La Terza Missione - Creare Impatto

Il risultato della ricerca - punto di partenza per realizzare l’impatto

META Group Srl
12.10.2022
META: 25+ years of experience in «Knowledge To Market»

- **bringing knowledge to market**, helping researchers and entrepreneurs in exploiting the results of their project and commercialising their ideas
- **running European research-support services** as Horizon Results Booster, IP Booster, ESIC, SSERR and CSSERR framework contracts (DG RTD)
- **training & coaching** on how to communicate and pitch research results
- **engaging** with a variety of **stakeholders** from Public agencies to early-stage investors across Europe

The DG RTD main contractor to support funded projects with **Exploitation and Dissemination services**

[https://www.horizonresultsbooster.eu/](https://www.horizonresultsbooster.eu/)

Framework contractors of DG RTD since 2012

1’400 research consortia supported in exploiting research results

More than 15’000 R&D projects participants coached and tutored
Terza missione

Per promuovere la crescita economica e sociale del territorio, la Sapienza è impegnata a favorire l’applicazione, la divulgazione e il trasferimento delle conoscenze, dei saperi e delle tecnologie affinché essi diventino strumenti per l’ottenimento di benefici di natura sociale, culturale ed economica.
Introducing impact

- Thousands of R&D projects funded by public donors ended or will approach their end in the years to come.
- Only very few results from these projects were applied and generated an impact/value.
- Maximising the social, economic, technological and scientific value of the public funding and transforming it into benefits for the society is key for impact.
- This transformation is only possible with the successful use of the R&D results fostered by the Dissemination and Exploitation (D&E).
Maximising value
What is maximising value for you?
Understanding impact
After a research activity involving people experiencing homelessness, a university researcher was invited to present the results to a Parliamentary Group (Coventry Univ). What is it?
A research on musculoskeletal modelling has revealed that practice for extracting casualties from crashed vehicles is not the best method. Thus, the National Fire Service changes safety protocols and these are implemented across the UK (Conventry Univ.)
A researcher at the university has developed a novel algorithm with broad potential for real-world applications. As a follow-up, a spin-out company has been established with 5 employees (Coventry Univ.). What is it?
Linking **impact** to **outcomes** - **results** - **use of results**

The **planet** is the “**destination**” (transformation to be fostered, economic, societal, etc.)

The **meteorite** is the “**KER**” key exploitable result

“**impact**” is the long term “**effect**” enabled by the “**outcome**” (thanks to the **USE** by the “**target groups** of **KERS**”)

“**Effect**” is the “**benefit**” derived from “**USE** of a KER thanks to the implementation of a **pathway** to impact”
Meteorite: not just a result but a **key exploitable result (KER)**

- Responding to specific **needs**, to the demand of a well-defined group of “**customers**”
- Selected by the partners for **use** and/or **market** introduction
- A product or process...
- A new service...
- New standard...
- New training courses...
- Input for a new project...
- **It is not just a patent...**
USE

USE can be commercial, societal, political or for improving public knowledge and action.

Partners can:

- exploit KERs themselves
- or
- facilitate their use by third parties
USE - can be direct or indirect (both?)

**Direct – by themselves:**

- Background in further research activities (low TRLs);
- developing and selling a product or process (high TRLs);
- providing services (consultancy – contract research);
- using results in standardisation activities;
- new policy measure (if the partner is a policy maker)

**Indirect - by third parties:**

- transfer of results;
- licensing;

A spin-off is always linked to an indirect use
KERs and USE in SSH

Health service agencies, professional associations and unions used the information in assessing work environments, and either making or advocating for change.

The research is used to assist aboriginal rights movements.

The results inform therapeutic interventions in a variety of health and educational organizations.

Used as a basis for advocacy by early learning and child care NGOs.

Utilisation de mes travaux sur l'Amérique latine par les agents du Ministère des affaires étrangères dans la préparation de la nouvelle stratégie du Canada face à la région.

A chapter of a book I published became the basis of major criminal law legislation in the UK.

My research in development economics is sometimes used by researchers at the World Bank.

I have brought music uncovered through that research to a wide public by editing and publishing it.

* The output and impacts of social sciences and humanities research, Eric Archambault.
From KER to impact!
Impact: long term wide effects on the society (including the environment), the economy and on science. It is enabled by the outcomes.

