

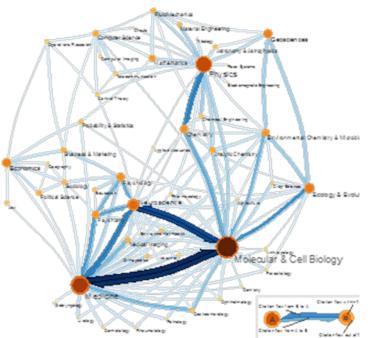
The Innovation Accelerator

Building on the Global Participatory Platform and the Planetary Nervous System, FuturICT will create an Innovation Accelerator that will discover valuable knowledge in the flood of information, monitor the latest developments in science, detect emerging trends, identify innovations early on, help to find the best experts for projects, and support the distributed generation of new knowledge, hence promoting innovation. The Innovation Accelerator will speed up research, development, and the creation of new business opportunities. Through this, the Innovation Accelerator will significantly contribute to laying the foundations of a more innovative European Union. Through new ICT technologies, Innovation Scouts and Knowledge Transfer Supply Chains, the distance between academic inventions and innovations in the technological, social and political realm will be significantly reduced. In this way, transforming new ideas into new products will be much more efficient than today (currently this requires of the order of 30 years in many areas).

Accelerating research and development

Scientific research has been the driving force behind innovation, and it has been an enormously successful human endeavour. Virtually all the major improvements in the quality of life of people around the world have been due to fundamental breakthroughs in scientific understanding. However, the system that we use today to organize collaboration, communication, competition and selection in modern science is essentially the same as when it was devised in the 17th century, in the days of the first printed scientific journals delivered by horse or canal boats. There is a widespread feeling among scientists (and particularly, although not exclusively, among the younger generation), that the way we run science today is broken: the transition of scientific results into new social solutions (products, services) is measured in decades, the peer review system encourages conservatism, journal publications are large, monolithic and slow, data is often not available to other scientists, and the independent validation of results is limited. In short, the innovation process lacks coherence, agility and transparency. The aim of the Innovation Accelerator is to change this situation radically by:

- revolutionizing the way in which we create knowledge and disseminate information
- creating self-organizing reputation-based science platforms that capture discipline-specific features while supporting interdisciplinarity.
- transforming publishers from gatekeepers of high quality information to innovation scouts and technology brokers
- creating a self-balancing web of trust and ranking
- inventing a corruption-proof reputation system that avoids tragedies of the commons in a globalizing world
- bridging invention to innovation: facilitating the creation of new business opportunities, markets and employment opportunities
- developing new indices to discover high-quality work and new methods to analyse scientific productivity, facilitating early identification of innovations and trends
- providing co-creation tools for large-scale projects and new collaboration schemes based on insights from complex systems
- establishing a new science forum and publication platform
- generating customized recommender and reputation platforms
- exploring new institutional designs to stimulate and disseminate innovations



From Bergström and Rosvall (2008): Maps of random walks on complex networks reveal community structure, PNAS 105, pp 1118-1123. http://www.pnas.org/content/105/4/1118

