Western Norway University of Applied Sciences

AFII seminar series on the development of Research Applications

IMPACT

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What is Impact – Brief background

"Impact is the positive and negative, primary and secondary long term effects produced by a development intervention , directly or indirectly, intended or unintended

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Used by Organisation for Economic Cooperation and Development (OECD)

"Impact is the effect research has beyond academia and consists of benefits to one or more areas of the economy, society, culture, public policy and services, health, production, environment, international development, public understanding, or, quality of life, , whether locally, regionally, nationally or internationally "

What is Impact – Brief background

- Important focus.
- Lots of related concepts:
  output, outcome, applied, influence, effect, benefit, transfer, payback,
  translation, return on investment, uptake, utilisation, sustainability of results

The sum of influences and effects your project has after its end.

- Impact considered as a **positive loaded** concept.
- Impact may also cause **unwanted effects** - ethical considerations.
- All potential impacts should be considered both positive and negative.
- Happens **AFTER the project**
- But is facilitated **DURING the project - through different measures such as dissemination, exploitation, communication, open science, etc.**
- Is **SPECIFIC** to the project – no general blablabla

"You may consider impact as part of the funders return on its investment in the project. The higher value of return, the more interesting it will be to invest in the project (funding)"

How to think about Impact

- Impact is what creates a difference
- It is what makes your project standout from the others
- TIPS: Make a list of what makes your proposal outstanding
- Make the impact concrete - that create higher score and more credible project

Example:

Not so good (not concrete)

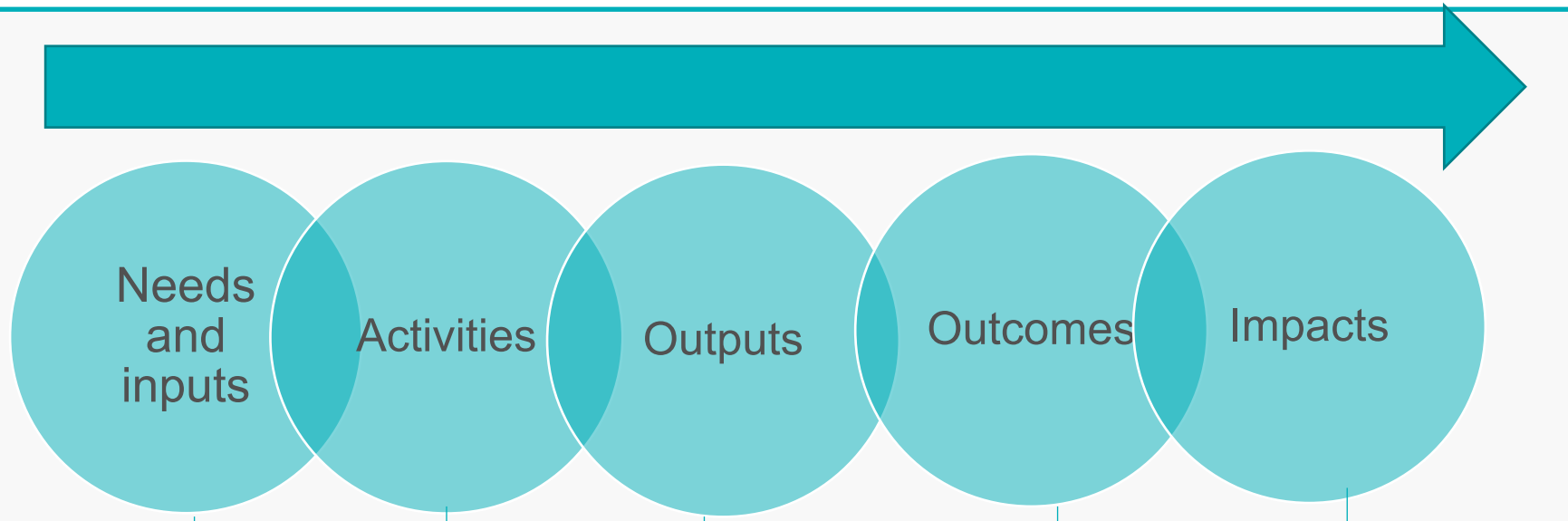
The technology developed in this project will find many applications in the health area.

Better (more concrete)

This project will develop a novel sensor for monitoring X that company Y will incorporate in a proof of concept model and Haukeland hospital will test it out in a clinical setting (see WP Z).

