

Incunabula

Printed books, ca1450-1501
In Europe

20th Century

Global wars

Science and technology and changes
in the way of our life

Medical and life sciences and human population
low infant mortality rate, longer life

Urbanization; life style, disease pattern, ageing society

The 20th Century: Science, technology and engineering

1901 Nobel prize's launch

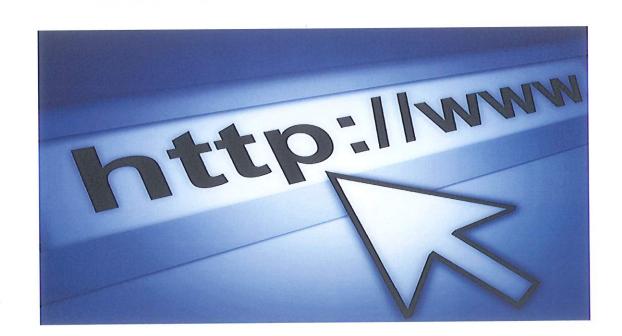
1904 Wright Brothers: first flight

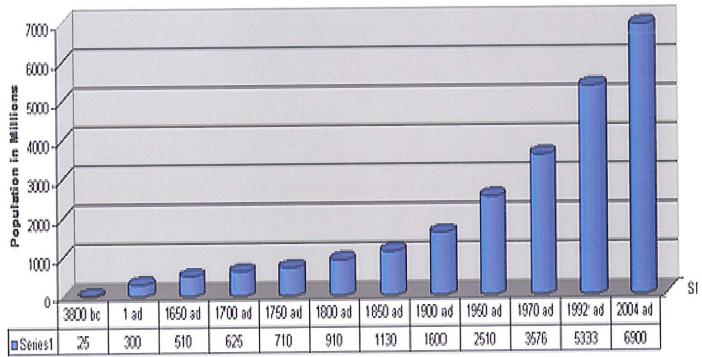
1905 Albert Einstein; E=MC²

What huge differences we see now Why? –Circumstances

-Hiroshima, Nagasaki, Fukushima







Year

Last Decade of 20th Century

-beginning of globalization-

End of Cold War

-Global market economy

•Internet- www

-Connectivity, web1.0

Population explosion

-6.4 billion

Urbanization

-near 50%

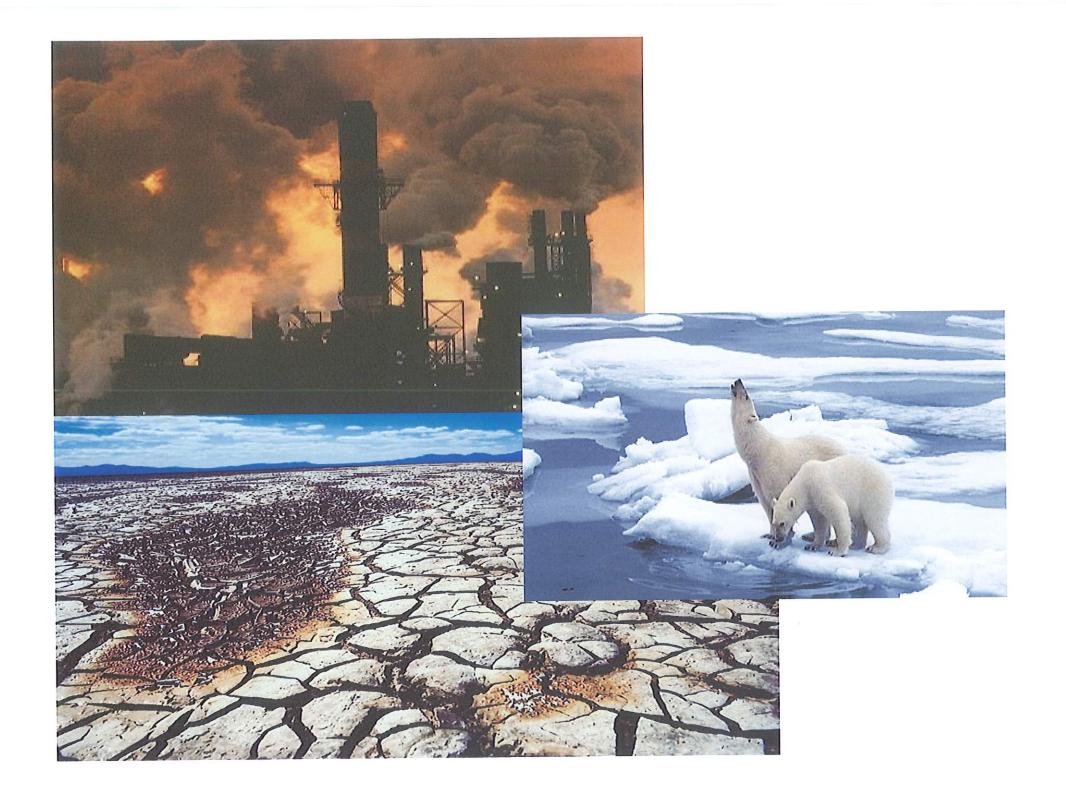
• 'Brain drain'

