

## SPIN-OFFS AND START-UPS

Fourteen spin-offs and start-ups have been created so far.



Medical ICT and telemedicine. It has developed the oncological electronic medical record.

Speech recognition and transcription services.



Solution for data management and platforms for processing, organizing and sharing of geo-referenced data.

Platform for big data integration and mashup, dynamically linking massive amounts of open economic and financial data.



Speech recognition solutions for medical reporting.

Multi-touch software and multi-user devices, collaborative man-machine tabletop interfaces.



E-tourism services and technologies for web and mobile devices.

Big data and semantic web technologies and APIs in multi-dimensional live dataspace.



Solutions for Digital Humanities, such as digital tools for education and semantic search engines for digital libraries.

Vision inspection technologies for the food industry.



Solutions for the integration of mobile and web-accessible services, applications and systems.

Solutions, services and very high resolution data for outdoor sports based on well-being and safety.



Innovative search & booking systems of tourism services.

Multilingual platform performing semantic analysis of textual documents.



### EIT ICT Labs

FBK ICT - irst is a major partner of the EIT ICT Labs.



### OPEN DATA INSTITUTE

FBK ICT - irst is one of the 21 nodes of the global network of the Open Data Institute.



FONDAZIONE BRUNO KESSLER

ICT\_irst  
CENTER FOR INFORMATION AND COMMUNICATION TECHNOLOGY

Where ideas come alive

Photos - Gaetano Calabrese



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# High Quality Research with Impact on Market and Society

## Mission

FBK ICT-irst aims to conduct high quality research with impact on market and society. It seeks to demonstrate the added value of research through the creation of software systems, experimental validation, industrial applications and social impact.

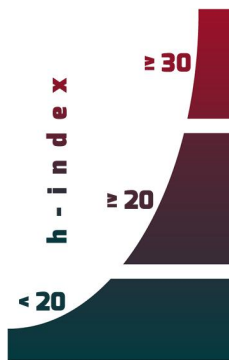
## People

200 people  
 90 researchers  
 50 technologists  
 60 PhD students



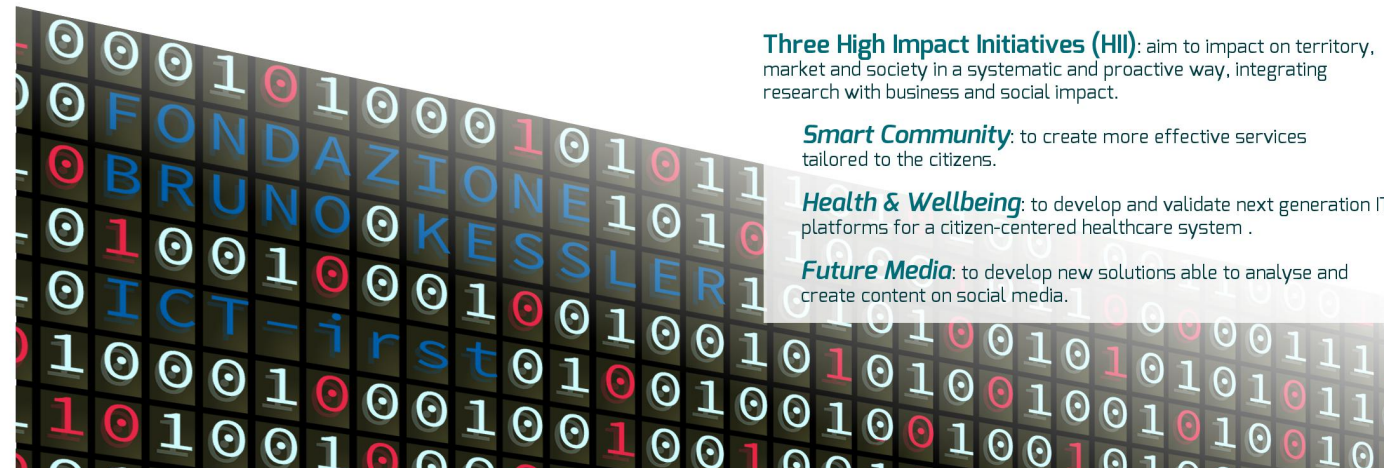
## Scientific Excellence: H-index

≥ 30 : 10 researchers  
 between 20 and 29 : 16 researchers  
 between 15 and 19 : 18 researchers



