



Parallel Session (Ondaatje Hall)

**Monitoring Societal Impact to
inform Institutional Strategy**



Parallel Session

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Kathryn Graham (Chair)

Executive Director, Impact Action Lab, Alberta Innovates,
Canada



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Ole Henning Sørensen

Chief Consultant, Danish National Research Centre for the Working
Environment, Denmark

Monitoring Societal Impact to inform Institutional Strategy

The Societal Impact Instrument:
Occupational Health & Safety Research (SII:OHSR)

Ole H. Sørensen, Ph.D.

Chief Consultant

The National Research Centre for the Working Environment (Denmark)

About the Danish National Research Centre for the Working Environment

- Independent research institute
 - Legal mandate to conduct applied research
 - Part of the Ministry of Employment
 - About 130 FTE – 100 FTE researchers
 - Funding: 50% research grants
 - About 150 research projects
 - About 200 peer-reviewed articles annually
-
- Knowledge transfer and exchange:
 - Social media and short videos
 - Webinars and podcasts
 - News and thematic newsletters
 - Stakeholder meetings (integrated KTE)
 - Presentations
 - Facilitation

- Four main research areas:
 - Psychosocial
 - Ergonomics
 - Chemical
 - Accident prevention

	 Psycho-social	 Ergonomics	 Accidents and safety	 chemistry
Epidemiological Research				
Intervention Research				
Implementation Research				
Economics				
Digital Solutions				

Measuring societal impact of research

- A definition of societal impact:

“research contributions to addressing current and/or future social, environmental, economic, and other needs outside academia”

Reale, E., et al. (2018) 'A review of literature on evaluating the scientific, social and political impact of social sciences and humanities research', *Research Evaluation*, 27/4: 298-308

- As part of our strategy to increase societal impact, we decided to:

develop a quantitative instrument to measure societal impact at the programme and institutional level

- Our reasons were:

1. document the societal impact of the institute (accountability)
2. identify improvement possibilities (learning)
3. project a positive image (public value)