-human resource/capital

•Advances in Science, technology, engineering human genome, genetic engineering, nanotech

Constraints/Global Challenges

- > Climate change/climate crisis
- > Environment deterioration, pollution
- > Water and foods and other natural resources
- Perception by the general public of wide North-South disparity
 - > Sense of inequity, frustration, violence, identity, etc,
- ➢ Growing human population: 50% in last 30 years
- **►** Is Our Society Sustainable?





New Century -1

- Rio de Janeiro 1992 Transition to Sustainability
- •Rio+10 2002 -Johannesburg

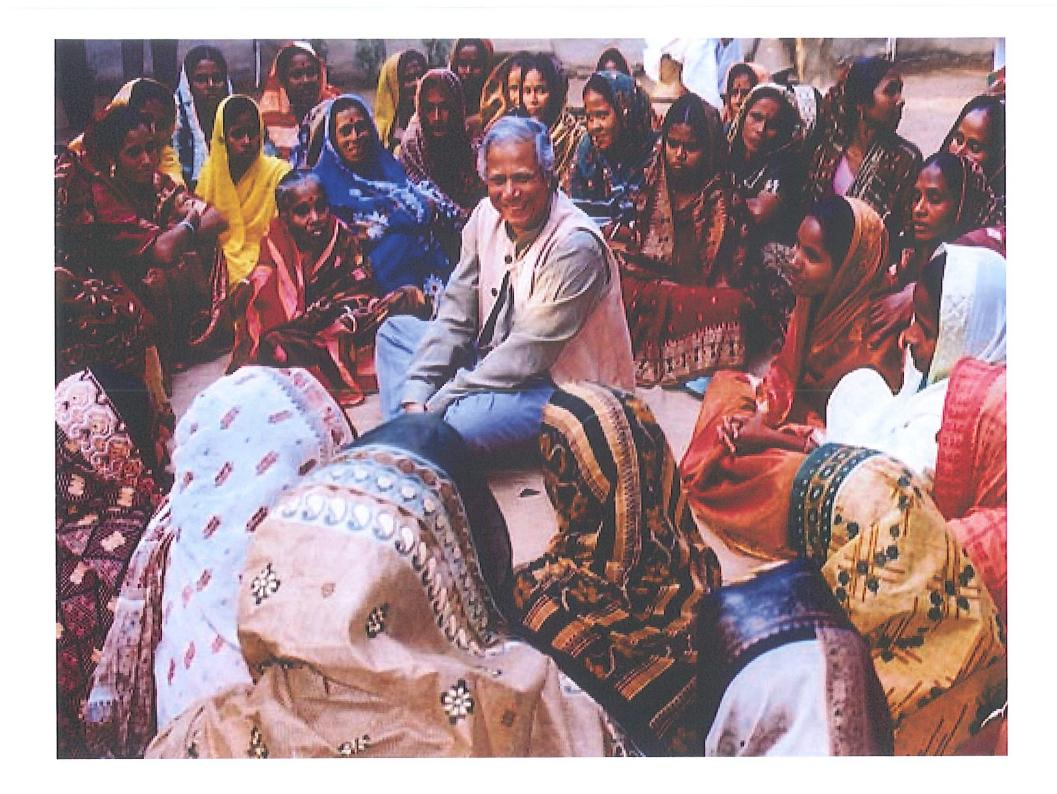
-a new feature; private sector, women, youths, science community

