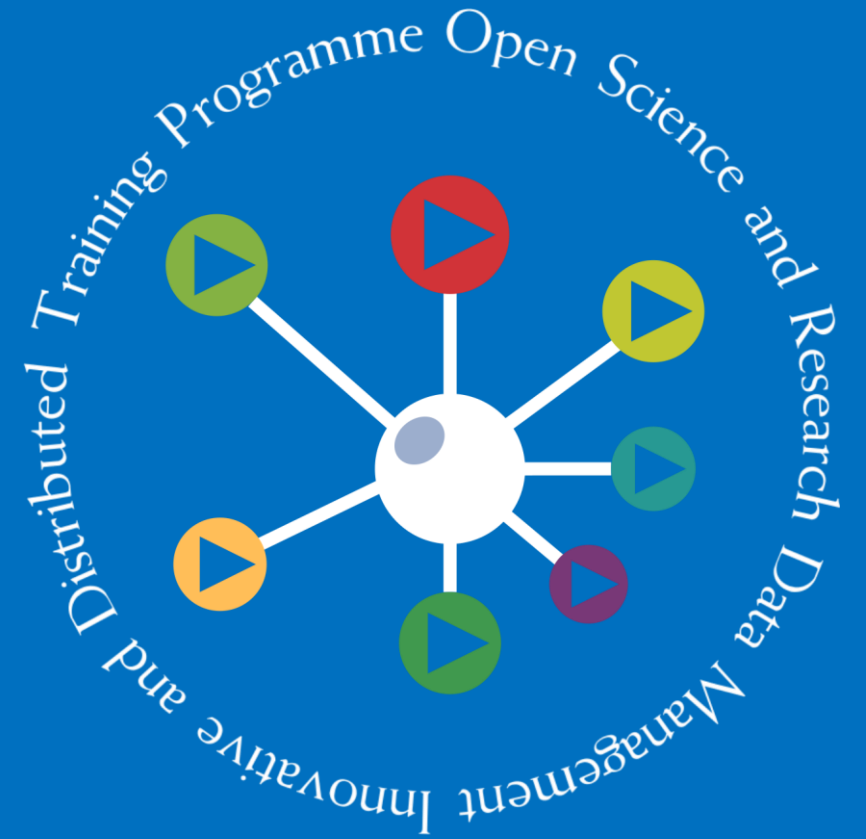


OPEN INNOVATION

Introduction to the topic

TrainRDM Project
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Giulia Antinucci
Sapienza University of Rome



Programme of Sapienza session



Giulia Antinucci

- Introduction to the topic

Andrea Riccio

- Open Innovation for HEIs - How universities can implement and benefit from OI (ONLINE)
- Tools for Open Innovation - Canvas, Theory of Change, PEST model, crowdfunding (ONLINE)

Paola Ciaccia

- The exploitation of research results: from patent filing to licensing

Giorgia Nanula

- Technology Transfer tools: Proof of Concept and entrepreneurial culture

Introduction to the trainers



Andrea Riccio – *Head of the Research and Third Mission Area – Bicocca University of Milan (former Head of the Strategic Research Projects and Evaluation Office – Sapienza University of Rome)*

Giulia Antinucci – *Head of the Research Innovation and Third Mission Unit - Strategic Research Projects and Evaluation Office - Research and Technology Transfer Area*

Paola Ciaccia – *Head of the Patents and Licensing Unit - Enhancement and Technology Transfer Office - Research and Technology Transfer Area*

Giorgia Nanula - *Patents and Licensing Unit - Enhancement and Technology Transfer Office - Research and Technology Transfer Area*

OPENESS - The Three Os

Three strategic priorities for Research, Science and Innovation in Europe



Open Innovation is about involving far more actors in the innovation process, from researchers, to entrepreneurs, to users, to governments and civil society.

Open Science means promoting open access to scientific data and publications alongside the highest standards of research integrity.

Open to the World means enabling Europe to be relevant and competitive by engaging more in scientific diplomacy and global scientific collaboration. “Europe is a global leader in science, and this should translate into a leading voice in global debates.”