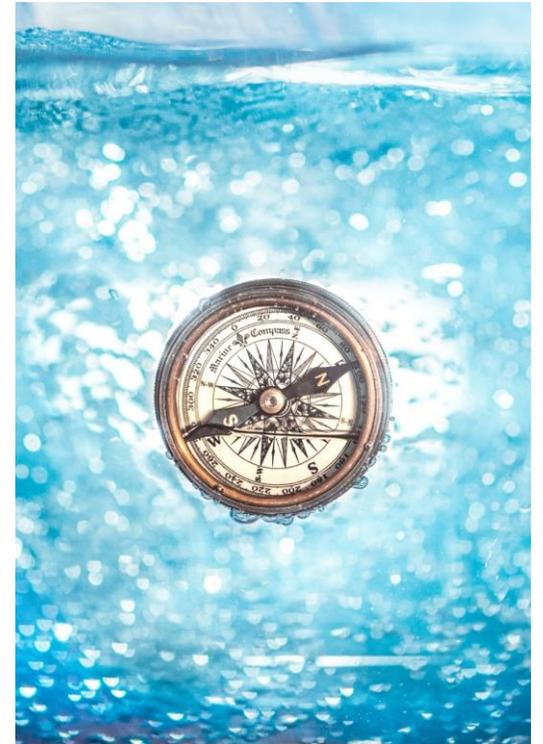
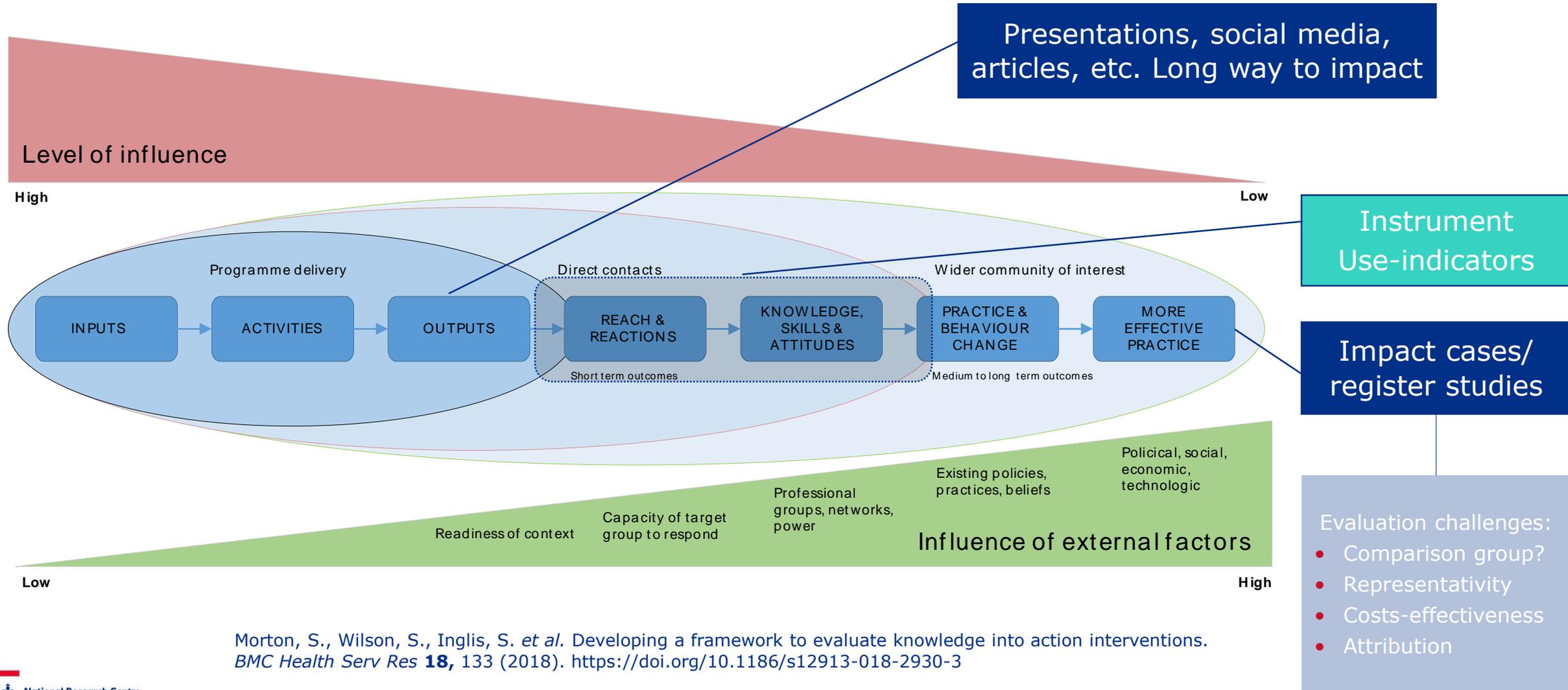


Photo by [Jamie Street](#) on [Unsplash](#)

Attribution is increasingly difficult down the translation chain



Morton, S., Wilson, S., Inglis, S. *et al.* Developing a framework to evaluate knowledge into action interventions. *BMC Health Serv Res* **18**, 133 (2018). <https://doi.org/10.1186/s12913-018-2930-3>

Our solution for evaluating knowledge-use

Basic use-concept

- Kemes: Units of evidence-based transferable knowledge

Kramer, D. M., et al. (2013) 'Did you have an impact? A theory-based method for planning and evaluating knowledge-transfer and exchange activities in occupational health and safety', *International journal of occupational safety ergonomics*, 19/1: 41-62.

We evaluate types of knowledge use with generalized questions:

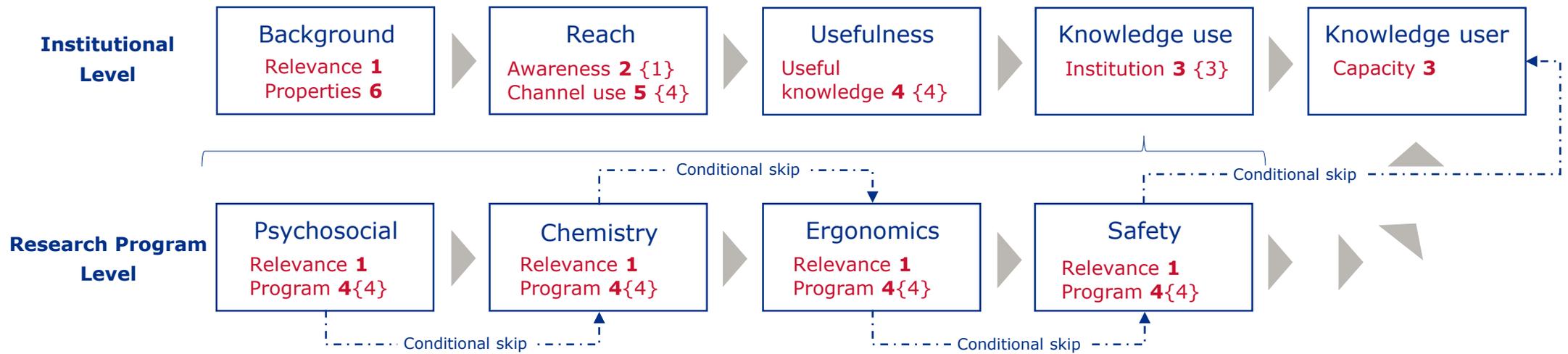
- *Conceptual use*: change and frame the understanding
- *Instrumental use*: new procedures, methods or tools
- *Strategic use*: influence new policies, procedures and processes

