FuturICT

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Scientific Coordinator

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http://www.futurict.eu/

Aims of FuturICT

Bring together the fields of ICT and social science

- to model our social system using
  planetary scale simulations
- powered by a new
  planetary scale data science
- to enable a paradigm shift to
  data intensive policy making

so we can manage our new global society in a sustainable manner.

Scientific advance:
Planetary scale simulation

Build planetary scale models of our social systems

including their interaction with economic, technological and environmental systems

Technological advance:
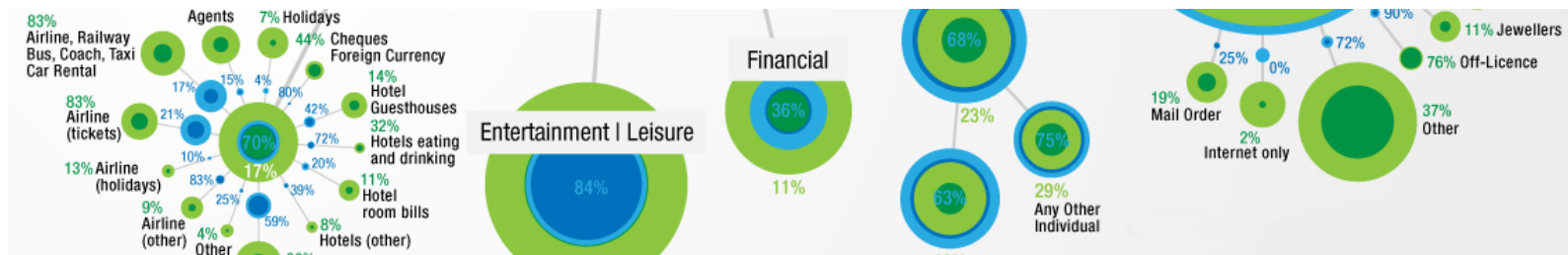# **Planetary scale data science**

We need real-time data of massive size and scope.
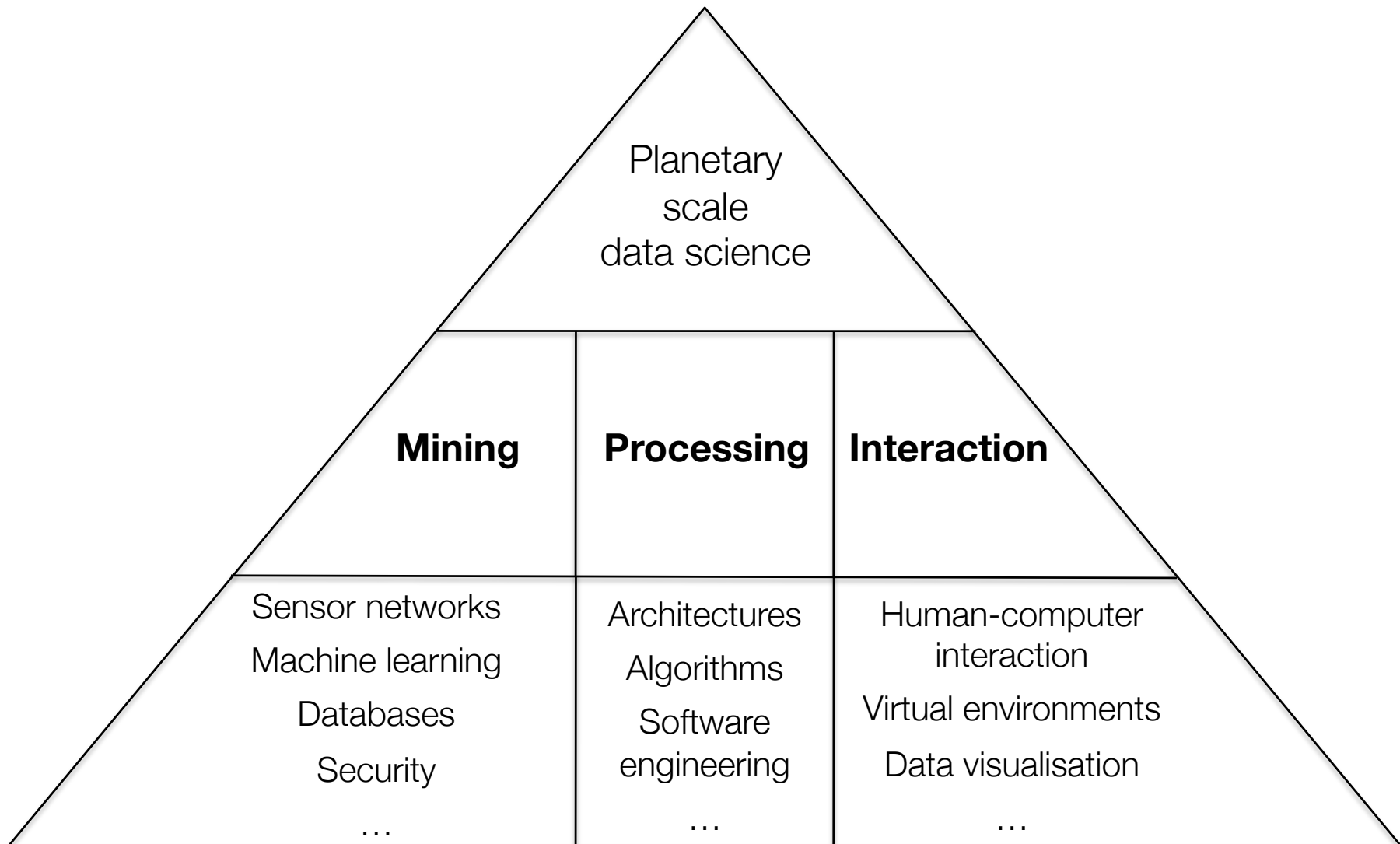Technological challenges lie in three key areas:

