

Workshop with the Member State on the  
*Common Strategic Framework (CSF) for research and innovation  
towards more inclusive, innovative and secure societies*  
Brussels, 13 July 2011

**Summary of CSF stakeholder workshop:  
"Research and innovation for inclusive  
and trustworthy digital societies"**

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# Disruptive technology

Web 2.0, social and professional networking, contributing and mashing-up content, rating, debating, blogs, wikis, RSS, gaming, etc.



- citizens change from passive consumers to **active producers and participants**
- citizens **share** more and more with each other (the 'social signal'), **privacy** issues
- **crowdsourcing** content and services
  
- **Web 3.0**: wide scale, ubiquitous semantic networks, the cloud
  - public and other data used for data mining, pattern recognition, policy modelling
  - Advanced man-machine interfaces, brain research, etc.
- **Web 4.0** contextualises information about people, places and things using new semantic data standards (RDF)



# The power of mobile

- Location
- Time
- Identity
- Context
  
- Child watch
- Senior citizens alerts
- Networked medical devices
- Sensors
  
- Always-on mobile phones collect data from user's immediate environment and deliver user context in real-time:
- New privacy protection principles required



- Light sensor
- Proximity sensor
- Accelerometer
- Dual Microphones
- Compass
- Gyroscope
- Dual Cameras
- GPS



# Personalisation and inclusion – the challenge

## Disadvantage is multi-dimensional

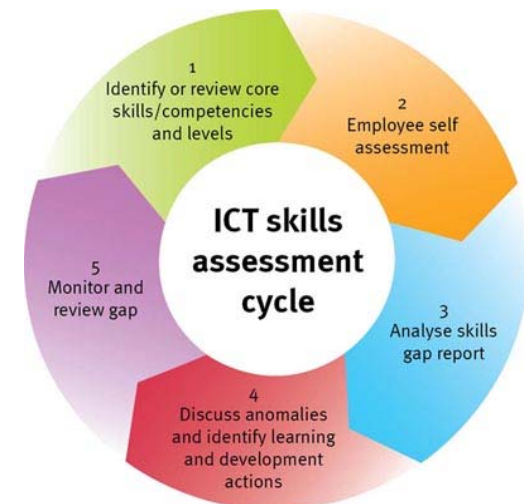
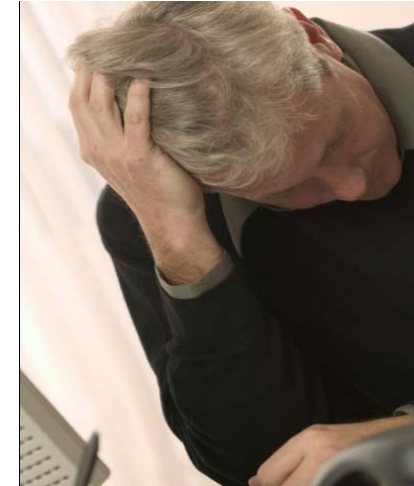
—social, economic, cultural/ethnic, spatial.....

## Research in innovative ICT-based solutions

- interoperability for digital access
- accessible smart environments
- inclusive design for all
- assistive technology for personal needs
- flexible, personalised and multi-channel

## Advanced ICT-based solutions for learning & skills

- enhanced digital literacy and competence
- citizens, intermediaries, businesses, PAs
- to foster personal and social empowerment





# Innovative and smart digital government services

## Smart digital government services

- personalised and ubiquitous
- interoperable key enablers on large scale, e.g. eID

## Socio-economic and humanities research

- for public services and policy support
- for digital society and digital life
- behavioural sciences

## ICT research

- personalised and interoperability of eID and privacy
- open data and citizen-centric integration and innovation
- handling and analysing huge and dynamic quantities of data
- management of complexity for decision-making and participatory services
- simulation of policy-making, participatory systems



# Digital society and digital life

## Empowering users

- Control of (identity) data
  - Select trusted partners
  - Deal with the trade-offs
- 
- User trust and confidence are crucial
  - Trust is multi-dimensional
    - Users trust service provider
    - Service provider trusts users
    - Users trust each other
  - How can trust be built
  - Trust and privacy by design

## The future has started

- In Japan, Matsushita has demonstrated a health-monitoring toilet that can analyze your stool and send the information online to your doctor.
- “ ... sensors detect seven abnormal behavior patterns of the elderly in their living quarters...”