“The Impact Journey”

The impact journey traces research impact over time, from the **project conception,** its development, and the diffusion between disciplines and the **wider society.**



Research gap, call, existing knowledge, policies, standards, etc.

R&D
New methods
Collaboration
Learning
Experimentation
Theorising
Innovation management

Publications
Prototypes, Datasets
Patents, Innovations, Products, Methods, Processes
New companies
Exhibition, Performance, Policy recommendations

Postgraduates
Cited outputs
Licence income
Follow-on income
Uptake and upgrade of research results
Adoption of research results by users
Media coverage

Cultural
Economical
Environmental
Political
Scientifical
Social
Technological
Health
Training, etc.

“The Impact Journey” in practise

Think about the complete project design (retroengineering!)

- What is the long-term impact that the project should deliver?
- Plan the methodology and workplan with the expected impact in mind – how will you ensure this new knowledge will be effectively captured, organised and delivered?
- Excellence beyond state of the art – and objectives in line with the proposed impact: what new knowledge will be generated in different fields of research - how this knowledge could benefit relevant academic environments and disciplines?
- Make sure to choose partners that can help you to achieve impact
- Include enough resources and expertise for impact (meetings, IPR..)
- Plan a tailored range of impact facilitating activities and to ensure transfer of knowledge and uptake and sustainability of results beyond the project team and scope
- Include activities to evidence and assess impact
- Be ambitious but remain realistic!

The RCN proposal template

Researcher Project for Scientific Renewal/Young Research Talents (6. March)

1. Excellence

1.1 State of the art, knowledge needs and project objectives

1.2 Research questions and hypotheses, theoretical approach and methodology

1.3 Novelty and ambition

2. Impact

2.1 Potential for academic impact of the research project

2.2 Potential for societal impact of the research project (optional)

2.3 Measures for communication and exploitation

3. Implementation

3.1 Project manager and project group

3.2 Project organisation and management

Collaborative and Knowledge-building Project /Knowledge Building Project for Industry (13. March)

1. Excellence

1.1 State of the art, knowledge needs and project objectives

1.2 Research questions and hypotheses, theoretical approach and methodology

1.3 Novelty and ambition

2. Impact

2.1 Potential impact of the proposed research

2.2 Measures for communication and exploitation

3. Implementation

3.1 Project manager and project group

3.2 Project organisation and management

Impact in Researcher projects

Application Types, with deadline 6. March 2024	Impact	What should be the text focus
1. Researcher project for scientific renewal. **2. Researcher project for young talents.**	Academic Impact (Mandatory)	Describe the importance of anticipated project results - Short/Long term. How project outputs address important present and/or future scientific challenges and have an impact on the research area/field, are crucial. Describe how to ensure reproducibility and the potential to reuse the project outputs through open science practice such as FAIR data, software, models, algorithms etc.
	Societal Impact	Based on knowledge needs and challenges described in the Excellence part., elaborate further on why/how project outputs have the potential to meet the mentioned needs/challenges. Address the potential to contribute to the UN Sustainable Goals

