

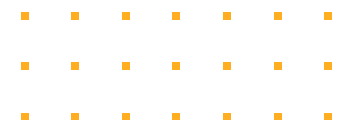
Module 3 Funding sources and opportunities



Funding research goes through several stages and is often part of the researcher's direct job. However, it should be noted that funding opportunities from science to business are very numerous. In this section, we will briefly look at the whole system.

- The institution as investor. Since the time of the PhD, the research that has been carried out and the particular scientific direction chosen require novelty. In many cases, scientists are focusing on very sensitive problems and looking for validity, scientific knowledge and innovative solutions. Therefore, the first investor may be the institution itself, which sees the market applicability of scientific results. Organisations have technology transfer centres that can identify opportunities for commercialising research results, as well as provide advice on market issues or funding needs. Every researcher has the opportunity to contact such a centre, to present an idea and to receive the necessary assistance.
- The customer as an investor. Research and experimental development are often outsourced. Scientists have a huge potential for knowledge and the ability to put that knowledge into practice. Private funds are often raised for personal objectives that could help an organisation to solve a problem, create an advantage and differentiate itself in the market. Such investments are specifically targeted at the implementation of a specific order, but when drafting a contract, attention should be paid to the sharing of intellectual property, the involvement of the researcher when the results are presented later, and the researcher's rights to profits or other income earned. Particularly often, the investor demands a full transfer of intellectual property, while the researcher is happy with the results produced, but does not think about the possibility of earning future profits from the solution developed. However, everything has to be discussed in a contract with the customer. It should also be noted that the researcher cannot publish the scientific solutions discovered in articles unless the client agrees. Frequently the client asks for detailed calculations of costs and estimates, so it is recommended that the researcher calculates everything at market price.
- Competitive investing Hackathons, accelerators and other pitch events. Nowadays, there are plenty of open events that can provide additional funding for research or commercialised products. As an entrepreneur, the researcher should publicise his/her work, present the idea at various events and be able to represent his/her financial need in a targeted way. Accelerators are mainly for the long-term development of an idea with a fixed amount. They offer investors the possibility to provide funds for pilot production, for the development of the initial idea, or for a larger amount with the possibility to participate in the researcher's company as shareholders or board members.

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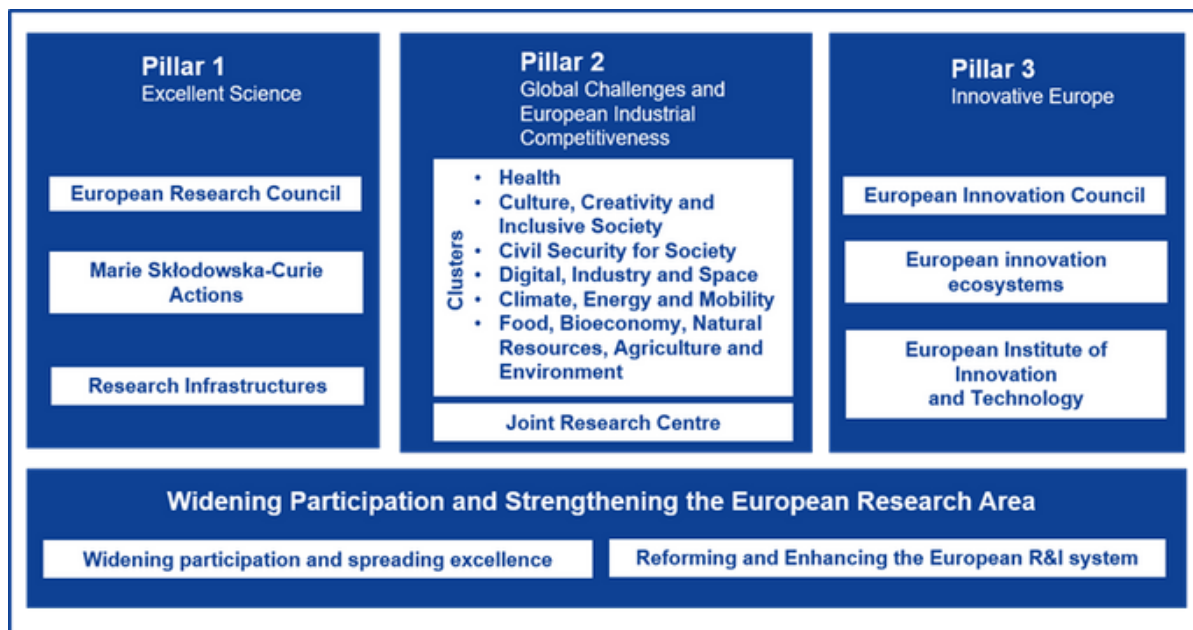


