

 @HumanomicsMap

Mapping and Aligning Strategy for Impact

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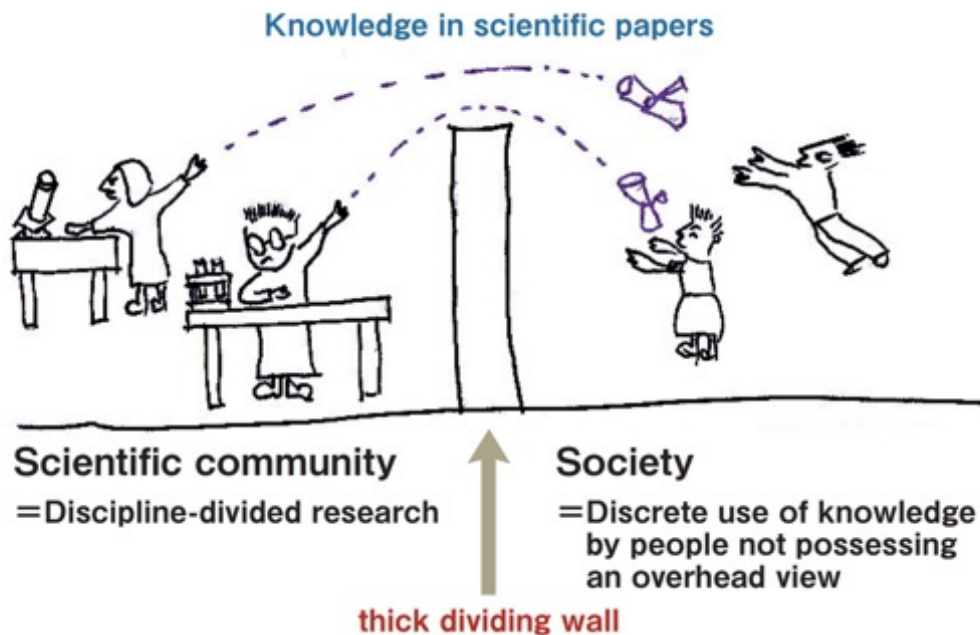


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Science Adviser on Algorithms, Data and Democracy (2021-2030)





“ The value of research is only realized with communication and translation of results into real-world settings.

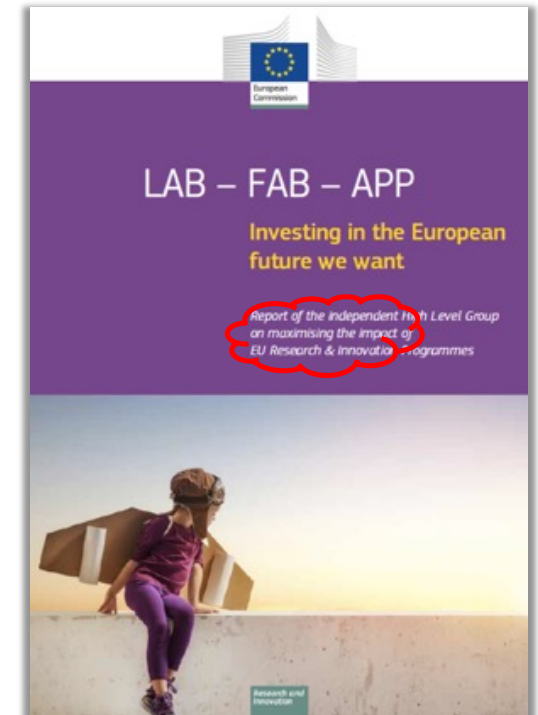
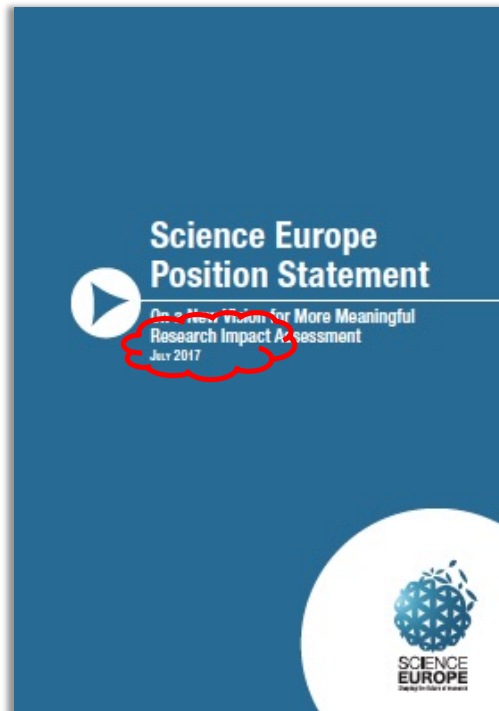
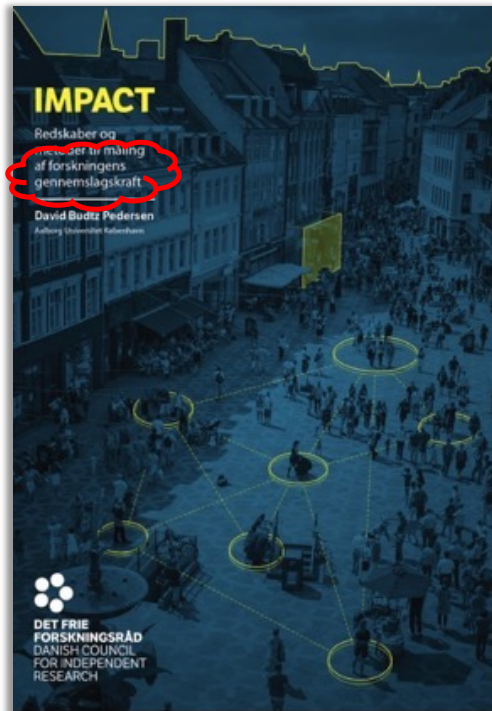
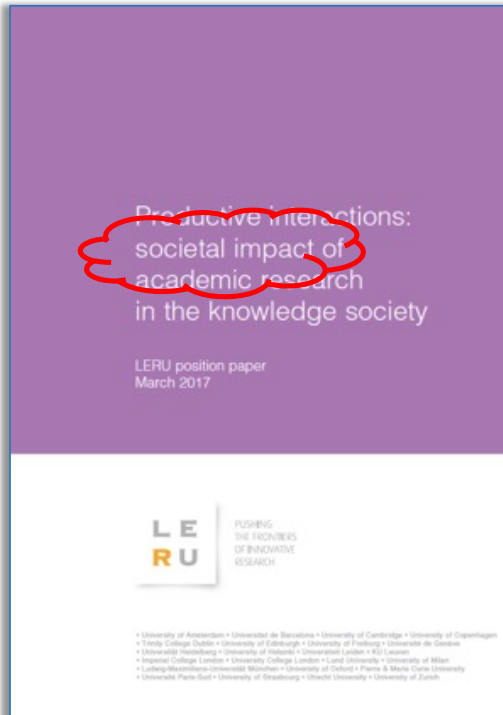
Without closing the loop, there is no beneficiary to all the tireless efforts put in by those dedicating their lives to the advancement of science.