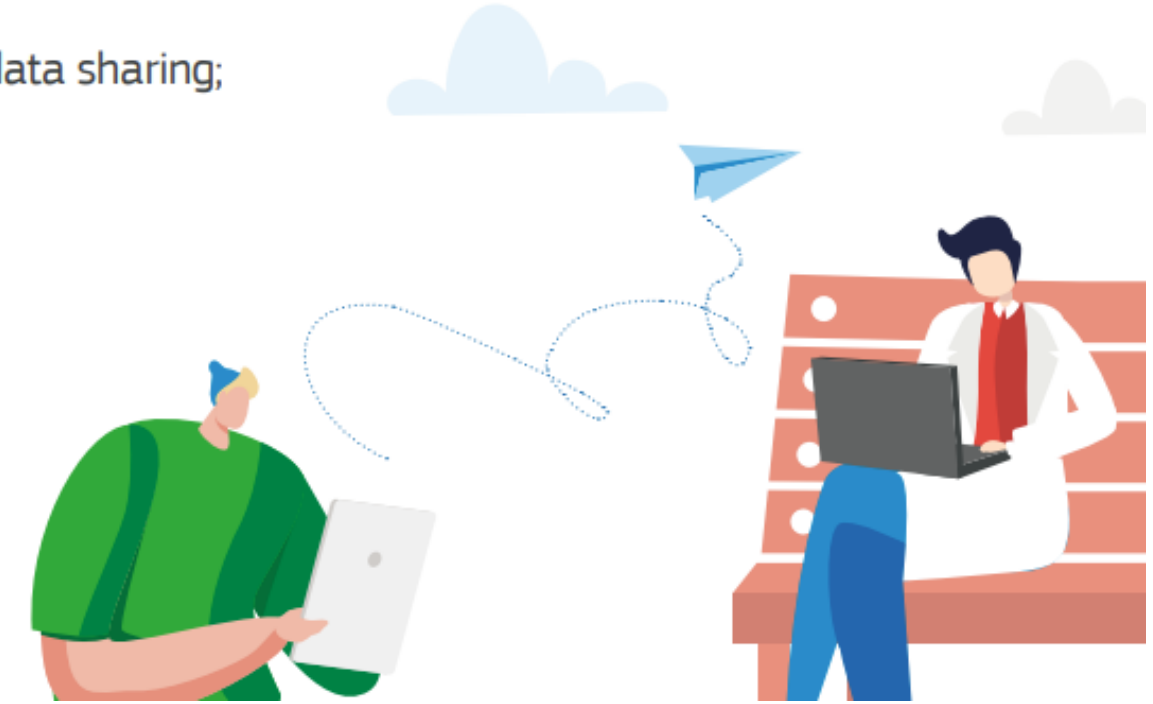
Impact in Collaboration projects

Application Types, with deadline March 2023	Impact	What should be the text focus
4. Collaborative project to meet Societal and Industry-related Challenges. **5. Knowledge Building Project for Industry**	Potential Impact (Mandatory)	Based on project objectives (ch 1), describe clearly why and how the project outputs may address important present and/or future scientific challenges and impact in the research field. Based on society/industry knowledge needs and challenges (ch 1), describe why/how project outputs meet mentioned societal/industry needs/challenges. Describe how to ensure reproducibility and the potential to reuse the project outputs through open science practice such as FAIR data, software, models, algorithms etc. Describe why/how project output will promote value creation in society/industry. Address **how** the research outputs contribute to the UN Sustainable Goals.
For all applications, the Impact chapter must be based on, or interrelated, to the objectives described in ch. 1 of project application, which again must be based on the objectives of the specific call/ announcement (described in the call texts). (a continuous red thematic thread throughout the application		