Mining

Processing

Interaction
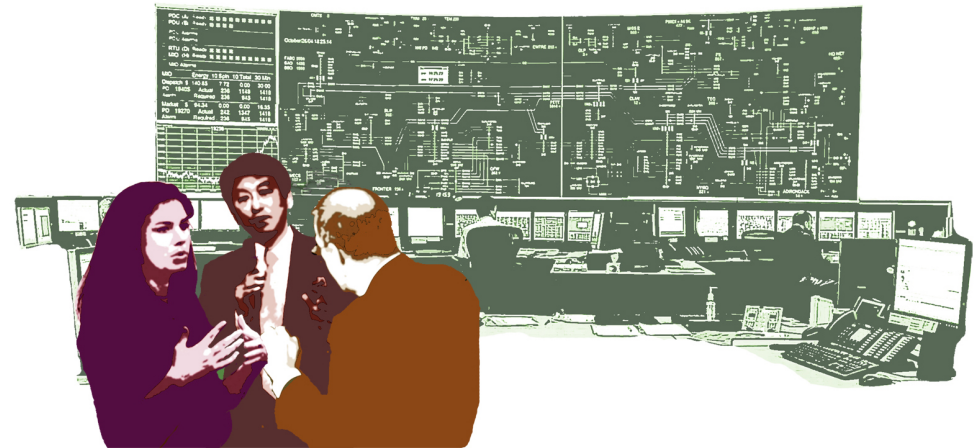
Technological advance:
Planetary scale data science

Planetary
scale
data science

Mining	**Processing**	**Interaction**
Sensor networks	Architectures	Human-computer interaction
Machine learning	Algorithms	Virtual environments
Databases	Software engineering	Data visualisation
Security	…	…
…		

