



INFORMATION COMPETENCE AS BOOSTER FOR PROSPECTIVE SCIENTISTS



Brain@work - Information Literacy

## **Exploitation beyond academia research outcomes**

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Technology Transfer Unit (Unitat de Valorització) | Eurecat



## Brain@work - Information Literacy

## **Exploitation**

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# **Research results exploitation**







# **Technology Transfer / Exploitation:**

### DEFINITION

"The process of creating VALUE from knowledge, adapting it to be appropriate and/or available for commercial and/or social use, turning that knowledge into competitive products, services, processes and entrepreneurial activity"

Netherlands National Exploitation Commission

Systematic actions and feedback







# **Research results exploitation**

## **GOALS:**

- To recognize the importance of technology transfer process
- To understand the basic principles of the tech transfer process



European IP Helpdesi



Tip: check out the 2016 IPR Helpdesk Guide to IP commercialisation



# Intro to commercialisation

In addition, since IP can be commercialised either directly by (...) its owner, through an assignment or by building up business partnerships, the selection of the most appropriate tool is often challenging, especially for Small and Medium-sized Enterprises (SMEs).



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Source: IPR Helpdesk: Guide to IP commercialisation



- KEEP SECRECY



- USE **IP DATABASES** and conduct FTO (freedom to operate)
- Keep **records**
- Protect IP
- Enforce IP Rights (monitoring, IP watch)





- KEEP SECRECY



The following measures may help businesses to keep their IP secret within the company:

- Making sure that employees, researchers and collaborators have in place confidentiality obligations and reminding them from time to time of the importance of complying with these obligations,
- Reviewing public disclosures (such as technical publications or communications with potential partners) to guarantee that confidential information is not included therein,
- Signing confidentiality agreements with partners and testers, prior to performing concept and technical testing and with third parties, when negotiating partnerships.

BRAIN
 WORK

**NDA** 





USE templates + Ask for established procedures

What to consider in NDAs?

JFIDENTIA

- Clearly define the "confidential information".
- Describe any restrictions on use of confidential information by the receiving party.
- Provide the list of information not covered by the agreement.
- Define the duration of "obligation for confidentiality" (unlimited or a period of time)





- Keep records

Keeping records of inventions is of utmost importance, as these will help you to prove the date and ownership of the invention, when needed. Besides, such records are a valuable source of information when drafting patent applications.

E.g. laboratory Booknotes, tests results, experimental books and track records

+ IDF's (Invention Disclosure Form) or equivalent (e.g. Record of Invention ROI)  $\rightarrow$  inventor's signatures needed

disclosure ≠

making public











#### Fact Sheets

Commercialising Intellectual Property: Assignment Agreements Non-Disclosure Agreement: A Business Tool IP Due Diligence: Assessing Value and Risks of Intangibles Alternative Dispute Resolution (ADR) Mechanisms Defending and Enforcing IP

#### Useful Documents

Mutual Non-Disclosure Agreement (European IP Helpdesk)

#### References

Non-Disclosure Agreements (UK Intellectual Property Office)

All these documents can be found in our library: www.iprhelpdesk.eu/library Find and contact your KTT Office!





### **Other types of contracts:**

- MTA: Materials Transfer Agreement (Lab material(s), prototypes, samples)
- ✓ NDA: Non Disclosure Agreement (or Confidentiality agreement):
  e.g. One way NDAs, Mutual NDAs





# **Exploitation goals:**

Set of processes aimed at:

- **Increasing** the economic value of research
- Turning results into viable products with industrial application
- **Maximizing** the possibilities of acceptance in the market





# **Tools to exploit technology**

### Aspects to consider of our technology

We need to determine if new **business opportunities** exist through the exploitation of our technology. What needs to be considered:

- **Market**: opportunities, competitors, regulation and rules
- State of technology development: degree of innovation, state of the art, value € of similar technologies
- Intellectual Property: e.g., level of protection, ruling technologies









# The Technology transfer process:



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# The Technology transfer process:



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# TRL

# **Technology readiness level**





## **TRL: Technology readiness level**

TRLs originally conceived at NASA in 1974, included seven levels

### **Original NASA TRL Definitions (1989)**

- Level 1 Basic Principles Observed and Reported
- Level 2 Potential Application Validated
- Level 3 Proof-of-Concept Demonstrated, Analytically and/or Experimentally
- Level 4 Component and/or <u>Breadboard</u> Laboratory Validated
- Level 5 Component and/or Breadboard Validated in
- Simulated or Realspace Environment
- Level 6 System Adequacy Validated in Simulated Environment
- Level 7 System Adequacy Validated in Space

Source: Wikipedia https://en.wikipedia.org/wiki/Technology\_readiness\_level







## **TRL: Technology readiness level**



Source: <u>https://www.gamechangers.technology/technology-readiness-levels/</u>





## **TRL:** Technology readiness level



Source: <u>https://www.uk-cpi.com/blog/the-innovation-challenge-and-the-valley-of-death</u>





# Are we good at valorisation?



#### HORIZON 2020 Program: crossing The Valley of Death

http://www.nature.com/news/2008/080611/full/453840a.html





# **The Valley of Death:**



The valley tends to appear at the point where a conceptual idea needs to be turned into a working prototype in order to demonstrate that it works, assess production costs, and to outline the equipment and processes needed for manufacture.





Source: Deborah J. Jackson: What is an Innovation Ecosystem?



# The Technology transfer process at EURECAT





# **Technology vs Market**







# **Eurecat Model**





# **Exploitation model at Eurecat** IP Follow-up Scouting & **Maturation and** Externalization & identification development Revenues





# Who conducts exploitation?











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**THANKS** 