Breanne Everett

agenda

THE IMPACT LIFECYCLE

1. Impact planning and assessment
2. Partnerships for impact
3. Mission-driven research



... part of a broader change in the lifecycle of science

- Increasing dissatisfaction with current (closed) publication models
- Increasing public demands for Responsible **Open Science** & Innovation
- Increasing policy interest in mission- and challenge-driven research (SDGs)
- Increasing importance of research for future employment, competitiveness, growth, well-being and policy-making (“broader impact”)
- Increasing emphasis on reviewing merit & promotion criteria
- Increasing access to new digital tools and metrics that represent and track the dissemination and uptake of research (beyond bibliometrics)



Fewer numbers, better science

Rinze Benedictus, Frank Miedema & Mark W. J. Ferguson

26 October 2016

Scientific quality is hard to define, and numbers are easy to look at. But bibliometrics are warping science — encouraging quantity over quality. Leaders at two research institutions describe how they do things differently.



Subject terms: [Research management](#)

“Publications that directly influence patient care are weighted no higher in evaluations than any other paper, and less if the work appears in the grey literature (official reports rather than in scientific journals). Researchers are actively discouraged from pursuing publications that might improve medicine but would garner few citations. ... Publication pressure is keeping scientists from doing what really matters”

“The evaluation gap is the phenomenon... that the criteria in assessments do not match the character or goals of the research under evaluation or the role that the researcher aims to play in society.”

