

# In the wake of the Digital Revolution

Afonso Ferreira  
(CNRS)  
Head of Science Operations  
COST Office  
Brussels  
cost.esf.org

# What is COST ?

- (European) Intergovernmental Cooperation
  - 9 Scientific and Technical Domains
  - Multidisciplinary track for submissions
  - **Created in 1971**
- Participation
  - **35 COST Countries**
  - European Commission
  - European and International Organisations
  - Organisations from Non-COST Countries on Mutual Benefit Basis
- **COST Actions - Networking Scientists**
  - Coordination of research funded otherwise
  - Pre-competitive and bottom-up
  - **A tool for networking researchers**

# The Story

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- The Context (PARADISO)
    - ICT for a global sustainable future
    - ICT for the well being of all world citizens
    - The mind-boggling talks so far
  - The Hypothesis
    - The future will indeed be here when it's time

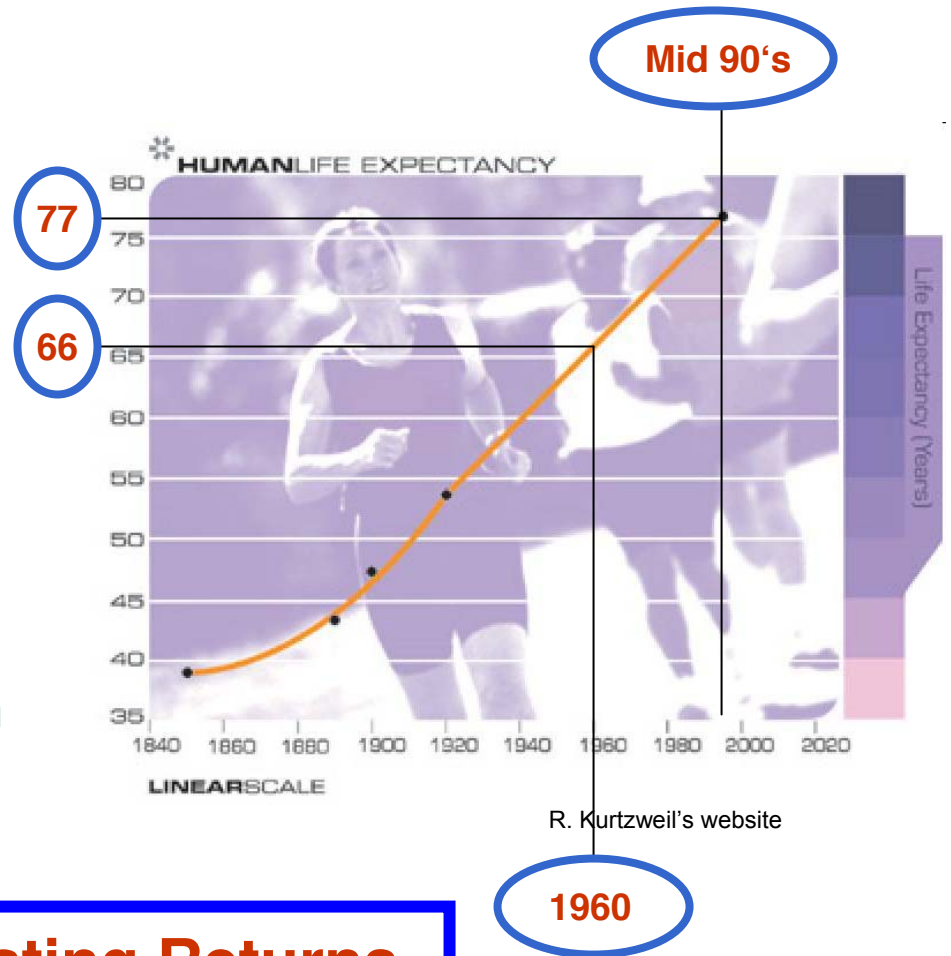
# The Future in Hindsight

- The Financial Crisis

- “You are worried because you just lost 20% of your pension plan value” (J. McNeely, yesterday)

- Some (bad?) news

- You are going to live at least 20% more than you were expected to live when you were born (Past 100? 120?)