Paradigm shift for society:
Data intensive policy making

Tools for detecting upcoming crises

Tools for data-based policy exploration

Mining data and model output
for early warning signs

Multi-scenario policy exploration
for policy makers
and for citizens

Preparatory action personnel

Advisory Board

Management Committee

Led by
Steven Bishop

Scientific Committee

Led by Dirk Helbing

Bishop, Kertesz, Lörincz, Lukowicz,
Lux, McCarthy, Ola-Linnér, Vespignani

Partners

Supporters

open for participation
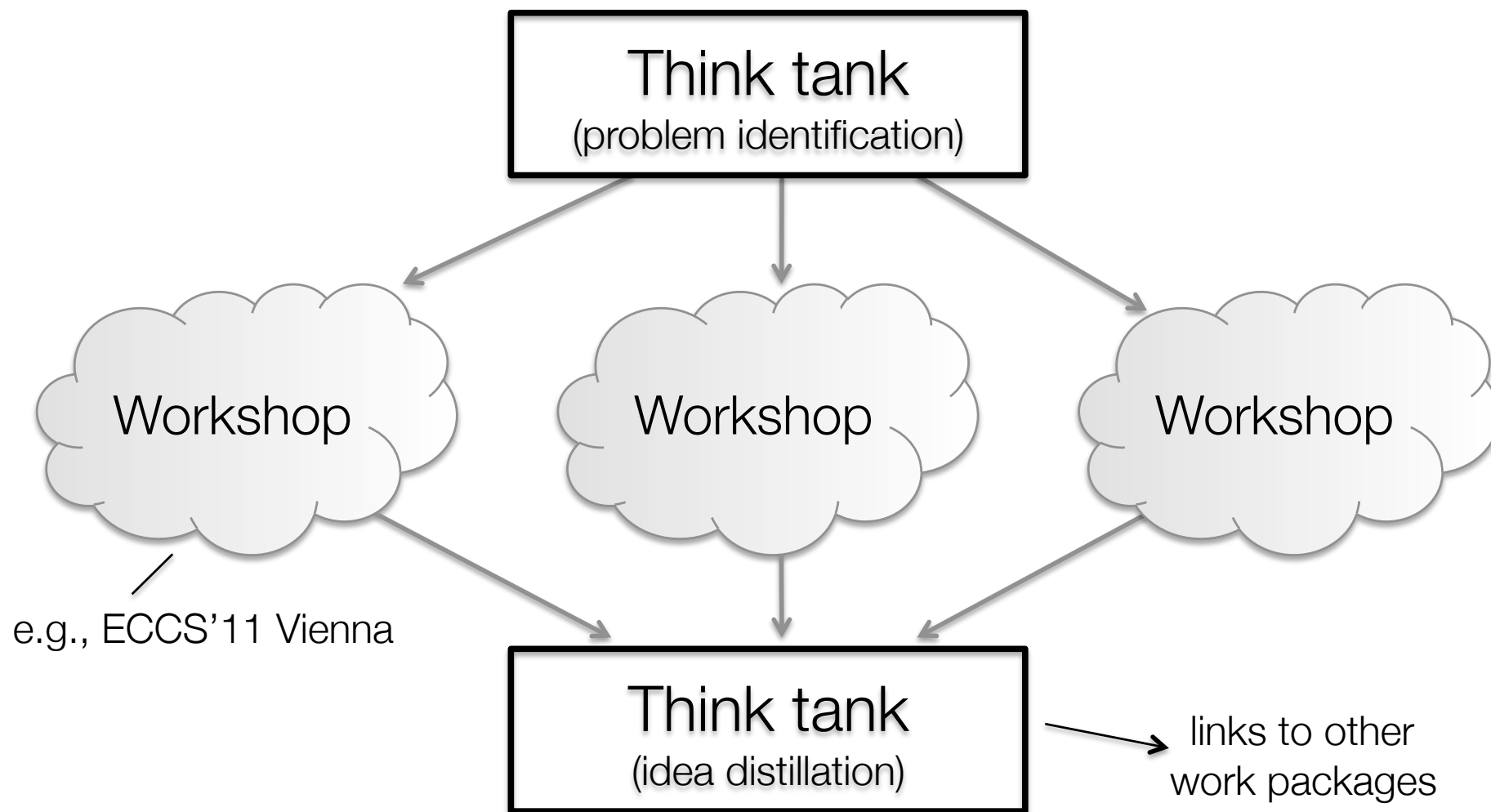
Preparatory action work packages