Outcomes: the expected short-mid term effects of the project results fostered by the dissemination and exploitation (uptake, deployment of the project’s results by direct target groups).

Outcomes generally occur during or shortly after the end of the project.

Key exploitable results: the outputs generated during the project which can be used, either by the project partners or by other.
Pathway to impact: Logical steps planned for the achievement of the expected impacts.

Exploitation
- to make the result used for achieving outcomes and enabling impact

Dissemination
- how to make the result known by the “problem owners - early adopters to maximise impact

Impact
- How an investment in R&D it is turned into benefits!
Maximising impact

Exploitation is not Dissemination

Dissemination is not Communication
## Dissemination vs Exploitation

<table>
<thead>
<tr>
<th>Dissemination</th>
<th>Exploitation</th>
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</thead>
<tbody>
<tr>
<td>Describing and making available results so that they can be used</td>
<td>Making use of results, for scientific, societal or economic purposes</td>
</tr>
<tr>
<td>Audiences that may make use of results</td>
<td>Groups and entities that are making concrete use of results</td>
</tr>
</tbody>
</table>

**Making results available**: Scientific publication, Policy brief/marketing materials, Workshops, demonstrations, Online repository/portals, Exhibition, Pilot plants

**Facilitating further use of results**: Innovation management, IP Management, Data Management plan, Business plan

**Making use of results**: PhD thesis/post, Patent, Spin-off/Start-up, Further R&D, Manufacturing, Service provision, Direct sales, Educational activities, Policy making, Licensing
## Communication vs Dissemination

<table>
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<th>Dissemination</th>
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<td>About the <strong>project</strong> and <strong>results</strong></td>
<td>About <strong>results</strong> only</td>
</tr>
<tr>
<td><strong>Multiple audiences</strong> beyond the project’s community (include media and the public)</td>
<td><strong>Audiences that may use the results</strong> in their own work, e.g. peers, industry and other commercial actors, professional organisations, policy makers</td>
</tr>
</tbody>
</table>

**Informing about project**
- Newsletter
- Press release
- Project factsheet, brochures
- Project website
- Social media

**Informing about results**
- Videos, interviews
- Articles in magazines
- Event presentation
- Project website
- Sharing results on online repository

**Making results available for use**
- Scientific publication
- Policy brief/roadmap
- Workshops demonstration
- Exhibitions/open days/guided visits
- Participation to trade fairs
No use  no impact!
A paper

Dissemination or Exploitation?
What is my result (my KER)?
Why am I publishing a paper?
What is the type of impact I am willing to achieve?
No use  no impact!
Examples 1/3

Result (generated during the project life)
- Algorithmic model: Novel algorithm for proactive airport passenger flow management.
- Large-scale demonstrator: Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.

Exploitation
- Licensing the algorithmic model (after patenting).

Dissemination (to scientific community and airports):
- Article in a specialised magazine of the results of the large-scale demonstration.

Communication (towards citizens)
- An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.

Example for outcomes: 9 European airports adopt the advanced forecasting system demonstrated during the project.

Example for impact: airports increase max passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs.
Examples 2/3

Result (generated during the project life):
- **KER 1: Add-on** for cystoscopes for clinical use in bladder cancer detection

Exploitation
- Licensing IP to market **leaders of Photo Acoustic Imagery (PAI)**.

Dissemination (Industry, Hospitals, scientific community)
- Participating in **trade fairs** with workshops for PAI Industrial leaders
- Organizing **demo sessions** for urologists.
- Open science publication on the clinical trials

Communication (towards citizens):
- Publishing in **newspapers** about the project’s objectives and results
- Posting on **social media** to rise awareness on prevention and **early detection**

Example for outcomes: 1 Leading company adopts the KER

Example for impact: Early detection of bladder cancer increased by 15% in the 5 years after market entry.
Examples 3/3

Result (what is generated during the project life)

Exploitation of the new product
- Licencing to major electronic companies.

Dissemination (industry and scientific community)
- Participating at industry specific events;
- Animating a platform of material compositions for industry;
- Contributing at EC project portfolios to inform on the results and maximise visibility vis-à-vis companies.

Outcome:
- A major electronic company exploits/uses the new product in their manufacturing.

Impact:
- Economic/Technological: A new market for touch enabled electronic devices.
- Societal: Lower climate impact of electronics manufacturing (including through material sourcing and waste management).
No use  no impact!