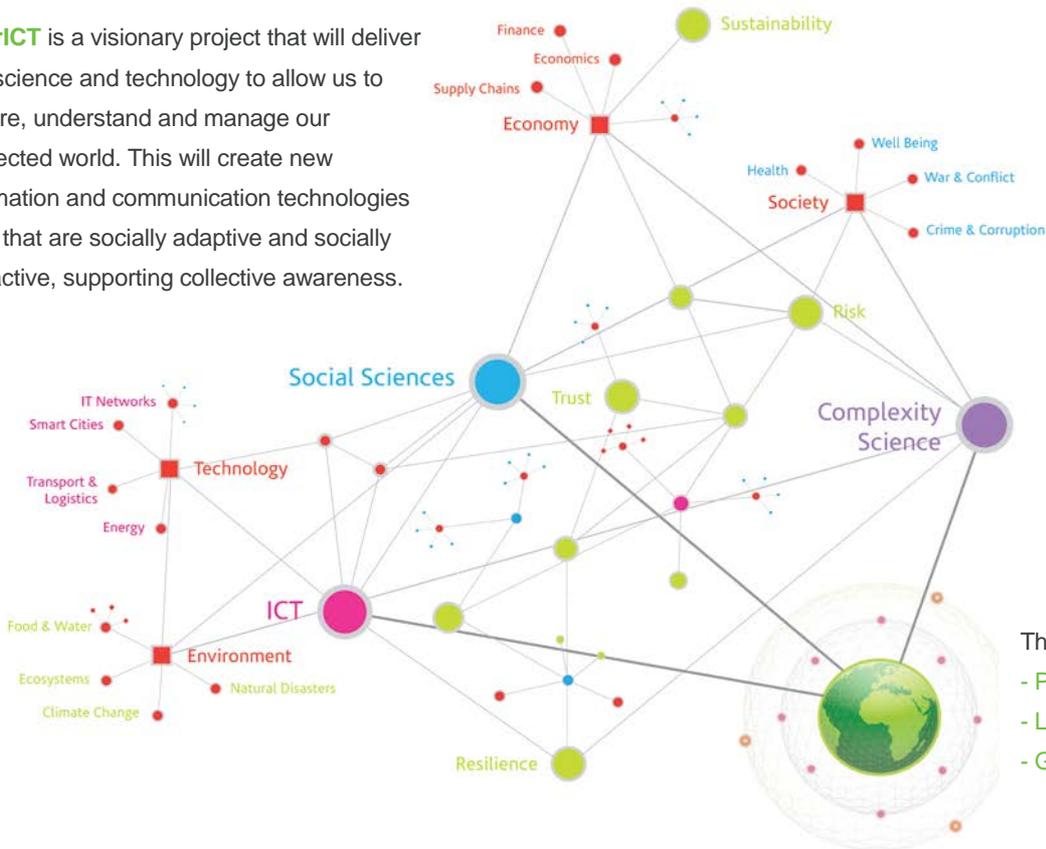**FuturICT** — Global computing for our complex world

FuturICT is a visionary project that will deliver new science and technology to allow us to explore, understand and manage our connected world. This will create new information and communication technologies (ICT) that are socially adaptive and socially interactive, supporting collective awareness.

The FuturICT Platform:
- Planetary Nervous System
- Living Earth Simulator
- Global Participatory Platform

Global Participatory Platform (GPP)

FuturICT will build a sophisticated framework for simulation, visualisation and participation, called the FuturICT Platform. A suite of models forming the Living Earth Simulator will power Observatories, to detect and mitigate crises plus identify opportunities in specific areas. These models will be driven, and calibrated, by data aggregated in real-time, which are gathered by a digital Planetary Nervous System. Both models and data will support the decision-making of policy-makers, business people and citizens, through a Global Participatory Platform which is intended to facilitate better social, economic and political participation. Exploring interactions among society, technology, environment and the economy will promote innovation.

The Global Participatory Platform will be an open framework for citizens, businesses and organisations to be able to share and explore data and simulations, and debate the potential implications. It will democratise 'big data', promoting responsible use of information systems and opening up the modelling of complex systems to non-experts. Next generation decision arenas for policy-makers will be developed to evaluate the consequences of interventions, and then opened up and tuned to the needs of the diverse stakeholders. This participation will harness and shape the emerging global, social computing infrastructure to tackle various problems.