Wouters 2014

The Impact Lifecycle

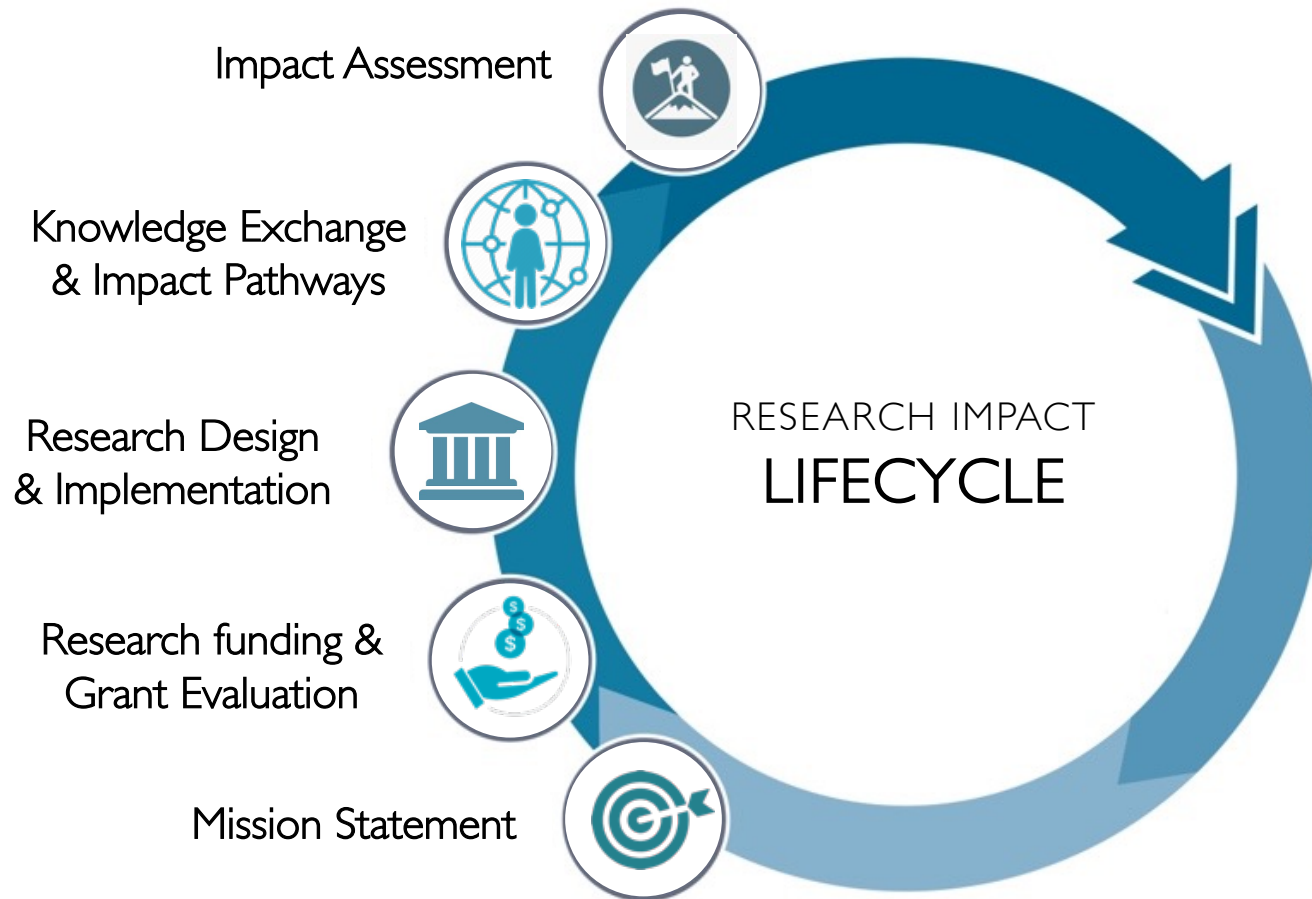


RE sponsible
imp **ACT**

Four “I”s of Research Impact

1. **INVESTING IN IMPACT.** Alignment of mission statement and impact strategy ('theory of change') at university & funding agency level.
2. **INCENTIVES.** Without emphasis on incentives, recognition and rewards, most societal impact activities will not occur.
3. **INTERMEDIARIES.** Professional support and specialist skill-sets, training and needs to be cultivated and provided by knowledge brokers.
4. **INFRASTRUCTURE.** Reliable and responsible impact assessment depends on data about impact to learn from best practices and shape new strategies





Algorithms, Data & Democracy (ADD)



Open Call for 10 year funding programme

Mission-driven research: to foster closer links between democratic governance and research capacity in CS and SSH

SSH & STEM co-lead: obligatory

Build-in 'impact lifecycle' approach: Special research unit tasked with impact management

15 mill Euro / 100 mill DKK

Kick off: January 2021



When we think of digital technologies, we cannot disregard their social impact, with respect to the ethical values and principles that underpin our societies. If there is friction between these values and principles and technological innovation, the latter will not be adopted and it's also likely that this friction will lead to strict policies and regulation.

In turn, this can hinder innovation. Ethics, when embraced at the beginning of any design process, can help us to avoid this path, limit risk, and to make sure that we foster the 'right' innovation.

Mariarosaria Taddeo, Deputy Director of the
Oxford Internet Institute's Digital Ethics Lab

ADD Impact Lifecycle Approach

1. ADD mission-oriented research and innovation: create closer links between democratic governance and research capacity (STEM & SSH)
2. Mandatory to provide impact plan: should be straightforward and actionable, including stakeholder engagement and partnerships.
3. Steering Group will develop, implement and monitor “theory of change” and adjust research strategy to targeted impact
4. Special grant for **knowledge broker** and real-time impact assessment to continuously track and reshape research agenda

Governing the Impact Lifecycle

Graham, K. & Budtz Pedersen, D. (2020)



Develop competences and strategies for knowledge exchange and research implementation.



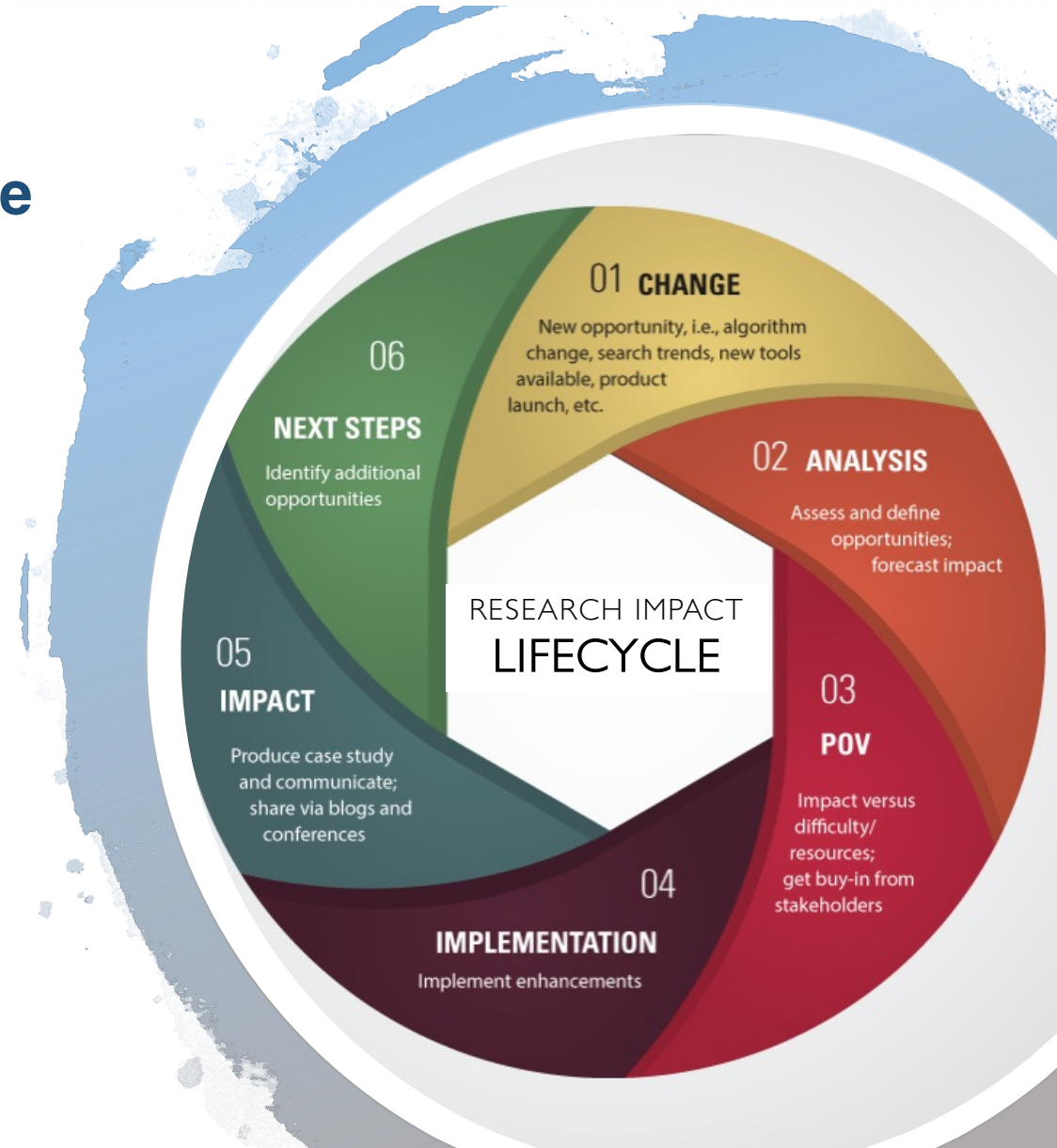
Facilitate exchange between researchers and key policy institutions (toolkits, policy guidelines etc.).



