Transforming Production for the 21st Century

http://www.bbc.co.uk/programmes/b00shfq
The Challenges

- Jobless recovery
- The marginalisation of Europe
- Societal challenges: Climate, Ageing, Energy,
- Massive demand but how to meet it?
- Focus on using information technologies to transform production of goods and services
- New markets with opportunities for high-quality jobs
Ambition to target ICT R&D to:

• generate low-cost market intelligence even for small niche markets

• enable low-cost direct communication with those markets

• transform the design, production and delivery of highly personalised, dynamic, goods and services that target such markets

• enable the creation of new techniques that create markets that meet the huge demand implicit in the Societal Challenges e.g. Ageing and Climate
Impact

• Realising the right to interesting, high-value jobs for all citizens of Europe.

• Sectors: wellness, climate, creative, …

• Tackling Societal Challenges to create new markets using novel ICT-based approaches to the production of goods and services.

• Enabling entrepreneurs and SMEs by:
  – reducing entry costs to markets
  – facilitating the low-cost exploitation of niches in new and existing markets

• Make a measurable difference to European employment and GDP
Integration of:

• Data challenges: data intensive computing, modelling, instrumenting artifacts and environments, social signal processing, …

• Organisational Challenges: structure of new responsive enterprises, usable business analytics and communication, risk analysis, trust,

• Production challenges: production of highly flexible real and virtual products that are highly personalised and integrated into the delivery organisation

• Governance Challenges: privacy, security, systems of systems issues, comprehensibility, trustability, transparency
Plausibility

• The Societal Challenges provide ideal pilot areas, for example dementia in ageing populations

• Treat the dementia challenge as a market:
  – Data Challenge: can we find niche markets in the population by analysing existing data streams (e.g. low tech sensors in housing – e.g. energy monitors).
  – Production Challenge: what new products and services fit in the niche markets (e.g. prompting)
  – Organisational Challenge: what organisational structures do we need to design, produce and deliver these products and services (e.g. mixed professional/volunteer orgs)
  – Governance Challenge: how to make this transparent and acceptable to people
Support

• We have a core group of five leading European research centres with deep interdisciplinary, commercial and business School engagements.

• We believe that a highly coherent core group is essential to drive an open pilot development.

• The pilot will help us identify and recruit further centres of excellence and leading companies.