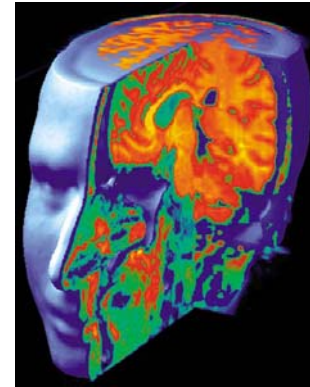


# The Revolution



# The Digital Revolution

- Everything that can be digitized, will be so



- In a production work-flow, every digitized process will be installed at the most cost-effective location
  - Eg, the different components of an airplane were digitally designed in different parts of the world and digitally assembled in France

# Fast Rewind: The Industrial Revolution

- New technology (cotton mills) caused a financial markets bubble
- A great deal of agricultural jobs were lost
- Massive immigration
  - Italy lost almost half of its population
  - Ireland lost around 2/3 of its population (current population smaller than in 1870)
- The start of a long-standing growth era
- After 2<sup>nd</sup> WW, a tri-partite balance was found between the main economic forces, leading to stability
  - Capital
  - Government
  - Workforce



# The Digital Revolution

## (As seen in 2007)

- The Digital Revolution, Free Trade, and Privatisations dangerously empowered the Capital
  - Capital will flow to wherever gains are maximised
  - Ultra-fast financial operations lead to huge capital gains
  - From a Capitalist Economy to a Monetarist Economy
- Witnessed Consequences
  - Unemployment & Social Unrest
  - Scarceness of Skilled Man-Power for New Jobs

# The Digital Revolution (As seen in 2007)

- Consequences to come
  - Economic Slowdown
    - So far mitigated by productivity growth



- How best to harness this revolution?

# Think “Revolution”

- ICT is a powerful **enabler**
  - A new way of thinking
  - Communication–based distributed systems
  - **Data can be collected, treated, and transferred at unforeseeable rates**
- A new **Socio-Economic organisation**
  - Society/Production is now deconstructed
    - A “Lego”-World
  - The individual is being empowered again



# A Way Forward

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- The Framework Programme is meant to increase European industries' competitiveness
  - "Not everything should be measured in economic terms" (Commissioner Reding, yesterday)
  - New indices can now be computed, mainly because ICT allows for the collection and treatment of the required data in a **timely** manner.

# And Forward We Go

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- Only ICT may help provide
    - Relevant data
    - Models
    - Tools to help decision-making by Governments and Individuals
  - Improved policy-making
    - Government level
    - Individual level
    - **Shouldn't a Global World have a Global Governance?**

*(Maybe a true application of an Internet of the Future?)*

# Paradiso Quotes

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- "Priority on ICT solutions for Energy and Natural Resources Management" (Comm. Reding)
  - "Another big issue is Food Security" (H.I. Toure', Secretary General ITU)
  - "Society will have to be fully re-organised to cope with the Energy challenge" (Prof. Carvalho, BEPA)
  - "EP resolution on ICT for enabling Energy efficiency" (EP President Pottinger)
  - "I look forward to ideas for the future" (idem)
  - "Foresighting far in the future is worth because it frees the minds of the thinkers from self-projection" (P. Madden, Forum for the Future)