## Economic Sustainability

Long-term economical sustainability is guaranteed by fund-raising from both the Autonomous Province of Trento and other external financial sources.



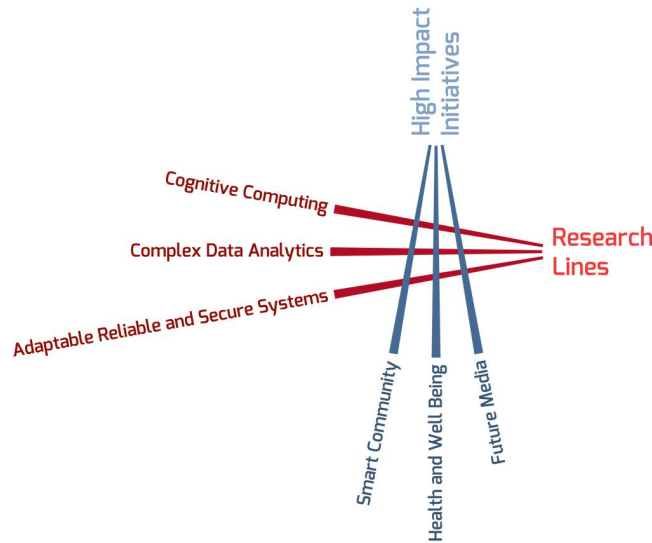
# Main Assets

**Three Research Lines (RL):** to promote synergies to address ambitious scientific and technological challenges.

**Cognitive Computing:** systems that learn and interact naturally in complex environments.

**Complex Data Analytics:** systems able to transform the streams of data in value, knowledge and ability to decide.

**Adaptive Reliable and Secure Systems:** systems that can operate in open, distributed, dynamic and unpredictable environments able to ensure safety, privacy and security.



**Three High Impact Initiatives (HII):** aim to impact on territory, market and society in a systematic and proactive way, integrating research with business and social impact.

**Smart Community:** to create more effective services tailored to the citizens.

**Health & Wellbeing:** to develop and validate next generation IT platforms for a citizen-centered healthcare system.

**Future Media:** to develop new solutions able to analyse and create content on social media.

# Collaboration With International Companies

ICT-irst develops joint research projects and strategic partnerships with more than 100 companies, for example:



Modeling, verification, and safety analysis of critical, highly integrated systems.

Discovering security flaws in Single-Sign-On protocol implementations; modeling and security analyses of high assurance system.



Projecting for Japan's main mobile phone operator to integrate services and smart phone apps.



Planning and scheduling for space missions for satellites and planetary exploratory rovers.



Extending models adopted by SAP for business process specifications, and developing verification tools for business tools SAP suites.

Novel combinatorial and regression testing techniques, for large scale, complex software systems.



Mobile Territorial Lab: exploiting smartphones' capabilities to access sources of social behavior related data.

Technologies for mixed and augmented reality, voice enabled automated home environments, distant speech interactions.



Process modeling systems for management of long-term learning in enterprise.

System for automatic event recognition and storylines from multilingual news.



Collaboration with Trento Cyber Security Innovation Lab in activities on Digital Identity and Mobile Device Security.

Providing multi-language localization services to more than 50.000 clients worldwide (e.g. Google, IBM, Expedia)



Research and technology transfer activities related to Cyber Security

Big data analytics solutions for pharma research, strategic marketing, clinical guidelines, and eHealth applications.