Weiss, C. H. (1979) 'The many meanings of research utilization', *Journal of public administration review*, 39/5: 426-31



Photo by [Héctor J. Rivas](#) on [Unsplash](#)

Structure of the SII:OHSR Questionnaire



Number of items in questionnaire in bold (44)

Number of items included in societal impact index {28}

How did we measure

We used two different approaches:

1) a *convenience sampling* (sample 1 - NFA)

- Survey administered to NFA-newsletter subscribers
- Self-recruit – homepage, SoMe, direct mails through networks and intermediaries

2) a *systematic sampling* in a semi-representative national panel (sample 2 - Epinion)

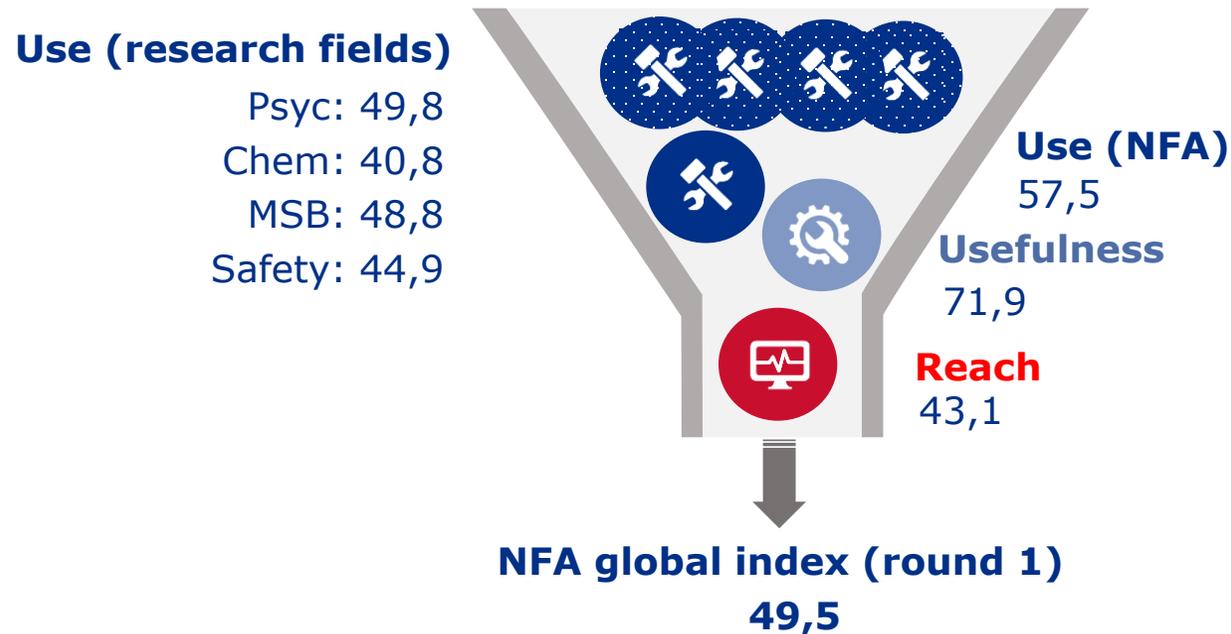
Respondents: OHS-professionals, -inspectors, -educators, -managers, employee reps...