Build partnerships and alliances with practitioners, companies, policy-makers, professional bodies.



Define and implement indicators for impact assessment to continuously adjust research agenda.



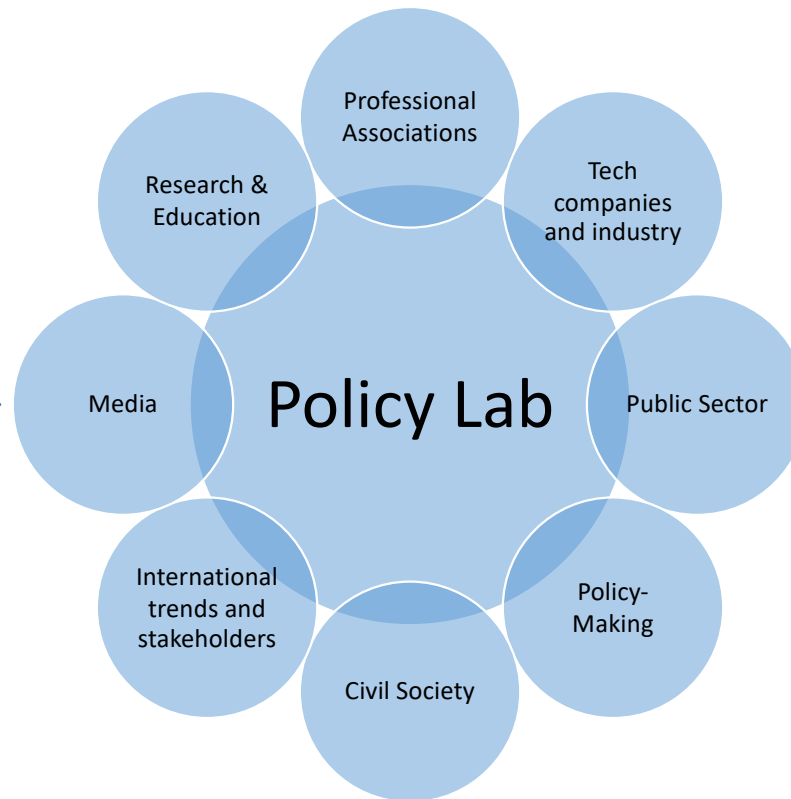
agenda

THE IMPACT LIFECYCLE

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'Policy Lab'

Establishing an alliance/network for ALGORITHMS, DATA & DEMOCRACY" – across stakeholders



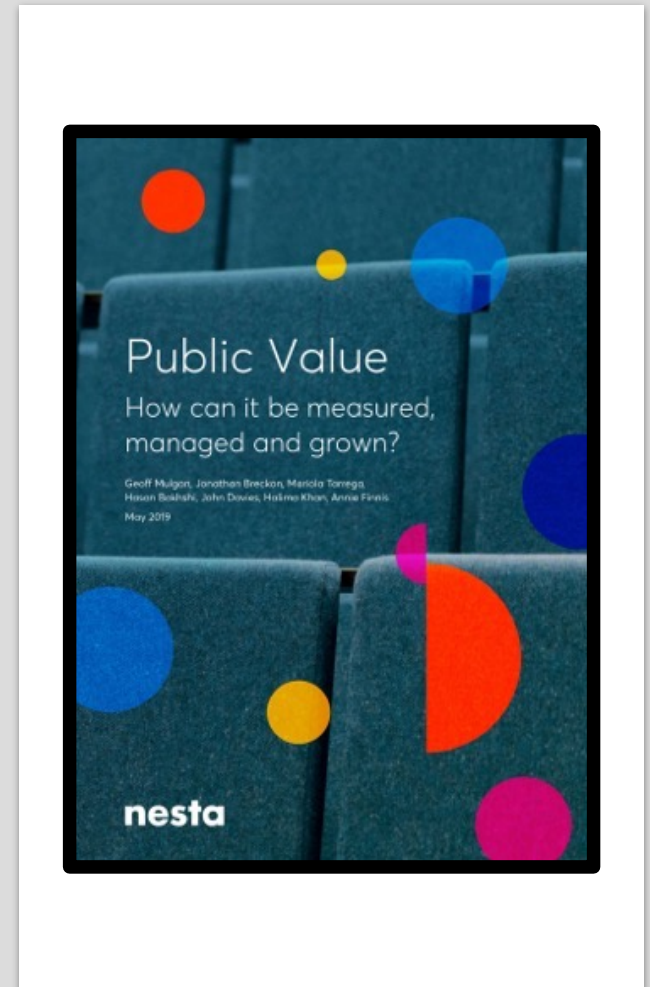
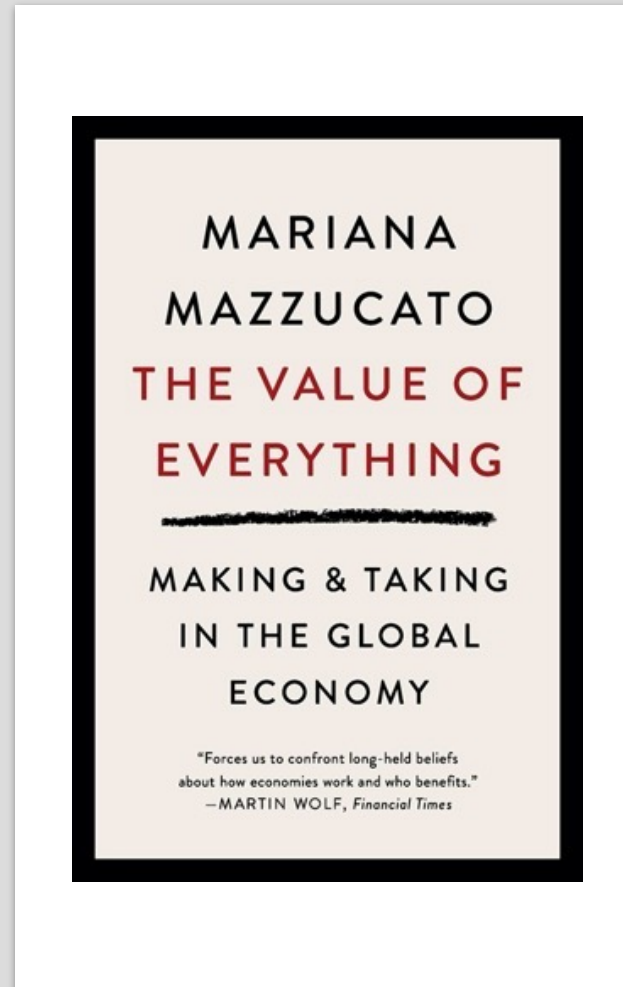
Outreach plan ADD.

