financial regulation. The regulatory system that has served us so well in the past was not able to recognize fundamental changes in national and international financial markets and to adapt to those changes in a coordinated fashion.”

Honorable Steve Bartlett
President and CEO
The Financial Services Roundtable
Before the Committee on Financial Services
U.S. House of Representatives, October 21, 2008

“There is an additional question that we urge you to ask: is this change pro-cyclical or counter-cyclical? Simply put, too much of our regulation is pro-cyclical: our regulations actually encourage booms and busts. The prime example is accounting policy. I want to make a fundamental point in the strongest terms: current mark-to-market accounting is simply incompatible with the banking system. I believe you want banks that are committed to the long-term – providing long-term loans to and investment in businesses, communities, and consumers’ futures. To be able to do that, banks must not have their loans and investments marked to prices set in panicked markets. These are long-term investments, not day-today trades. Without changes in accounting policy, the lesson learned from this financial disaster will be that long-term loans and investments will have their valuations destroyed, and therefore the bank will be destroyed, by mark-to-market during financial panics.”

Testimony of Edward L. Yingling
On Behalf of the American Bankers Association
Before the Committee on Financial Services
United States House of Representatives
October 21, 2008



Economics

The Cost of Congestion

Count it in billions



The average American in metropolitan areas wastes 26 gallons of fuel each year due to congestion. This may not seem like much, but aggregated it means nearly 2.9 billion gallons each year is wasted—nearly one-fifth of the total equivalent of oil imported from the Persian Gulf last year. Factoring in this wasted fuel, metropolitan congestion is now costing Americans about \$78.2 billion each year, an increase of \$20 billion since just 2000.

One recent study for greater New York, for example, finds a net loss in regional economic output of at least \$3.2 billion to \$4 billion annually due to congestion. Combined business costs, lost revenues, and lost productivity mean that there are 37,000 to 52,000 fewer jobs created in New York each year.

The Texas Transportation Institute has developed a travel time index as a ratio of congested to uncongested travel. In 1982 the average ratio was 1.09 in metropolitan America. In other words, traffic added 9 percent to the average trip. By 2005, that number had risen to 1.26—essentially a tripling of the amount of congested travel in just over twenty years.

From: A Bridge To Somewhere: Rethinking American Transportation for the 21st Century
Robert Puentes, Fellow, Metropolitan Policy Program, Brookings Institution
June 12, 2008



Economics

"I was shocked."

Greenspan admits flaws in his ideology



"It turned out to be much broader than anything I could have imagined"

Former Federal Reserve chairman Alan Greenspan admitted to a congressional committee today (23 October 2008) that he had been "partially wrong" in his hands-off approach towards the banking industry and that the credit crunch had left him in a state of shocked disbelief. "I have found a flaw. It turned out to be much broader than anything I could have imagined. Those of us who have looked to the self-interest of lending institutions to protect shareholders' equity (myself especially) are in a state of shocked disbelief."

He told the House committee that he regretted his opposition to regulatory curbs on certain types of financial derivatives which have left banks on Wall Street facing billions of dollars worth of liabilities.

Committee chairman Henry Waxman, pressed him: "You found that your view of the world, your ideology, was not working?" Greenspan agreed: "That's precisely the reason I was shocked because I'd been going for 40 years or so with considerable evidence that it was working exceptionally well."

"I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms."

Treasury secretary Paulson also admitted he ought to have anticipated a meltdown in the US mortgage industry. "I could have seen the sub-prime crisis coming earlier," he told the New York Times.



Economics

Paulson's question

How can the value of the US stock market change 10% in one day?



“How can it be that every major financial market - stocks, bonds, cash, commodities - became dislodged from their fundamentals this much for this long?”

There is no way oil could have doubled and fallen by half in 8 months because of changing fundamentals. How can the value of the US stock market change 10% in one day?

“How can it be ...”

This has to be studied and we have to change the things that caused it to happen.”



Economics

AIG Risk Models Fail

Computer models used to manage risk didn't work ...



“AIG charged its trading partners a fraction of a penny a year for every dollar of credit protection it provided. The company realized that it might have to post collateral if the market values of the underlying securities declined. But AIG executives believed that such price moves were unlikely to occur.”

Gary Gorton, whose failed computer models were used by AIG, lamented that problems in one sector caused investors to question value all across the board. Gorton commented, “There doesn't seem to be a fundamental reason why.”

Warren Buffet commented, “Beware of geeks bearing formulas.”

Wall Street Journal, Nov 3, 2008



Economics

Hard Lessons of Portfolio Theory

Correlated risks fail together



The father of investment portfolio theory, Nobel Prize winner Harry Markowitz, has pointed out the current crisis has come about largely because of a lack of attention to the principles of sound portfolio construction.

“Diversifying sufficiently among uncorrelated risks can reduce portfolio risk toward zero, but financial engineers should know that not true of a portfolio of correlated risks.”