- Sample 1: ~1,500 respondents each round; ~500 repeated.
- Sample 2: ~500 respondents each round; ~200 repeated

Societal index score

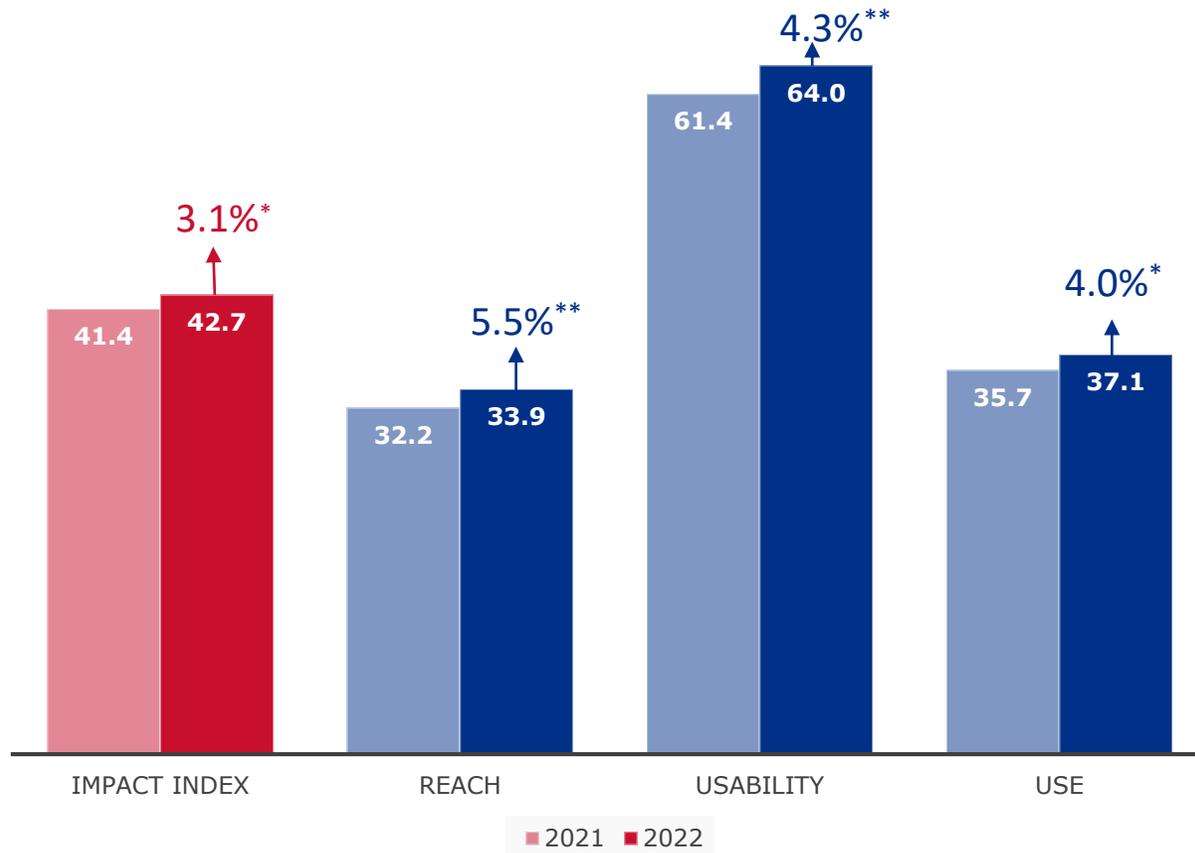
Global index 0-100 composed of 7 sub-indices

- Index would be 100, if all relevant users answered that...
 - they know and frequently use NFA's communication (*reach*)
 - NFA knowledge and activities are useful to a very high degree (*usefulness*)
 - they use knowledge from NFA's to a high degree generally and that it also applies for all relevant research fields (*use*)