- This type of event also offers the support of mentors and the involvement and advice of business people in the field. Valuable practical information is available when actively involved in mentoring and taking research in a truly innovative direction. Another format that is becoming increasingly popular is hackathons. Hackathons are quite an original event format with a very specific duration and it makes sense to participate with the whole team. The prize fund consists of mentoring, advice, internships as well as prize money, which can be a kick-start for setting up and starting a company. The Hackathon is a relatively short time to develop a new solution or improve an idea already in the team. Other different events can be as much about attracting investment as they are about purifying the idea, gathering experience, presenting the idea in public and testing the proposed solutions. These types of events are often attended by business representatives who are both looking for ideas and can help with the development of ideas.
- Investor funds such as business angels. For business angel funds, it is not enough to present an idea, but a business plan must be prepared and the financial calculations must be the focus. This requires justification of the revenue and profit forecasts, costs and payback of the solution developed. Business angels usually become shareholders and board members of companies in order to be able to constantly monitor the development process and the targeted use of finance. Each fund includes its own rules, requirements and priorities, so it is advisable to prepare in advance when applying for funding.
- National support. Everyone should take note of the project calls offered in each country. Calls are one thing for researchers, but often cross-sectoral cooperation is needed and researchers may submit calls together with the business or other organisations. The aim is developing innovative solutions based on science. Calls vary from country to country, with national agencies administering and publishing them during the year. Collaborative calls between different countries are also available.
- European Union support. Horizon Europe -research and innovation funding programme until 2027. How to get funding, programme structure, missions, European partnerships, news and events. What is Horizon Europe? Horizon Europe is the EU's key funding programme for research and innovation with a budget of €95.5 billion Search for available translations of the preceding link. It tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth. The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports creating and better dispersing of excellent knowledge and technologies.

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It creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area. Legal entities from the EU and associated countries can participate. New elements in Horizon Europe. European Innovation Council: Support for innovations with potential breakthrough and disruptive nature with scale-up potential that may be too risky for private investors. This is 70% of the budget earmarked for SMEs. Missions: Sets of measures to achieve bold, inspirational and measurable goals within a set timeframe. There are 5 main mission areas as part of Horizon Europe. Open science policy: Mandatory open access to publications and open science principles are applied throughout the programme Factsheet: Open science in Horizon Europe Search for available translations of the preceding link. New approach to partnerships: Objective-driven and more ambitious partnerships with industry in support of EU policy objectives. More information.



However, some scientific results require such fundraising to attract additional funds, or they require so much fundraising that it determines whether the product to be commercialised will be launched at all. However, when presenting the results to a scientific entrepreneur, it is advisable to prepare a one-page description consisting of the following sections:

- Scientists, responsible person. Every team has its leader, therefore it is essential to clearly define the roles of the team members and who will play which roles. It is useful to have a person in the team who will be in charge of communication, or the manager can do it when it comes to the description, presentations to competitions or foundations.

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- Technology or Idea. When you are drafting a description, you need to consider at what level you are with the solution, whether it is just an idea, a technology, a product or a service. The amount of funding often depends on this. These days, the main investments are in technology and it is clear that the idea level is getting less and less funding. This is a very brief description of what the solution is.
- Technology/Idea field. This part gives an overview of the context, what is already in place and what is still under development. It is important to note whether there are analogues, at what level, whether the solution is national, European or global and relevant for the whole world. As more and more global solutions are being sought, the context should take into account the extent to which the solution being developed will be global and whether there are any analogues or attempts and failures already.
- IP status. Furthermore, it is worth checking both national and European databases to see if any such solutions are patented, as this will show the way forward, and if they are already patented they may have to be abandoned.
- Description of technology/ idea. All information must be specific, analytical and factual. In this part, the decision should be described in a very specific and clear way, so that everyone reading it understands what it is all about. What will be developed, its functionality and uniqueness. It can be limited to 1 A4 description or even one paragraph.
- Technical maturity TRL. The proposed solution can also be evaluated in terms of the TRL level, which allows you to decide how much investment will be needed to achieve the final result. Where a topic description refers to a TRL, the following definitions apply, unless otherwise specified:

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in lab

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

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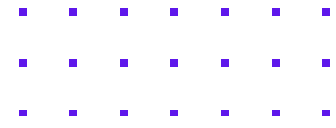


- Our target group. In order to present the solution you are developing in detail, you should again anticipate your target audience and who the main users of the solution might be. This should be defined in as much detail as possible, from whether it is an individual or an organisation, and if an organisation, which one.
- Strong points. Innovative solutions have their own uniqueness, and it is often up to the developer to judge whether that uniqueness is there. If the investment is very high, it may be appropriate to have a confidentiality agreement in place and then disclose it, but otherwise exclusivity may be the main advantage over other analogue solutions. It should therefore only be disclosed to reliable sources.
- Team. In the case of commercialising a solution, every investor will ask about the members of the team and who makes up the team. It is particularly important to pay attention to the competencies of the team members, which can show both the weaknesses and the strengths of the team. The completeness of the team leads to greater confidence that the team will be able to implement and fully develop the solution once the investment is made. If it is just one person, then there is a high risk that the solution will not be fully developed.
- Lack of competencies in team. It is crucial to see what competencies the team lacks, critical thinking will reveal to investors the ability to assess the team's capabilities. Also, if a particular person is missing, it is important to think about how that person can be attracted to the team with the necessary competencies. For example, the investment will be used to pay the salary of an accountant who is not on the team.
- Funds needed. In this part, it is not enough to give an amount, as for example we need €1000 to implement the idea. You should show your ability to manage your finances and give as detailed an estimate as possible, from how much you will need for materials and supplies to entertainment and salaries.

In the case of the private investors from whom you will seek additional funding, it is advisable to prepare your presentation by answering a few questions.

- Get to know your audience. Find out as much as you can about the investor and what can be found in public sources of information.
- Introduce your team. It is important to emphasise the roles and competences that each person has.
- Present your idea. Briefly, in a few sentences, what would be the essence of the ideas?
- Define the target group. Whose and what problem you will solve and why do you need to solve it?
- What will change when your innovation will be implemented? It is particularly important to emphasise the obvious change.

Assignments



1 assignments

We believe that you and your team have developed innovative solutions, so we invite you to briefly describe your innovative solution based on the highlighted guiding principles. You can do it on your own or with the whole team.

Scientists, responsible person	
Technology/Idea	
Technology/Idea field	
IP status	
Description of technology/ idea	
Technical maturity TRL	
Main areas of application	
Our target group	
Strong points	
Team	
Lack of competencies in team	
Funds needed	
Contacts	

#1

Questions for the discussion?

1. Have you already attracted private investors for your research?
2. Have you participated in a hackathon or accelerator?
3. What do you think is the most difficult part of finding investment?
4. If you could now ask how much investment you need, what would it be?
5. What level of project applications have you prepared? Have you managed to get funding, why do you think?

#2

Useful links

- https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes_en
- <https://www.climate-kic.org/>
- <https://www.eeagrants.lt/en/home>
- <https://www.litban.lt/>
- <https://www.good-investing.net/2022/09/15/richard-howe-how-to-invest-in-spin-offs-and-special-situations/>
- <https://invega.lt/data/public/uploads/2021/04/difass-brochure-6-spin-off-start-up-and-early-stage-support.pdf>

#3

Become a co-author

This handbook is unique in that we invite everyone to co-author it. If you are an expert and work in the field of entrepreneurship, if you want to share useful information with the readers, if you are a creator of unique tasks and believe that you can contribute to entrepreneurship in one way or another, we invite you to share your information and we will add a new chapter to the handbook that you have created.

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