# Fast Forward

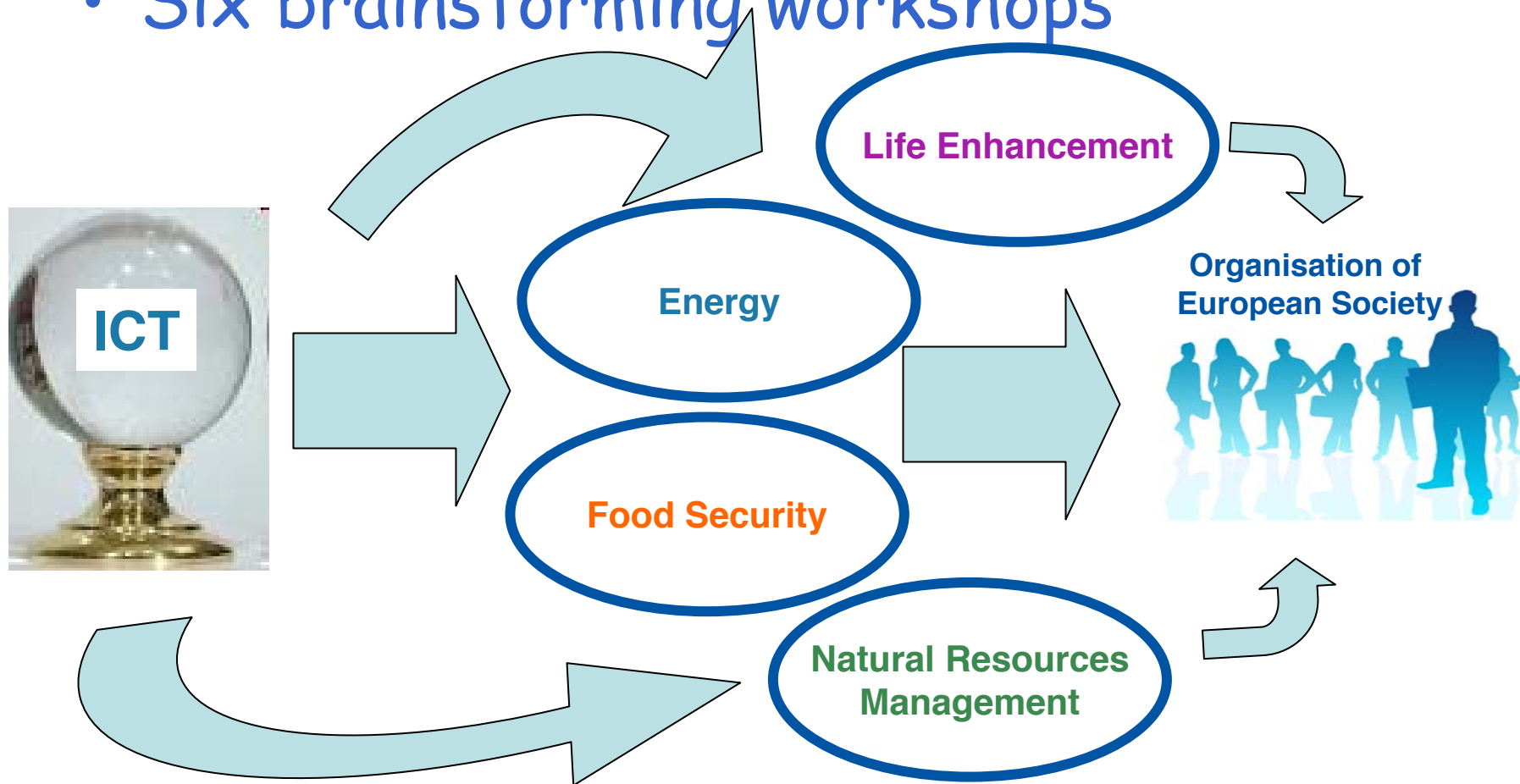
## Future Directions for ICT Research

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- COST Foresight 2030
- Multidisciplinarity / Multistakeholding
- Help shape the impact of the Digital Revolution
  - On four specific areas
  - On society
- Help steer the development of ICT towards the betterment of individuals and the society in a sustained world