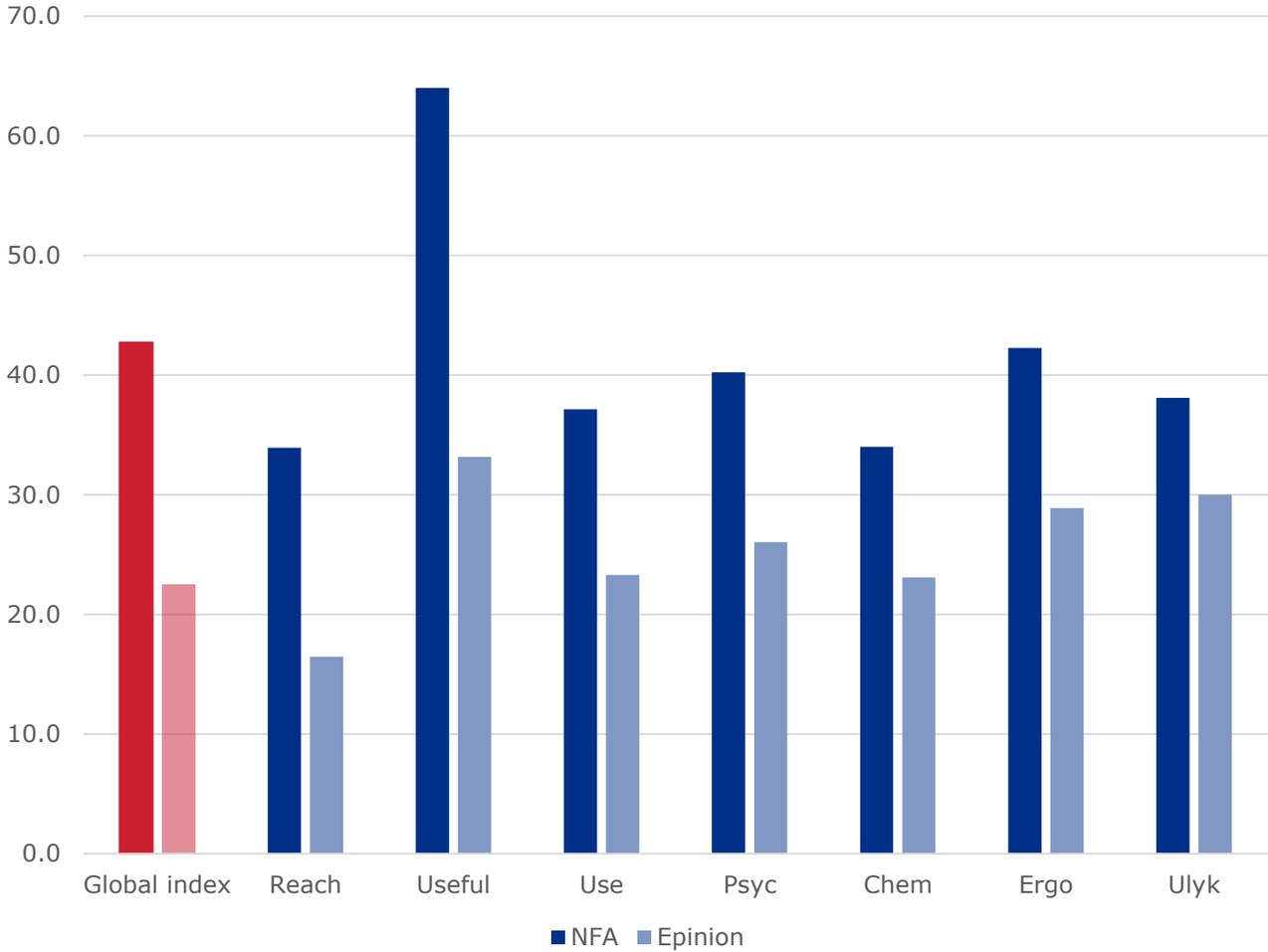
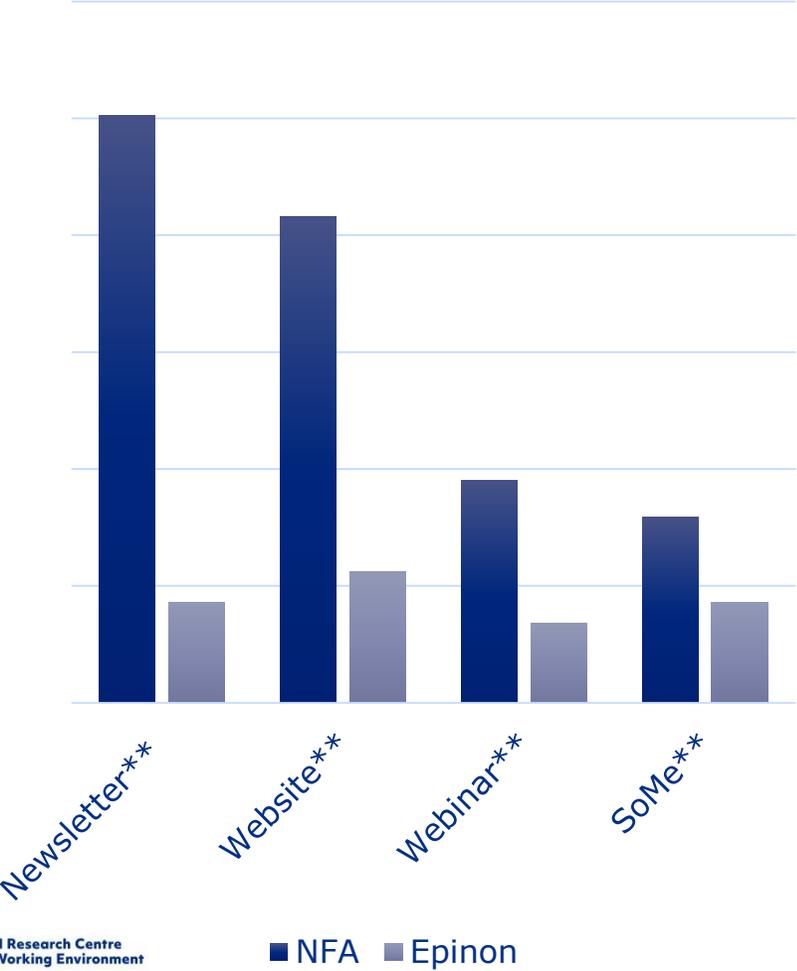