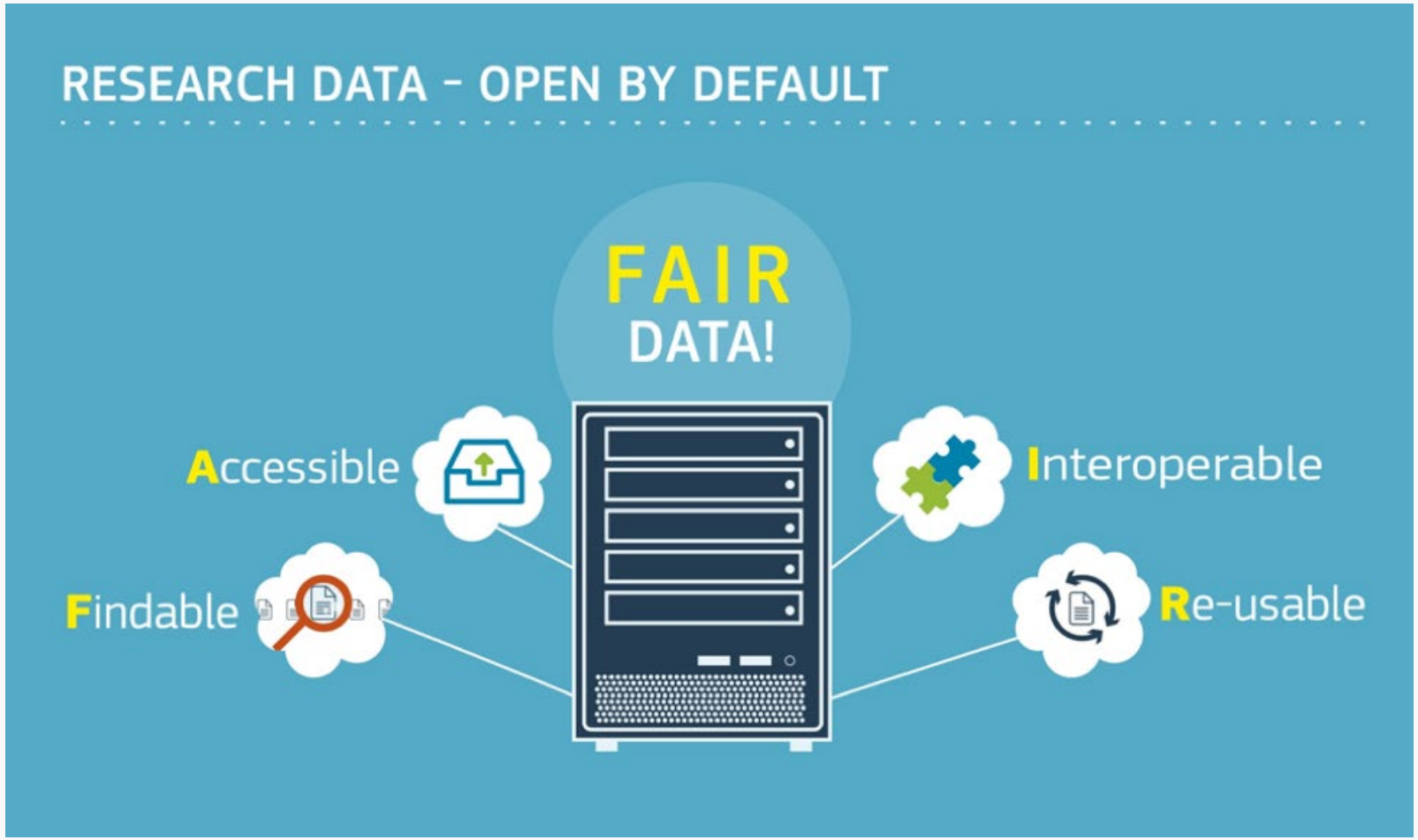
Open science as a tool for impact

What are open science practices?

- Open access to research outputs such as publications, data, software, models, algorithms, and workflows;
- Early and open sharing of research, for example through preregistration, registered reports, pre-prints, and crowd-sourcing of solutions to a specific problem;
- Use of open research infrastructures for knowledge and data sharing;
- Participation in open peer-review;
- Measures to ensure reproducibility of results; and
- Open collaboration within science and with other knowledge actors, including involving citizens, civil society and end-users, such as in citizen science.



Open data and FAIR principles (separate seminar 24. January)



