1° OPEN DAY - 09th of March 2017 – University of Rome, Tor Vergata

FAB SPACE 2.0

- THE ROLE OF BICS -

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BIC Lazio SpA

Local partners

The FabSpace 2.0 project received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement no. 693210

Lazio Aerospace Cluster

- Sector where Lazio has a recognized international competitive advantage
- More than 5 billion euros in turnover, 250 companies, 30k employees
- 5 universities, 4 engineering faculties, 3,000 university professors, researchers and experts involved in aerospace study, experimentation and design
- Headquarter of industrial as well as technical-scientific expertise, hub of expertise and technology
- First Italian aerospace technology district
- Unique Italian region where the entire value chain is present, upstream and downstream segment
- For its transversal nature, aerospace is susceptible to the technology transfer in many sectors of the Lazio economy

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esa

REGIONE LAZIO

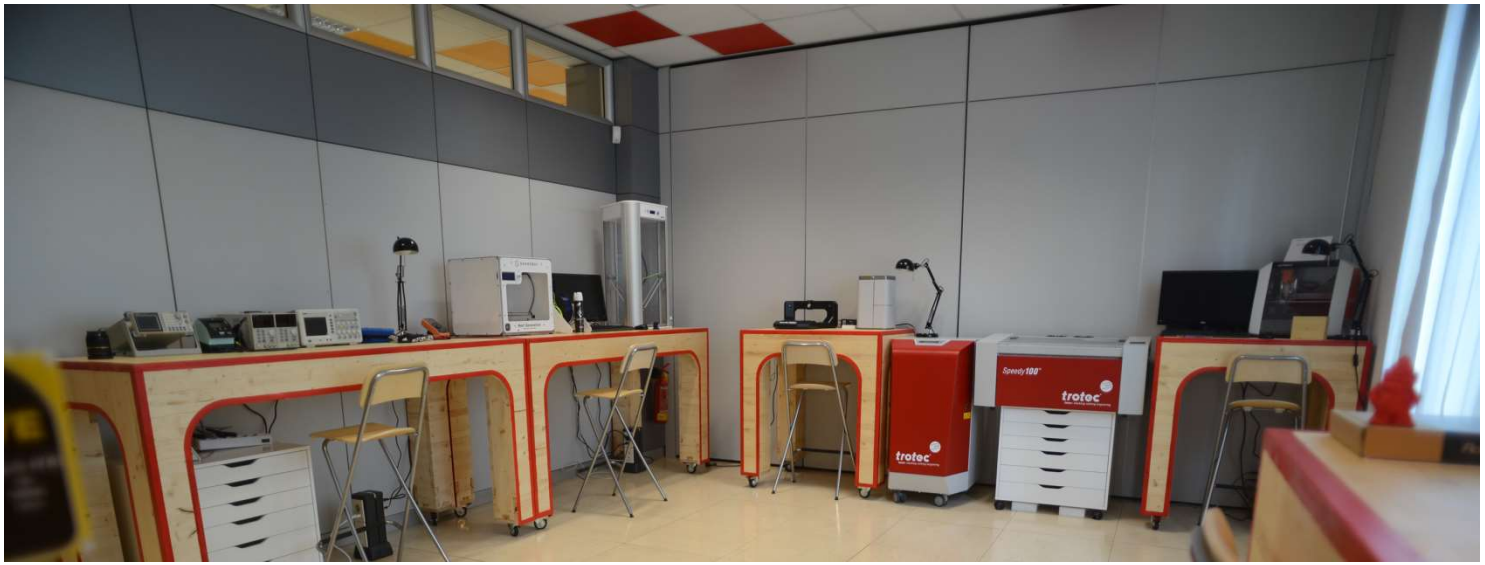
asi agenzia spaziale italiana

esa business incubation centre

Lazio

The FABLAB concept

- Fablabs represent a unique meeting environment dedicated to **creativity** and open **collaborations.**
- Built around the "**Do It Yourself**" concept, these new generation workshops are open to entrepreneurs, designers, artists, handypersons, students,
- They enable invention by providing **access to tools for digital fabrication**, that is to say an evolving inventory of core capabilities **to make (almost) anything, allowing people and projects to be shared**



"*a low-cost lab that lets people build things they need using digital and analog tools. It's a simple idea with powerful results*" - MIT's Center for Bits and Atoms (CBA) professor Neil Gershenfeld

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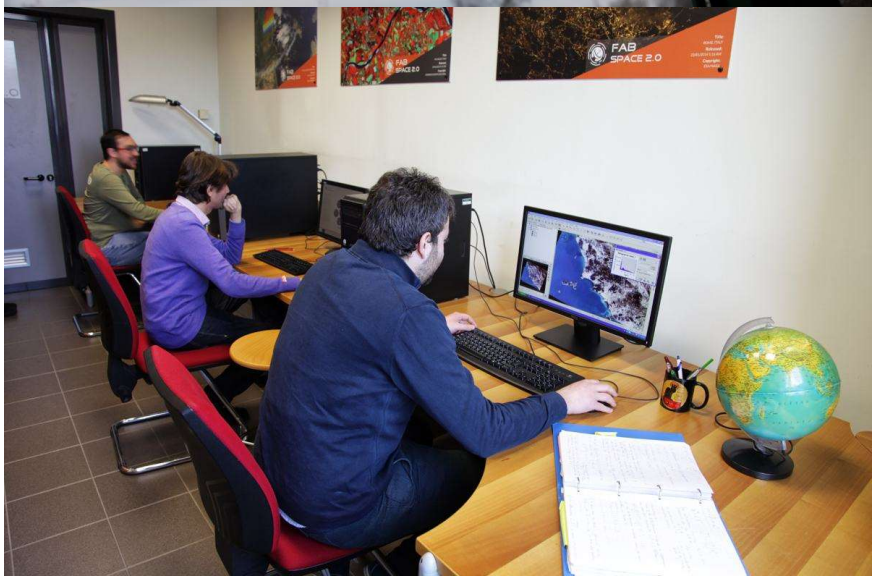
From Fablab to FabSpace