It’s necessary to have discipline around variables such as asset classes and models of covariance, but the collateralized mortgage obligations and related securities had no such discipline; they sank together. “Selling what sellers and buyers don’t understand is not a good thing.”



Terrorism

Terrorism is not expensive

Bombs for \$15



Local al-Qaeda cells generate cash through drug dealing and credit card theft to support their terror activities, often far more than they need for the attacks. For instance, the July 2005 transit bombings in London cost only \$15,000 to plan and execute.

One of the suicide bombers left an estate worth \$240,000 after he blew up a subway train.

In a separate terror plot, eight men planned to blow up airlines using ingredients acquired at drugstores for \$15 per bomb.

All this has made the efforts of the US and other governments to monitor large funds transfers largely irrelevant.

“The federal bureaucracy is on a wide goose chase,” commented a Tufts University finance professor.

There’s a complete disconnect between the government’s approach and the reality of how terrorism is funded.”



Business

Instapreneur

Custom, digital manufacturing makes products on demand



Jeffrey Wegesin is a furniture maker who does not set foot in a wood shop. Instead, he uploads furniture designs to an on-demand manufacturing service in New Zealand called Ponoko. Wegesin's is one of 5,000 companies that use Ponoko to manufacture jewelry, robots, t-shirts, and tons of other stuff.

Another manufacturer, a dress manufacturer in London, received 25,000 dress designs in only 3 months, and in the process cuts lead time from many months to only 2 weeks.

<http://www.ponoko.com/about/the-big-idea>: We wanted to create a place where you could shop for and make things that are completely original, and do this in the greenest way possible. So we made Ponoko ... the first online shop for individualized goods – things designed and made just for you. Right now you can shop the marketplace for designer crafted goods, request a designer to make something especially for you, or create and make something yourself.



Business

What's Killing GM?

Bad design, bad gas mileage, and health care costs



In 1950 UAW president Walter Reuther urged the US automakers to join him in “going down to Washington to fight for federal health care benefits.”

With a young workforce and a wide open market, the auto companies declined.

In the 1980s as the Japanese manufacturers made inroads into the US market, GM granted large increases in benefits to avoid a crippling strike. In doing so, they granted a permanent cost advantage to the Japanese.

From 1993 - 2007, GM alone spent \$103 billion on legacy pensions and health care costs for its aging workforce. During the same period, GM paid only \$13 billion shareholder dividends.



Tourism

Tourism in Space

Europeans sell weightless experience to fund research



European officials and technicians experience zero gravity during a "Zero G" test flight over Bordeaux, France.

Europe plans to enter the space tourism market by offering people a chance to experience weightlessness to help pay for scientific research. With Europe's space ambition facing a budget squeeze, due to the weak economy, the plan to mix science and adventure aboard a specially converted Airbus was unveiled by Novespace, a unit of France's CNES space agency and the 17-nation European Space Agency.

November 08.



China

Nanjing Job Fair

52,000 graduates looking for work



The Chinese economy is creating about 25,000,000 new jobs each year, so a job fair like this is not so unusual.

Here, about 900 firms had 40,000 openings.

510,000 people sent in their resumes online.

Nov 20, 2008



China

The Chinese Get More News

A change in strategy toward more openness



In an attempt to control the fierce circulation of rumors, Chinese authorities are now encouraging local news outlets to increase the reporting of protests over land, labor, and investment issues.

“It’s almost impossible to block anything nowadays, when information can spread very quickly on the Internet,” said a government official. “We noticed that it will benefit us if we report the news first.”

This is a big change for China, where it became legal to report the death toll from natural disasters only in 2005.

But openness is taking hold only slowly. A ‘bad news blackout’ during the summer olympics delayed the reporting of the tainted milk scandal that killed some children and sickened thousands more.



Demographics

Disney Strategy Shifts as Demographics Change

Theme park markets to Chinese as Japanese population drops



Disney's Tokyo Theme Park is marketing more aggressively to wealthy Chinese and other overseas tourists as the declining birthrate in Japan reduces the domestic market.

Eventually this may set up competition between Disney's Hong Kong and Japan destinations. A new project in Shanghai, scheduled to open in 2012, will intensify the competition further.



Side note:
Real estate prices in the vicinity of Disneyland Shanghai have doubled since 2006.



Society

It's So Easy to Collect Data

Millions of sensing devices capture data by the terabyte



Remote sensing devices are proliferating at a rapid rate, leading to an explosion of available data, a progressive loss of privacy, and ever greater connections between people, places, and things. Satellite cameras feed Google, moisture sensors on trees monitor the weather, webcams linked to social networking sites capture daily life, security cameras monitor for crime, RFID tags track product inventories... We are surrounded by a new layer of ambient “intelligence” gathering devices used by governments, NGOs, businesses and also disruptors such as terrorists and protestors.