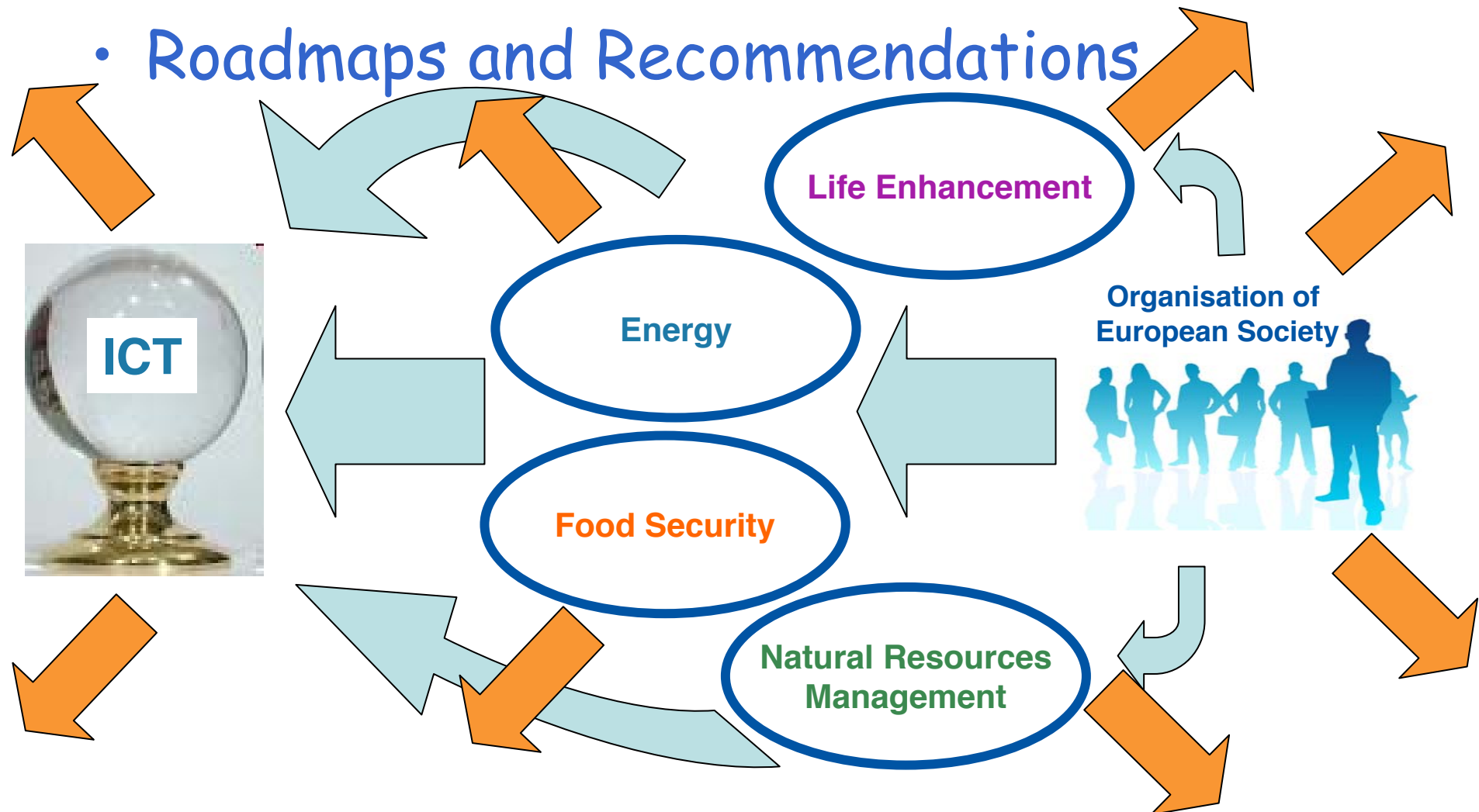
# COST Foresight 2030 – Concept

- Six brainstorming workshops



# COST Foresight 2030 – Outcomes

## • Roadmaps and Recommendations



# COST Foresight 2030 - Timeline

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- Advisory Group meeting
    - December 2008
  - ICT Crystal Balling Workshop
    - April 2009
  - Brainstorming Workshops on Life Enhancement, Energy, Food Security, and Natural Resources Management
    - June 2009
  - Societal Organisation Workshop
    - October 2009
  - Dissemination Conference
    - June 2010

# Conclusion

- Focus is how to harness a Revolution
  - Well-being, Society, Growth, ...
- Future is **B**right

Or may **B**wrong

- Let's shape it!