Policy Lab should:

- Engage
- Activate
- Concept development
- Co-creation
- Enhance knowledge
- Deliver inspiration to researchers

Methodology: Participatory workshops, expert testimonials etc. in dialouge with stakeholder alliance

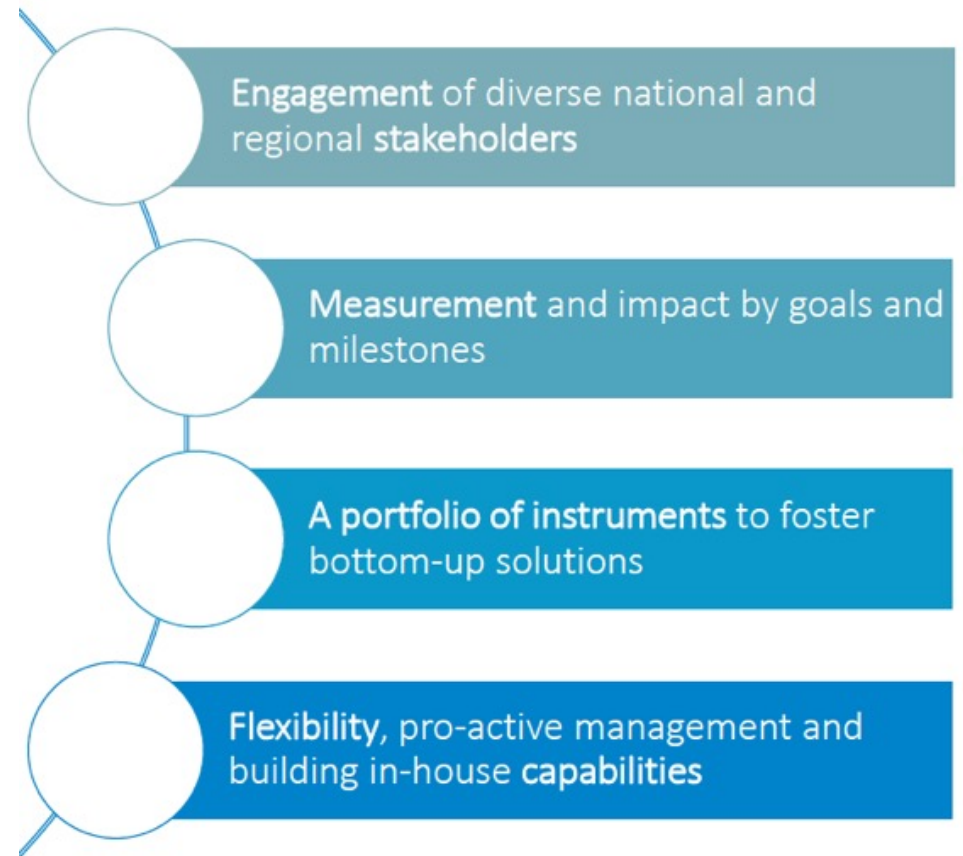






“Missions around societal challenges are more complex than going to the moon and must be **open, bottom up, flexible, adaptable and engage with citizens** from the beginning”

Mariana Mazzucato 04.03.2018



—

The Apollo Program
goal for the 1960s of
"landing a man on the
Moon and returning
him safely to the Earth"
within 10 years





“European research and innovation missions sits between broad challenges and concrete projects. Missions set clear and ambitious objectives that can only be achieved by a portfolio of research and innovation projects and supportive measures.” (Mazzucato 2018)