Development from 2021-22

Impact index and sub indices



The sampling strategy is very important



Conclusion

- We developed and validated an instrument to measure *intermediary outcome indicators of societal impact at the programme/institution level in the OHS-area*
Sørensen et al. 2021, Measuring societal impact of research – developing and validating an impact instrument for occupational health and safety, *Research Evaluation*
- Most questions are context independent and therefore relocatable
- Sampling strategy is highly important for index-value levels
- We use a different method to assess upstream impact (interviews and document trail)
- We can use the instrument to improve our impact strategy activities, e.g. vi have...
 - maintained focus on SoMe because it increases use
 - renewed focus on newsletters and webinars
 - introduced initiatives to make our knowledge easier to access, assess and apply
 - increased collaboration with OSH-professionals and the OSH-authority

Contact details

Thanks for you attention.

I am grateful for this opportunity to present our KTE-research.

If you have questions don't hesitate to contact me.

Ole H. Sørensen

ohs@nfa.dk

Examples of respondents, questions, distributions and analyses



Related learning – third round

- We sampled 36 respondents from private enterprises focusing on...
 - small and medium sized private enterprises
 - managers with OHS-responsibilities and safety representatives
- The analyses made it clear that:
 - These users primarily work on a case-to-case basis
 - Their primary way to find knowledge is internet search
 - They may know official web-pages (regulatory authorities, brokers)
- They rarely use knowledge from NFA because
 - They do not find us (access)
 - It is hard to find relevant knowledge on the homepage (access)
 - It is difficult to assess, adapt and apply the knowledge



Preferred types of knowledge and formats

What do they seek?

- Answers to specific questions
- Understanding
- Inspiration
- Advice, guides & tools