Scientific program

- Models and data

- Tools
  - Crisis detection

- Policy areas
  - Economy, environment, civil design, security, health, education, innovation
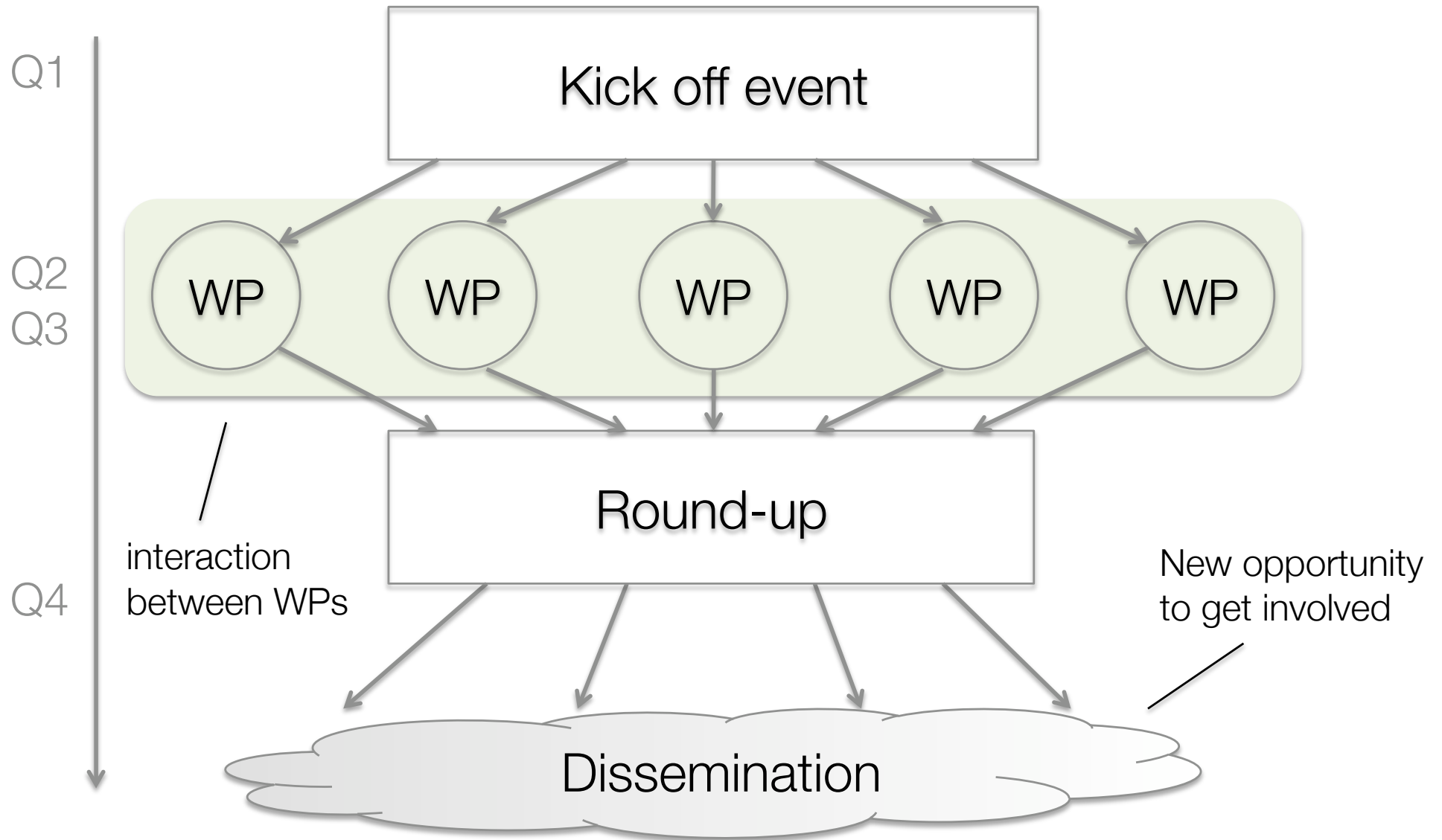
- Ethics

Management

- Project coordination
  - Coherence and collaboration
  - Funding

- Stakeholder liaison
  - Policy makers, business, NGOs, other EU projects, beyond Europe

- Dissemination and inclusion
  - Internet and media
  - Exhibitions

Preparatory action
typical work package structure

Think tank
(problem identification)

Workshop

Workshop

Workshop

e.g., ECCS'11 Vienna

Think tank
(idea distillation)

links to other
work packages

Preparatory action overall structure

Q1

Q2
Q3

Q4

Kick off event

WP   WP   WP   WP   WP

Round-up

interaction
between WPs

New opportunity
to get involved

Dissemination

and finally …

Thanks to Peter, Paul and Suzy for help with the slides

The Motion Box for the movie