Political Agenda Setting and Civic Engagement



Clear Targeted Missions

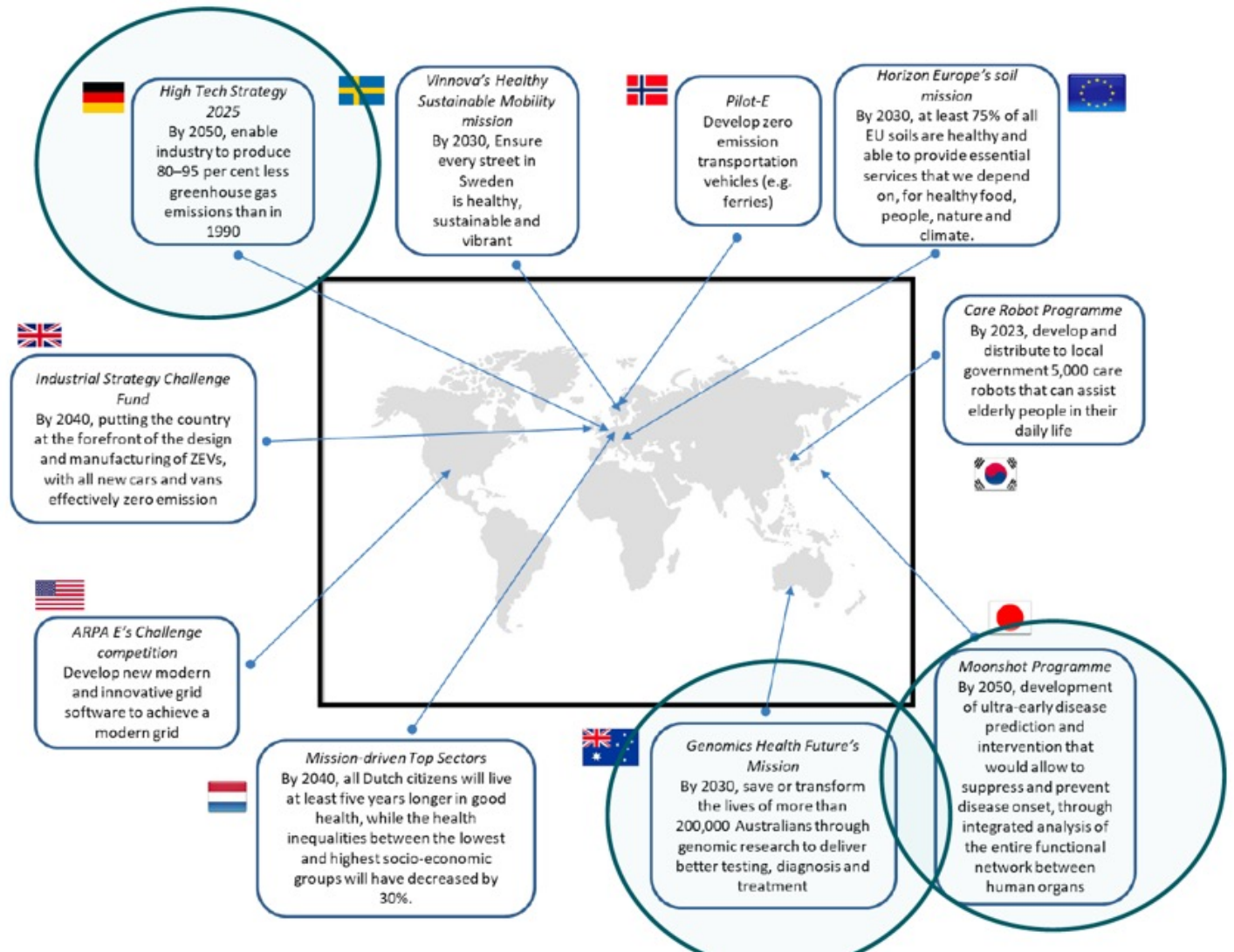


Portfolio of projects and bottom-up experimentation



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Missions that call on science ...



Missions
(Where to go?)

Design
(How to get there?)



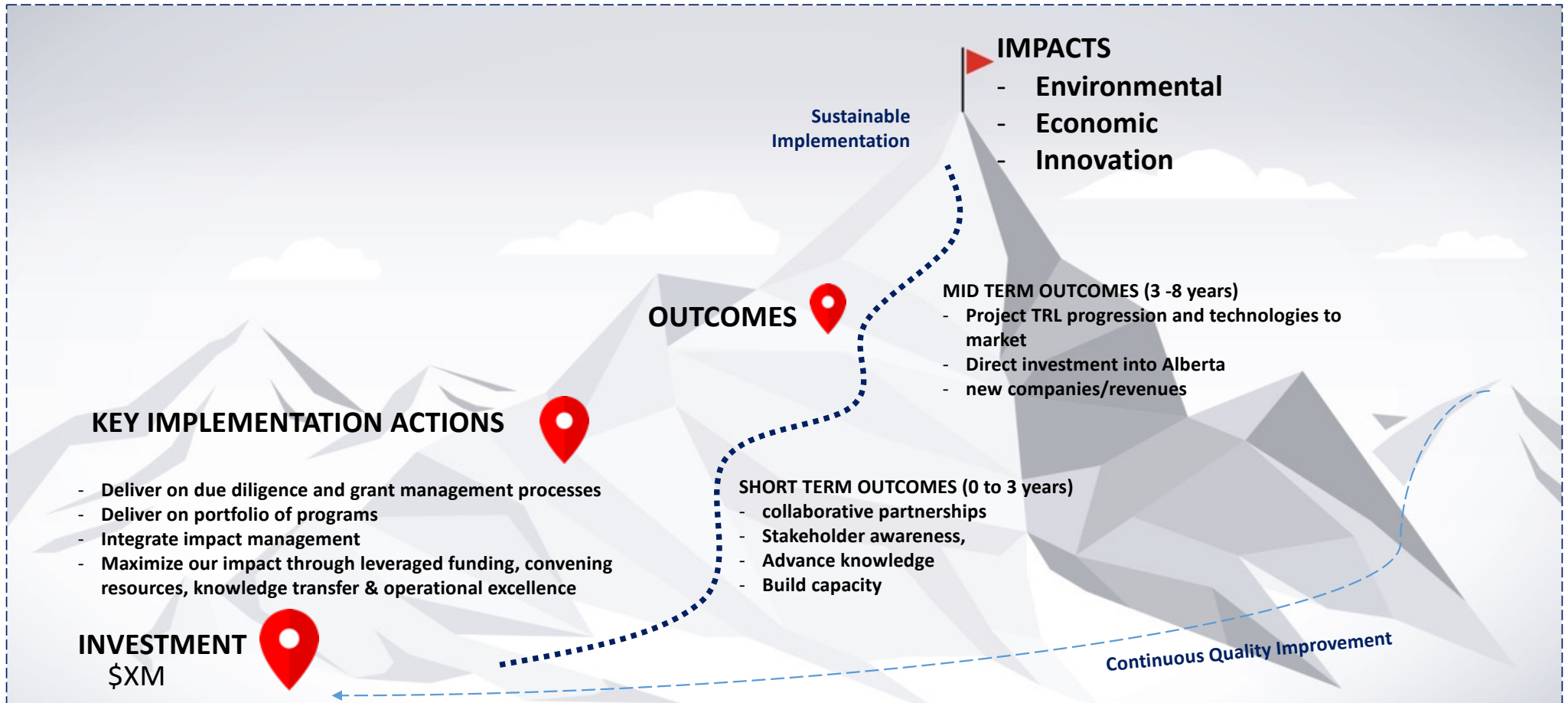
Missions and design: key characteristics