From the speech 2015 of Carlos Moedas – EU Commissioner for Research, Science and Innovation 2014-2019

OPEN INNOVATION

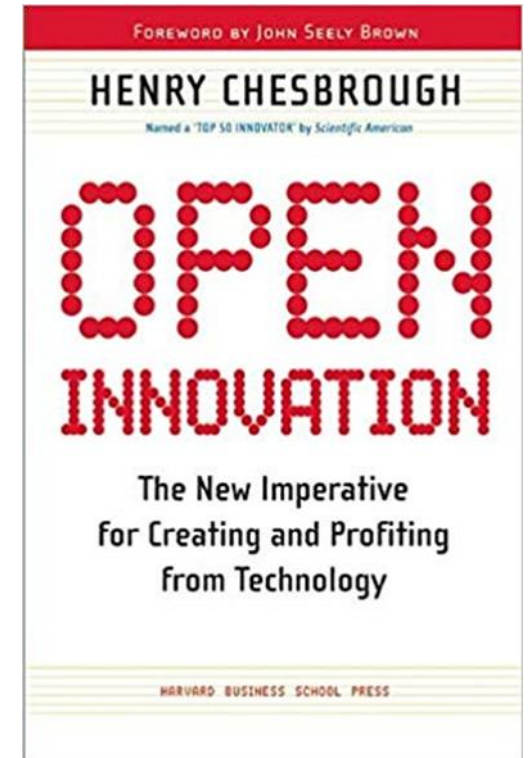
Let's start from the definition



The term **Open Innovation** was coined in 2003 by the US economist **Henry Chesbrough**, assistant professor at Harvard Business School in Boston, in his essay 'The era of Open Innovation', referring to the ways that firms can generate and commercialize innovations **by engaging outside entities**.

Today, companies must rely on an **innovation model** that takes into account not only internal ideas and resources, but also **tools and expertise from outside**, in particular from **start-ups, universities, research institutes**, consultants and non-competing companies.

Similarly, companies no longer only have to think in terms of internal exploitation of ideas, but must also consider **pathways to market outside their own borders or alternative to their own business model**.



OPEN INNOVATION

what does it mean?



The basic premise of Open Innovation is to **open up** the innovation process **to all active players** so that **knowledge can circulate** more freely and be transformed into products and services that **create new markets**, fostering a stronger culture of entrepreneurship.

Open innovation, open science, open to the world, A vision for Europe, Corporate author(s): Directorate-General for Research and Innovation (European Commission), published: 2016-05-17



OPEN INNOVATION

what does it mean?



Innovation can **no longer** be seen as the result of predefined and **isolated** innovation activities

but rather as

the outcome of a **complex co-creation process involving knowledge flows across the entire economic and social environment.**

the EC's concept of Open Innovation



- combining the **power of ideas and knowledge** from **different actors** (whether *private, public or civil society/third sector*) to co-create new products and find solutions to societal needs;
- creating **shared economic and social value**, including a citizen and user-centric approach;
- capitalising on the implications of trends such as **digitalisation, mass participation and collaboration.**

OPEN INNOVATION

Contrasting Principles of Closed and Open Innovation



Closed Innovation Principles

The smart people in our field work for us.

To profit from R&D, we must discover, develop and ship it ourselves.

If we discover it ourselves, we will get it to market first.

If we are the first to commercialize an innovation, we will win.

If we create the most and best ideas in the industry, we will win.

We should control our intellectual property (IP) so that our competitors don't profit from our ideas.

Open Innovation Principles

Not all of the smart people work for us* so we must find and tap into the knowledge and expertise of bright individuals outside our company.

External R&D can create significant value; internal R&D is needed to claim some portion of that value.

We don't have to originate the research in order to profit from it.

Building a better business model is better than getting to market first.

If we make the best use of internal *and* external ideas, we will win.

We should profit from others' use of our IP, and we should buy others' IP whenever it advances our own business model.

* This maxim first came to my attention in a talk by Bill Joy of Sun Microsystems over a decade ago. See, for example, A. Lash, "The Joy of Sun," The Standard, June 21, 1999, <http://thestandard.net>.