https://www.hvl.no/en/library/research-and-publish/publishing/research-data/

UN SDGs

Target
11.1
By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Indicators

Target
11.2
By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

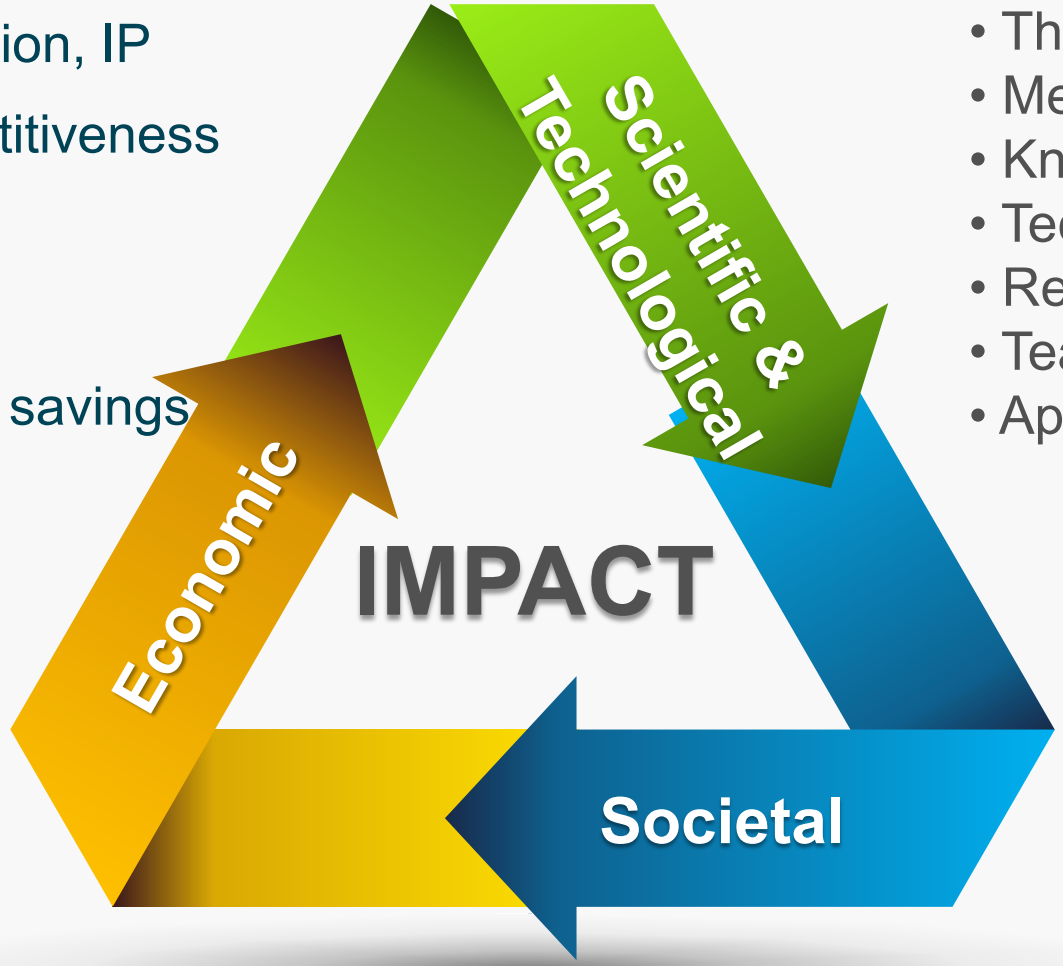
Indicators

Target
11.3
By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

Indicators

Dimensions of Impact

- Innovation, IP
- Competitiveness
- Growth
- Jobs
- Budget savings



- Theory
- Method
- Knowledge
- Technology development
- Researcher training
- Teaching and training
- Application

- Quality of life
- Health
- Environment
- Public services
- Policy
- Public engagement
- Education
- Energy

Challenges to achieve impact?

- The gap between research and society's **needs/problems**
- The **understanding** (from both researcher and user perspective) of what the research can contribute to – short and long term
- The short timeframe of research projects and the demand of the society for rapid solutions.
- The poor **involvement of users** in research (co-creation)
- The **transfer/exchange of knowledge - how?**
- **Barriers to achieve impact: resistance** in organizations, **cultural challenges, regulatory or legal issues, etc.**

Feedback from evaluations

- The section tends to describe what it will do and produce, rather than the impact these will produce
- The description of the scientific impacts of the project were quite general and could benefit from more detail. (very broad, superficial, generic)
- In summary, the claimed impacts are partially unclear and not plausible

- **It presents a well-crafted and generic plan for impact, where there is also an argument for scientific impact**

- The number of publications proposed to result from this work appears unrealistic (or, a lot of very low impact papers can be envisioned)
- A broad range of target audiences are identified but clear methods for engagement with each audience are not provided.
- The outcomes and impacts are very broadly defined. There needs to be a clearer link between the outputs, outcomes and impacts

- **There is a clear strategy to disseminate the results namely through scientific and popular publications (international journals) as well as seminars and conferences**
- **There are some nice ideas for dissemination through podcasts, guidelines etc. Attention is paid to making the results accessible to a broader range of stakeholders and users.**

Feedback from evaluations

- Greater societal impact could have been achieved by engaging with relevant policymakers and state agencies responsible for the xx
- More could have been said about how the policy impact will be achieved
- **The composition of the steering and advisory groups could be likely to ensure high impact**
- **The expected effects are well elaborated on, specifying the effects from each work package in a table overview**
- **There is a direct correlation between planned outcome and SDNs**

Check list

- ✓ The whole proposal links call priorities, objectives, results, impact and activities into “one story”
- ✓ Clear need/problem/challenge/knowledge gap is identified
- ✓ Baseline data included; appropriate evidence referenced clearly
- ✓ The effect your research will have to address/solve this challenge/gap is clear, specific, feasible and ambitious to convince the funder to invest in your project
- ✓ Users have been involved in elaborating the expected impacts and will be strongly involved in delivering them
- ✓ All the elements of the pathway to impact are clearly presented
- ✓ Key results, target groups and the expected benefits are identified and differentiated
- ✓ Specific information is used (e.g. locations, stakeholder names)
- ✓ Impacts are addressed at local, regional, national and international levels when relevant and short, medium and long term
- ✓ Some quantification of the expected impacts is provided
- ✓ Impact enabling activities are logically defined based on the expected impacts (not interchangeable)
- ✓ It is easy to understand how another research might find, access, reuse, reproduce, etc. results
- ✓ Open science practices are indicated and compliance with FAIR principles demonstrated
- ✓ Resources have been planned and expertise is available within the consortium
- ✓ There is a clear commitment to continue beyond the project

Thank you for your attention!