	Missions (where to go?)	Design (how to get there?)
Intervention logic	outcome-based, goal-setting, framing, linear, top-down	human-centred, emergent, explorative iterative, bottom-up
Bodies of knowledge	economics, political science, natural, technical and health science	design, humanities, arts, craft
Key actors	policy-makers, system entities, academia, enterprise	people, citizens, users, employees
Key assumptions	tangible long-term objectives, and measures of impact against them	solutions emerge from co-created processes of sense-making
Values	system change, market shaping, public value (economic, social, environmental)	new interactions and interventions, human value meaning and sense-making at individual and community level

Pathways to impact



Starting With the End in Mind



Developing an impact strategy

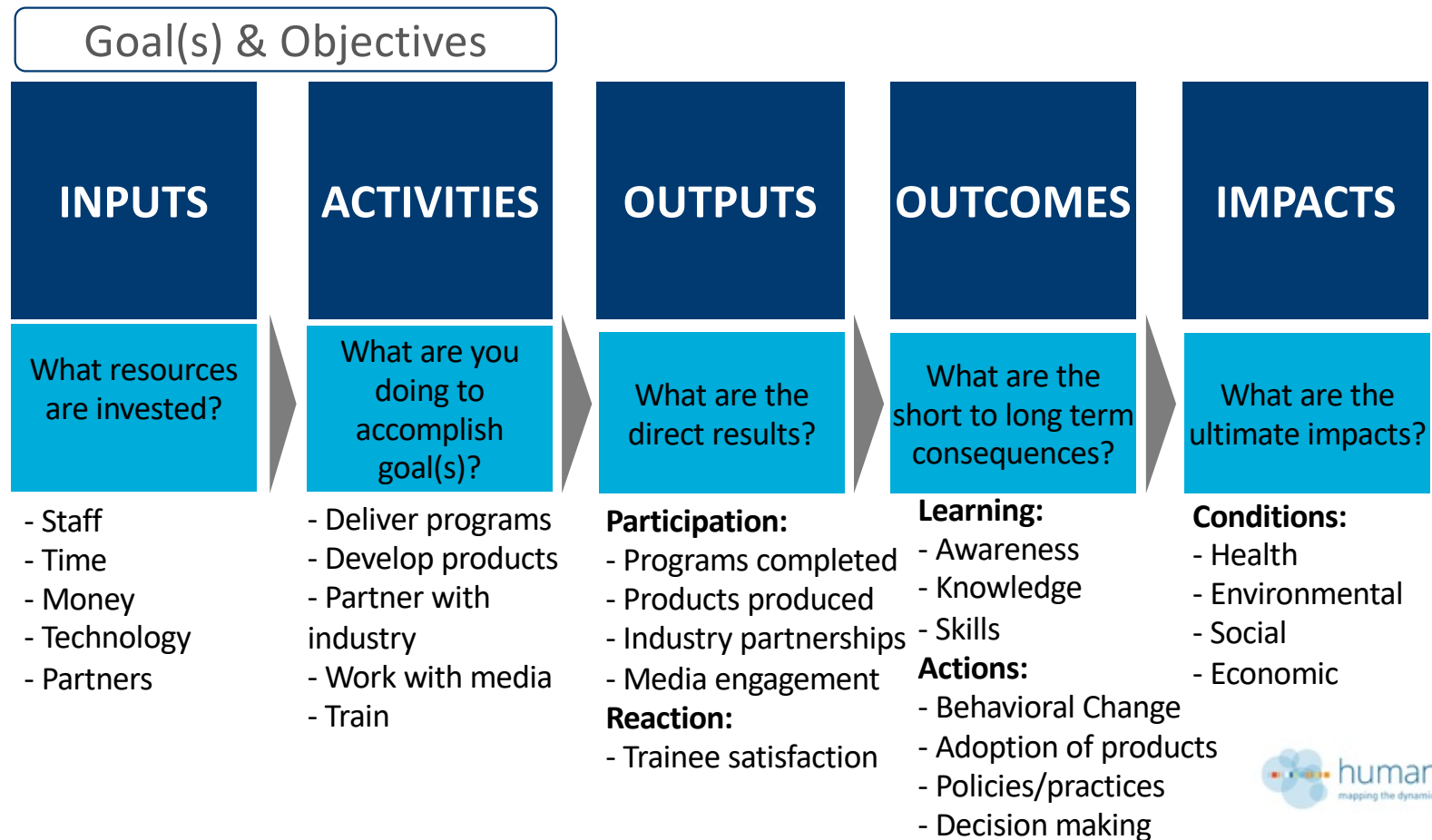
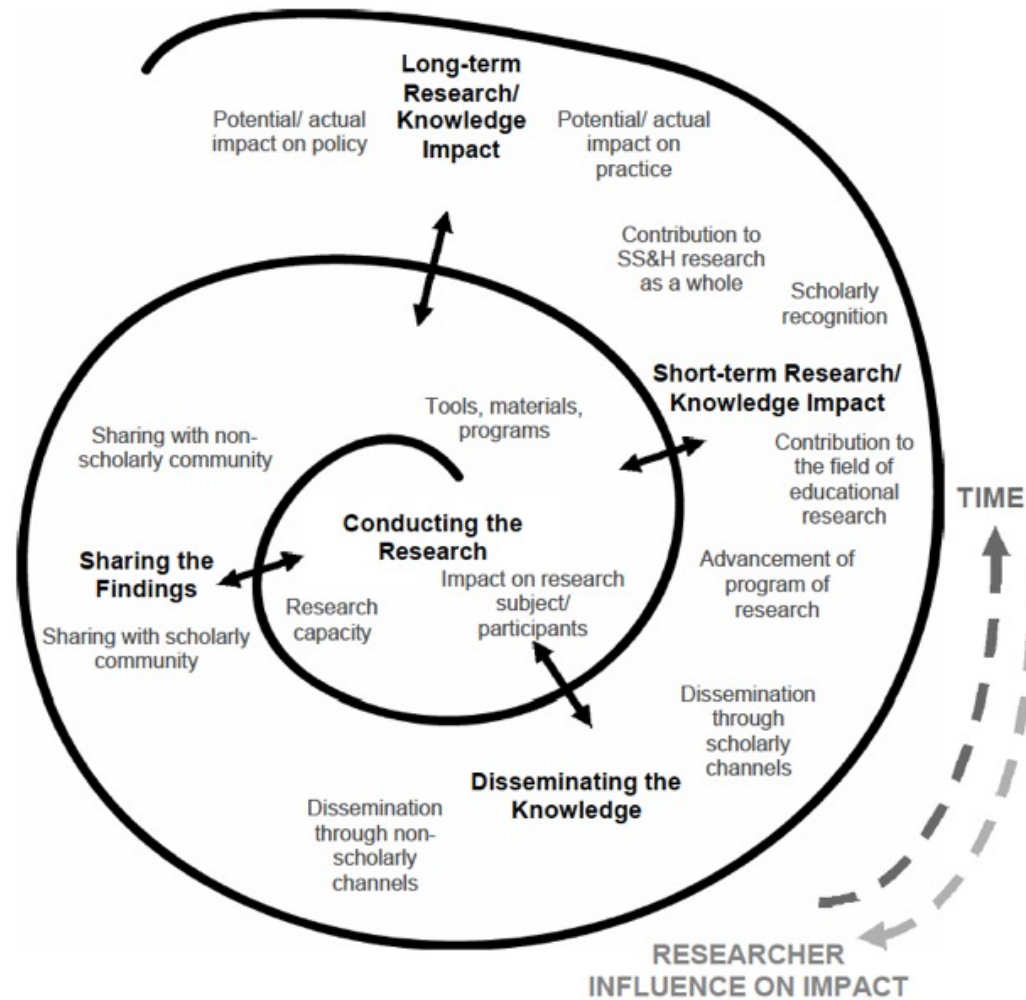