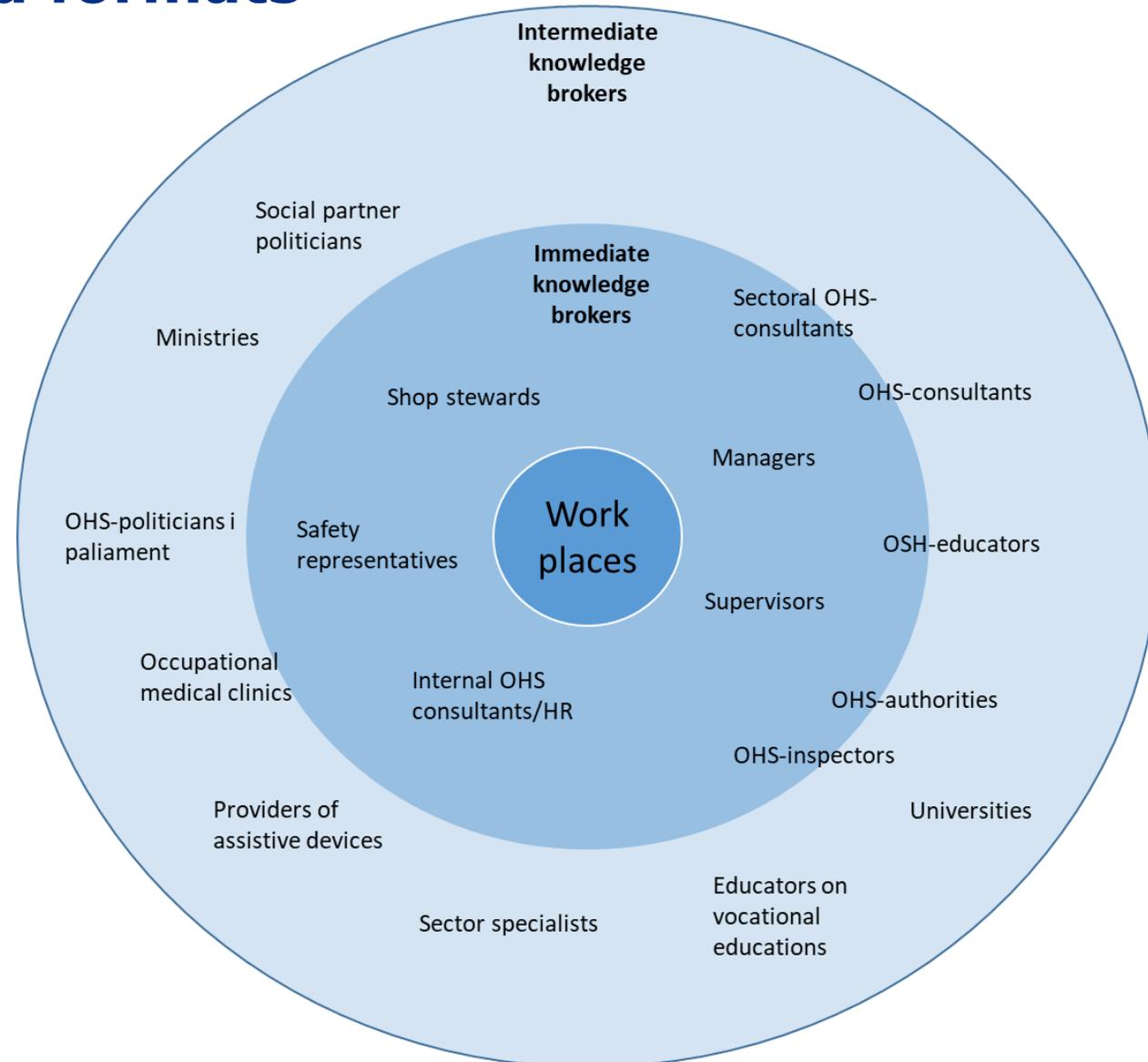
Preferred formats:

- Newsletter
- Podcasts
- Webinar
- Tools
- Animation/video

Generally they look for knowledge to solve specific and pressing problems. It should be useful and easy to overview and understand

Learning: we need to be easier to find and use

- Initiatives: SEO-optimizing, revised webpage, closer collaboration with intermediaries...