Global Participatory Platform in Practice - Crowd sourcing and interface

The main idea behind the GPP is to allow the stakeholders - scientists, policy analysts, software developers and the ordinary citizen - to harness the knowledge and creativity of multiple minds as the communication, coordination, cooperation and the social, economic and political participation of citizens is promoted. By building on the principles of Wikipedia and Web 2.0, this will go beyond what is currently possible through existing eGovernance platforms. The goal is to engender a beneficial human-information symbiosis, with the GPP featuring mixed reality systems, where it will be almost impossible to distinguish between the real and virtual world. The GPP use techniques employed in multi-player online games; for example where scientists will be able to explore simulations for different designs of shopping malls, airports, or city centres in addition to trying out different financial architectures, or voting systems.

New Ecosystem

In order to make derive a public good from data and models, the FuturICT project will develop a new ecosystem, one which delivers access to data, quality analytical tools and effective communication systems. This ecosystem will have the capability of social sensing and social thinking. Several social features such as self-organization, adaptiveness, emergent cooperation, social norms, cultures and community formation will form the basis of these new systems. Trust is crucial property of our social and ICT systems. The creation of a Trustable Web, based on principles of social and reputation-based self-control will probably be the most pertinent feature of a socio-inspired future ICT system.

Outcomes of the GPP

The FuturICT GPP will bring about a quantum leap in our capacity to cope with the speed at which our world is changing and make a vital contribution to improving societal resilience and a promoting a sustainable future. It will trigger a new era for social science generating a wave of socio-inspired technologies which will harness the latest developments in Information and Communication Technology (ICT). The tools will extend beyond social networking, the wisdom of crowds and prediction markets in a future in which ICT-based cultures, collective self-awareness, reputation and trust-based applications will play vital role.
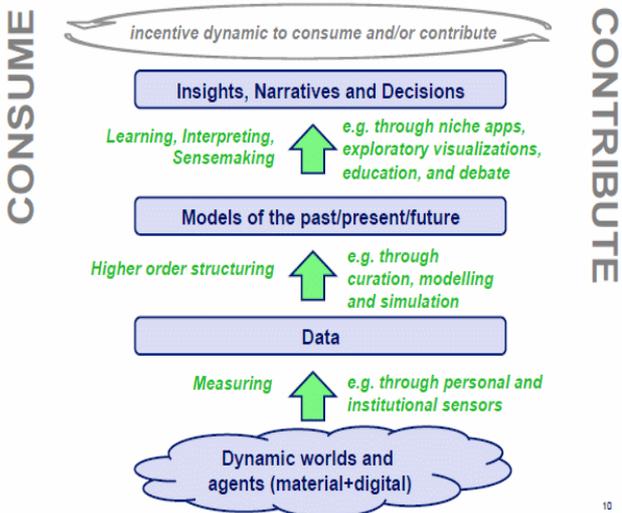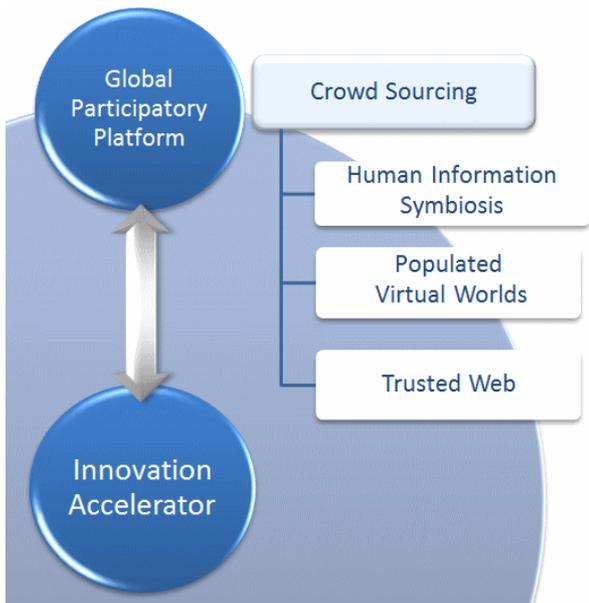
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