Figure 1
Conceptual Framework of Research Impact in the Field of Education



Amo, C. 2007. Conceptualizing research impact: the case of education research. *The Canadian Journal of Program Evaluation* 22(1):75-98

Key messages

Developing an impact lifecycle strategy requires:

1. Holistic design and implementation
2. Align research mission & strategy with impact indicators
3. Co-design metrics with stakeholders ('theory of change')
4. Continuous follow-up and real-time impact assessment
5. Learning not evaluation (impact is a moving target)

Group discussion 20 minutes

How to make sure all steps along the impact life cycle are aligned (impact planning, implementation, assessment?)

Are mission- and partnership approaches to research and innovation helpful to generate impact (barriers vs. enablers)?

Thank you for the attention

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Special section

OXFORD

Methods for mapping the impact of social sciences and humanities—A literature review

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Abstract
This article explores the current literature on 'research impact' in the social sciences and humanities (SSH). By providing a comprehensive review of available literature, drawing on national and international experiences, we take a systematic look at the impact agenda within SSH. The primary objective of this article is to examine key methodological components used to assess research impact comparing the advantages and disadvantages of each method. The study finds that research impact is a highly complex and contested concept in the SSH literature. Drawing on the strong methodological pluralism emerging in the literature, we conclude that there is considerable room for researchers, universities, and funding agencies to establish impact assessment tools directed towards specific missions while avoiding catch-all indicators and universal metrics.

Keywords: research evaluation; impact assessment; social sciences and humanities; literature review.

Introduction
Across the international research and innovation community there is a growing interest in how to assess and communicate the diverse impacts of scholarly work. Being able to demonstrate the societal uptake and value of social sciences and humanities (SSH) research is increasingly seen as a crucial component in ensuring accountability and transparency (Hofeldt et al. 2014; Morton 2015; Greenhalgh et al. 2016; Ravesscroft et al. 2017). In recent years, the notion of 'research impact' has gained significant traction within the science system, and has been embedded in research policies, funding instruments, and evaluation regimes (e.g. Rip 2000; Holbrook and Freeman 2011; Bornmann 2011; Buchanan 2013; Langford and Scordano 2015; Derick and Samuel 2017; Holbrook 2017; Reale et al. 2017). In this article, we provide an overview of the existing methods for broader impact assessments across SSH.

A key finding of the literature review is that different funding agencies, policy-makers, and research organizations operate with different models and methods for impact assessment. Impact simply does not mean the same thing across institutions, geographies, and research cultures. This conceptual diversity is reflected in the number of methods and frameworks which are used to track, demonstrate, assess, and incentivize the impact of research across the European SSH community and beyond. The diversity of the impact agenda in SSH reflects a broader trend within impact studies. The evolution of impact studies has shown that public research organizations do not just release their benefits to society following a linear model of growth and application. Instead, real-world effects of research occur at different stages in the research process, extending from knowledge dissemination and knowledge mobilization to long-term applications and dynamic effects.

Much progress has been made in measuring both the outcomes of research and the processes and activities through which these are achieved (Greenhalgh et al. 2016). However, as we demonstrate in this article, there exists a multitude of approaches to impact assessment reflecting the complex and multi-dimensional ways in which research is taken up by society. As Rafols (2017) noted at the Science, Technology, and Innovation Indicators Conference in 2017: 'The contributions of science to society are so varied, and mediated by so many different actors, that indicators used in impact assessment cannot be universal. Instead, they need to be developed for given contexts and used alongside qualitative assessment'. Assessing the impact of social science and humanities is indeed challenging. The ways in which research is taken up, used, and reused in real-world settings means that linking research processes or outputs to wider changes is difficult, and timescales are hard to predict (Morton 2015). However, rather than being paralyzed by the lack

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