-Multistakeholders

- Millennium Development Goals
- IPCC- Kyoto to Copenhagen
- 'Global Health' (2000-)- Global funds, Gates
- Nobel Peace 2006 and 2007

Innovation –creation of new social values





New Century

Globalization expanding —'One World'
The World is 'flattening' further
Financial crises;

Japan 1990, Nordic countries 1992,
Asia 1997, Global 2008
New economies; BRICs, natural resource
energy, food, feed, water

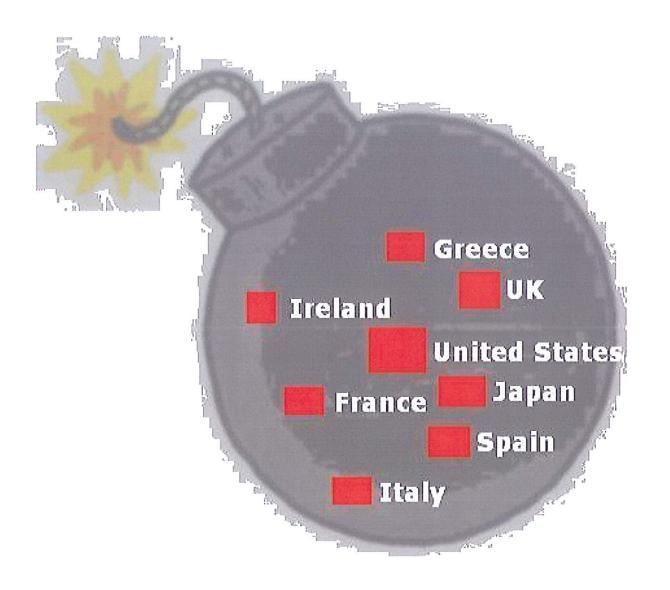
Science community; IAP, IAC, ICSU, G8+5 others

New Century -2

- •9.11
- •Web 1.0 (-2000), to 2.0 (-2010)?
- Kyoto to Copenhagen
- •G8+5 to G20
- Shift of economic growth engine
- •Globalization; regional conflicts inter-connected and inter-dependent
- Fragile and Regional