The Fablab concept relies on two major models coming from software development, **open source** and **open collaboration.**

A **FabSpace is a one-stop shop-access to Space data and a wide range of other data** as well as **free software** and data processing tools **to develop new digital applications.**

Apart from the non-manufacturing nature of machines made available and the software nature of innovations resulting from a FabSpace, **every characteristic of Fablab is found in FabSpace**



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Sectors with high market development potential for space data applications

Agriculture (€342 Bn)
savings in nitrogen, better crop quality, increases to overall crop yield, positive environmental impact

Water transport (€95 Bn)
current forecast models, traffic management in major ports and harbours

Non-life insurance (€276 Bn)
accuracy of catastrophe models, improved risk management and compliance practices, damage or disaster assessment information supporting loss quantification and exposure mapping

Electricity generation from renewable sources (€46 Bn)
data on cloud cover, solar irradiance, and on wind/wave speed and direction (combined with other environmental parameters such as land elevation and land cover models) to develop a strategy for the location and operation of solar, wind, and wave power facilities

Oil and gas (€124 Bn)
complement of geological surveys, improved readability of complex geoscience datasets, seismic planning and subsidence mapping to ensure safer management of reservoirs and pipelines

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Data management and Big EO satellite data that create new jobs

When the data can be used to generate information and knowledge that someone is willing to pay, new business opportunities create new job opportunities. This case of the (big) satellite data

We will see an increasing impact of Software As A Service (SaaS) and the use of cloud services based on these data, which will be increasingly delivered not as static and representative maps of past phenomena, but as subscriptions to access dynamic services to knowledge

Entrepreneurial ideas using EO data that can turn the grand challenges of our society, emerging business needs and advances in digital technologies into new growth opportunities for Europe..

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Target Groups

- Universities
- Public authorities
- Civil Society Organisations
- Researchers and students
- Industry
- Business support organisations

First in Europe, then worldwide

Support activities

FACILITATOR FOR THE FULL REALISATION OF UNIVERSITIES AS OPEN INNOVATION AND BUSINESS GENERATORS IN THE AREA OF (SATELLITE) DATA-DRIVEN INNOVATION

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HOW IT WORKS

- A **data management infrastructure** (hardware & software)
- Daily **technical support and online support** to FabSpace users
- FabSpaces **animation activities**
- **Entrepreneurship-oriented pilot actions** & innovation leadership training programmes for researchers
- Space Science shops **to collect the needs and the societal challenges** of external stakeholders
- Events **to tackle the identified challenges**
- **Bootcamps** to mature projects and drive **them to the creation of startups**

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THE CHALLENGES

To tackle market and society challenges and capitalise on opportunities. That is why Universities and Bics become the catalysts of new triple (or quadruple) helix relations with businesses, public administrations and civil society.

Ex.:
Assessment of damages to agriculture cultivations from natural disaster (ice conditions, hurricanes, drought, hale, etc.).This is of great interest for farmers and insurance companies, in order to determine the indemnification following a natural disaster and Sentinel data can be of great help

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Innovation Actions

- To promote the FabSpace as a stimulus for entrepreneurship, a platform for learning and innovation and open collaborations, a place to play, to create, to learn, to mentor and to invent.
- To run open contests to discover best individuals, teams and business idea validation with the highest prospect to create marketable outputs, goods and services.

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THE BOOTCAMP

Tema/settimana	1°	2°	3°	4°	5°	6°
Business model design and validation*						
Introduction to multispectral and optical remote sensing**						
Marketing Business Strategy*						
Introduction to SAR remote sensing**						
Economic & Financial Plan*						
Task planning*						

To validate the business idea and business planning

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FINANCIAL OPPORTUNITIES FOR THE START-UP

REGIONE LAZIO

Pre-seed Call designed to support the creation and consolidation of innovative start-ups and spin-offs from research initiatives (4 mln Euro, up to 100k Euro per research/academic spin-off)

ESA Business Incubation Centres Lazio has an Open Call for proposals for start-ups space technology based (500k Euro, up to 50k euro per start-up)

HORIZON 2020

SME Instrument

Phase 1. Concept & Feasibility Assessment

Idea to concept (50k Euro lamp sum)

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Are you…

- A student / researcher with an innovative idea?
- Representing a University?
- Supporting new businesses?

GET IN TOUCH!

www.fabspace.eu

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@FabSpaceWorld

fabspaceworld

Thanks!

Roberto Giuliani
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BIC Lazio SpA

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