ICT-11-2017

Collective Awareness Platforms for Sustainability and Social Innovation

Europe needs to capitalise fully on participatory innovation; building from the bottom-up more trust and new business models that are a blueprint for new ways of making sharing and collectively producing value. This requires collective intelligence for sustainable growth and measurable progress. Open data, knowledge networks, open hardware & Internet of Things is a domain ripe for more participatory innovation. The challenge is to develop innovative combinations of networked communities. Can digital social innovation achieve social sustainable development, mass adoption and measurable global impact?
Innovation Actions (IA): Scope

- Pilots of Collective Awareness Platforms (CAPs)
- Demonstrating new forms of bottom-up innovation and social collaboration
- Exploiting digital hyper-connectivity and collaborative tools
- Based on open data, open knowledge, open source software and open hardware
- Harnessing crowdsourcing or crowdfunding models
- Leveraging on fresh grassroots ideas and civil society participation in the broad digital social innovation domain
Innovation Actions (IA): target areas

• New participatory innovation models for economy and society
  • E.g. collaborative or circular economy, collaborative public services and collaborative making

• Solutions for sustainable lifestyles
  • E.g. collaborative consumption and production, smart reuse, low carbon approaches

• Emerging ethics of digital innovation
  • E.g. social entrepreneurship, direct democracy, privacy preservation, digital rights
Innovation Actions (IA): methodology

- Include in consortia an existing and motivated community of citizens
  - to drive platform development
- Base the platforms on an appropriate combination of existing or emerging network technologies
  - e.g. distributed social networks, wikis, sensors, blockchains
- Demonstrate a durable multidisciplinary collaboration
  - including in the consortia at least two entities whose main focus of interest is beyond the ICT domain

Even better if:
- integrating different platforms, addressing several sustainability challenges
- engaging civil society at large, for instance through NGOs, local communities, social enterprises, non-profit organisations, students and hackers
Expected Impact – 1/2

- Demonstrate **increased effectiveness** of new **bottom-up, open and distributed approaches** exploiting network effects and based on open data and open hardware, compared to existing solutions to societal/sustainability challenges.
- Capability to reach a **critical mass** of European citizens and to transpose the proposed approaches to **other application areas** related to sustainability.
Expected Impact – 2/2

- Achieve measurable improvement in cooperation among citizens, (including elderly), researchers, public authorities, private companies and civil society organisations in the development of new sustainable and collaborative consumption patterns, new lifestyles, and innovative product and service creation and information delivery.
- Demonstrate the applicability of concrete and measurable indicators to assess the social impact and the "social return of investment" of the proposed solutions.
CAPS 2017: Good to know

✓ **Opening:** 8 December 2016
✓ **Submission deadline:** 25 April 2017
✓ **Budget:** 10 M€ (IA: 9M€, CSA: 1M€)

**Website** (background docs, projects, examples, etc.):

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Net Innovation Initiative part b):
Distributed Architectures for decentralized data governance
Challenge

Today the net is a place unlocking **rapid innovation**. This potential is too often left un-exploited, i.e. Europe can do much more to bring RTD & I outcomes into business success stories. Current centralised platforms for big data and big management consolidate the dominance of existing incumbent actors, stifling new entry, alternative innovation and allowing less and less **control over the data by citizens**. Distributed architectures and decentralised platforms enable the creation of viable alternatives to current dominant value models.
ICT-12b: Distributed architectures for decentralized data governance

- Demonstrating **distributed open hardware open software platforms** for human communication, for secure cloud computing or for internet of things transactions
- Supporting decentralised data access and identity management for bottom-up participatory innovation
- Linking SMEs, social enterprises, industries, researchers, into community platforms, open, trust-building self-defined

*Fully distributed, decentralised, algorithms & blockchains*

- Resilient, intrinsically resistant to malware and hacking
- Circumventing centralised data storage or data management
- Able to provide federated identity management
Distributed architectures for decentralized data governance

- **Goal:** design, develop and demonstrate an architecture for such a platform

- **Involving:**
  - relevant technological actors (P2P and open source developers, open hardware manufacturers, experts in security, encryption, anonymity, blockchains and linked data)
  - civil society organisations (citizens' organisations, digital rights advocacies, artists, social scientists)
  - interested developers of the overlying social applications and systems (creative industries, SMEs, social entrepreneurs, software developers).

- **To create robust open standards for distributed and decentralised architectures (in coordination with industry and academia)**
Expected Impact

- demonstrate how a distributed architecture can enable new data services and disruptive (e.g. commons-based) economic models (as an alternative to the current centralised data management platforms)
- demonstrate that citizens' generated data can be made available as part of a common distributed and decentralised architecture, open to all, so to allow new entrants to aggregate data on demand, bringing unanticipated features and innovative services
- develop an architecture and open standards allowing European citizens to retain full control over their digital identities, and to move their personal profiles between different platforms (data portability)
- create a level playing field for the development of new collaborative applications and services based on emerging participatory innovation models that are intrinsically respectful of privacy and ethics
Good to know

✓ Opening: 20 October 2015
✓ Submission deadline: 12 April 2016
✓ Types of action: Research and Innovation Action (RIA, ICT-12b),
  Budget: b: 5M€

Website (background docs, projects, examples, etc.):

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