DECEMBER 15TH-19TH 2003

www.economist.com

The future of flight

PAGES 75-77

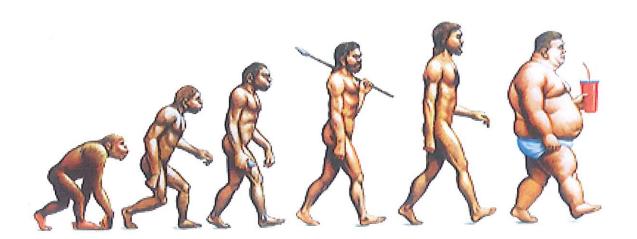
Russia's broken democracy

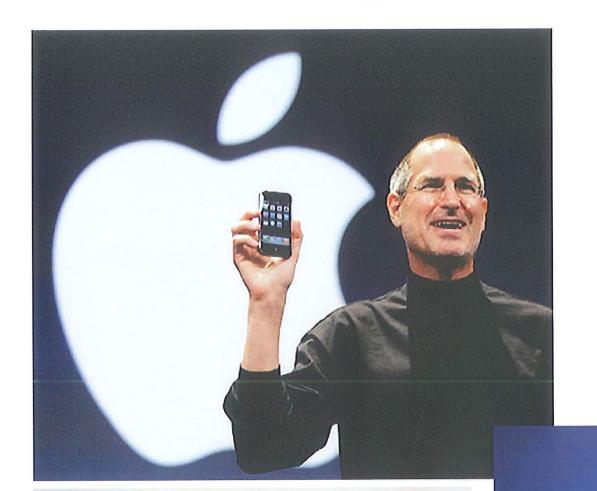
The great "offshoring" scare

A SURVEY OF FOOD

The shape of things to come

Ageing
Chronic diseases
Income disparity
National debts









Web 3.0 (2011-)

--Incunabula of today--

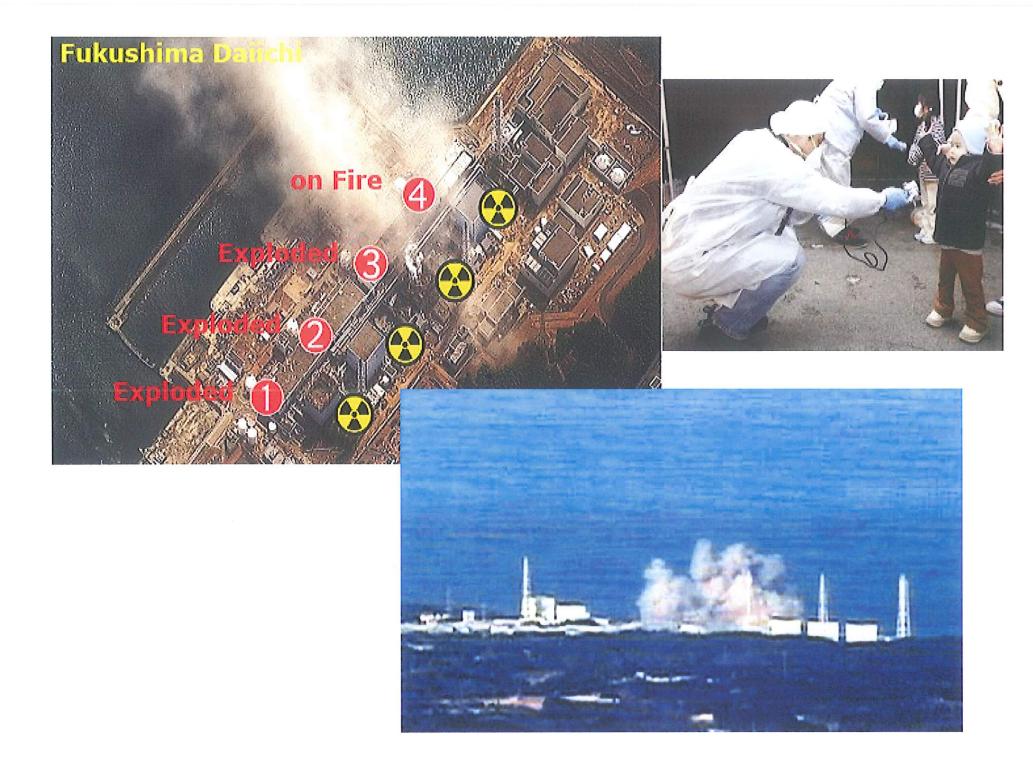
Smart phones, iPad Wikileaks FaceBook, twitters

Awakening - Sense of inequity and frustration









'The Singularity is Near' by Ray Kurzwell

'Our Final Hours' by Martin Rees

'How to Run the World: Charting a Course to the Next Renaissance' by Parag Khanna **Knowledge** is digitalizable

Wisdom has to be earned

Brain circulation Open education

Heterogeneity and diversity Women and Girls

Talent mobility
Innovation and Entrepreneurship

Many new programs and projects





