The main BENEFITS of Open Innovation



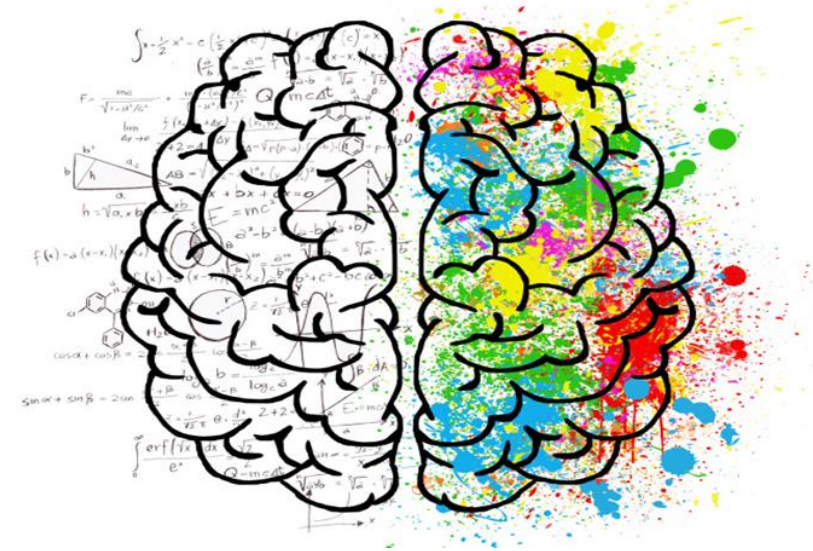
- **reduction of risks** in innovation projects for the adoption of already advanced solutions;
- **reduction of R&D costs** for the use of already developed solutions;
- **adoption of new technological trends** for better interaction with the ecosystem of innovators;
- **identification of new business opportunities** for a more open vision.

Innovation activities - outcome of a **COMPLEX CO-CREATION PROCESS** across the entire economic and social environment



The co-creation takes place **in different parts of the innovation ecosystem** and **requires knowledge exchange and absorptive capacities** from all the actors involved:

businesses, academia, financial institutions, public authorities or citizens



The roles of the different actors in Open Innovation - THE PUBLIC SECTOR



The public sector has a **central role** to play in promoting Open Innovation.

- it creates the **regulatory environment** in which all other actors operate;
- it **puts in place rules and tools** that can incentivise an open circulation of knowledge and cooperation among different actors with the aim to develop and market innovative solutions;
- it offers better **modes of coordination among the economic actors** involved in order to enhance productivity and value;
- it can **create a demand for innovation**, both through the above-mentioned regulatory means and, for instance, through the procurement of innovative solutions.

The roles of the different actors in Open Innovation - THE FINANCIAL SECTOR



Innovation can be a risky business, therefore accessing funding and / or finance is not always easy for those who have innovative ideas.

Building more **innovation-friendly financial instruments and institutions** and promoting the **integration of existing funds and tools** is essential to support Open Innovation.

It is important that investors of all kinds **find their interest** in investing in innovation.

The roles of the different actors in Open Innovation - INNOVATIVE BUSINESSES



Businesses play a key role in innovating.

To bring innovations to the market, they must be able to **maximise their returns on the resources allocated** to innovating.

This is the reason why it is **important to reduce European market fragmentation**, while fostering faster market access and development.

The roles of the different actors in Open Innovation - ACADEMIA



Universities, Higher Education Institutions, and Public Research Organisations / Research and Technology Organisations have a **key role to play** in the innovation eco-system, not only as knowledge producers, but also **as co-creators and generators of skilled human capital**.

Challenges in this component of the ecosystem include the

- **co-creation capabilities of universities;**
- **the design of incentives for academics when working with users and the absorptive capacity of academic knowledge within firms.**

The roles of the different actors in Open Innovation - CITIZENS



Citizens, users and Civil Society Organisations have a **central and transversal role to play in bringing innovation to the market.**

- They **create a demand** for innovative products and services;
- they **can fund and / or finance projects** that are relevant to them;
- they **can be at the source of innovative ideas** worth spreading and scaling up;
- they **can have a say in what research is meaningful** to them and can impact their lives.

THANK YOU!



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