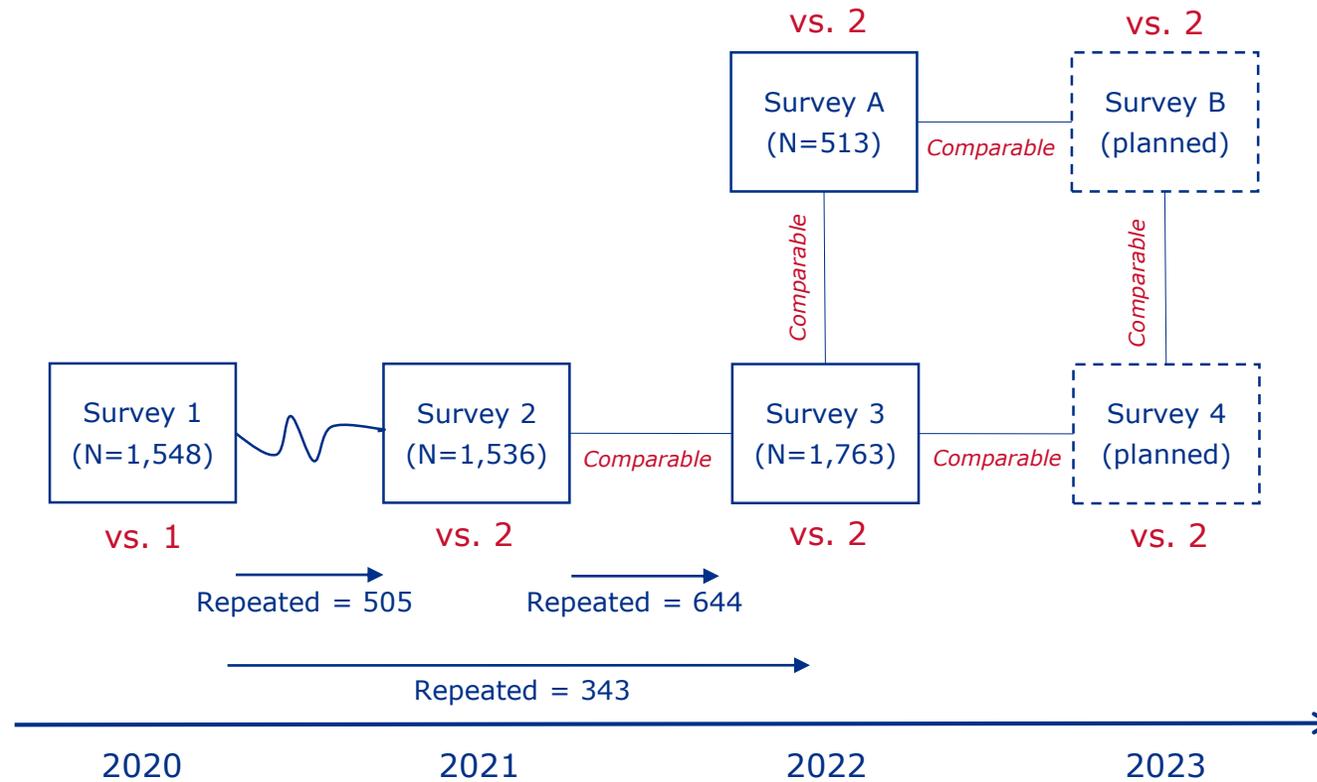


Data and data points for SII:OHSR

Sampling technique

OSH subsample
of Danish workforce

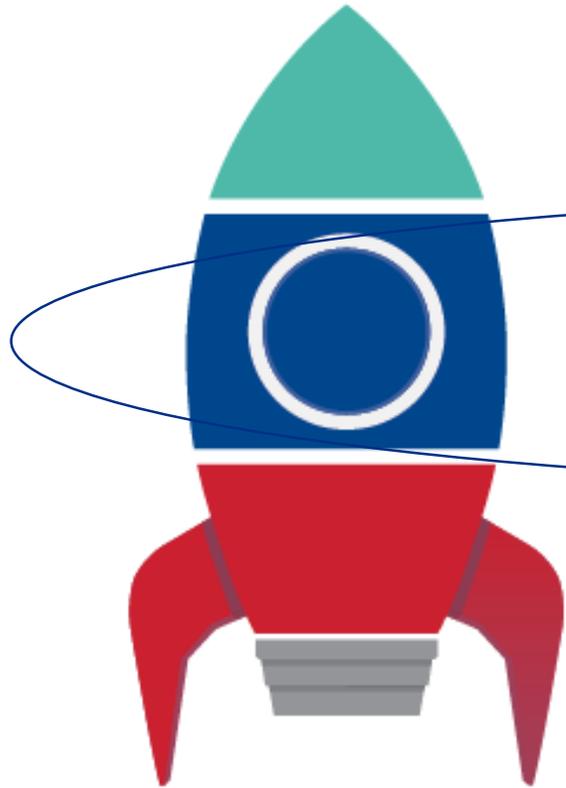
OSH convenience
sample



Respondents

Years of OHS-experience	N	Percent
0-4	300	21.5
5-9	270	19.4
10-	823	59.1
Sector	N	Percent
Public	810	54.8
Private	522	35.3
Social partner, NGO, association, etc.	126	8.5
Knowledge broker organizations	N	Percent
Union consultants and representatives	165	10.7
OHS-consultant	132	8.5
Working environment inspector	68	4.4
Employers' organizations	63	4.1
OHS-educator	19	1.2

NFA impact instrument – intermediate outcomes at institute-level



3 Change (long term)

- Case-based natural experiments and planned effect studies (RCT, quasi...)
- Qualitative case-studies (impact-pathways, fidelity, reach...)

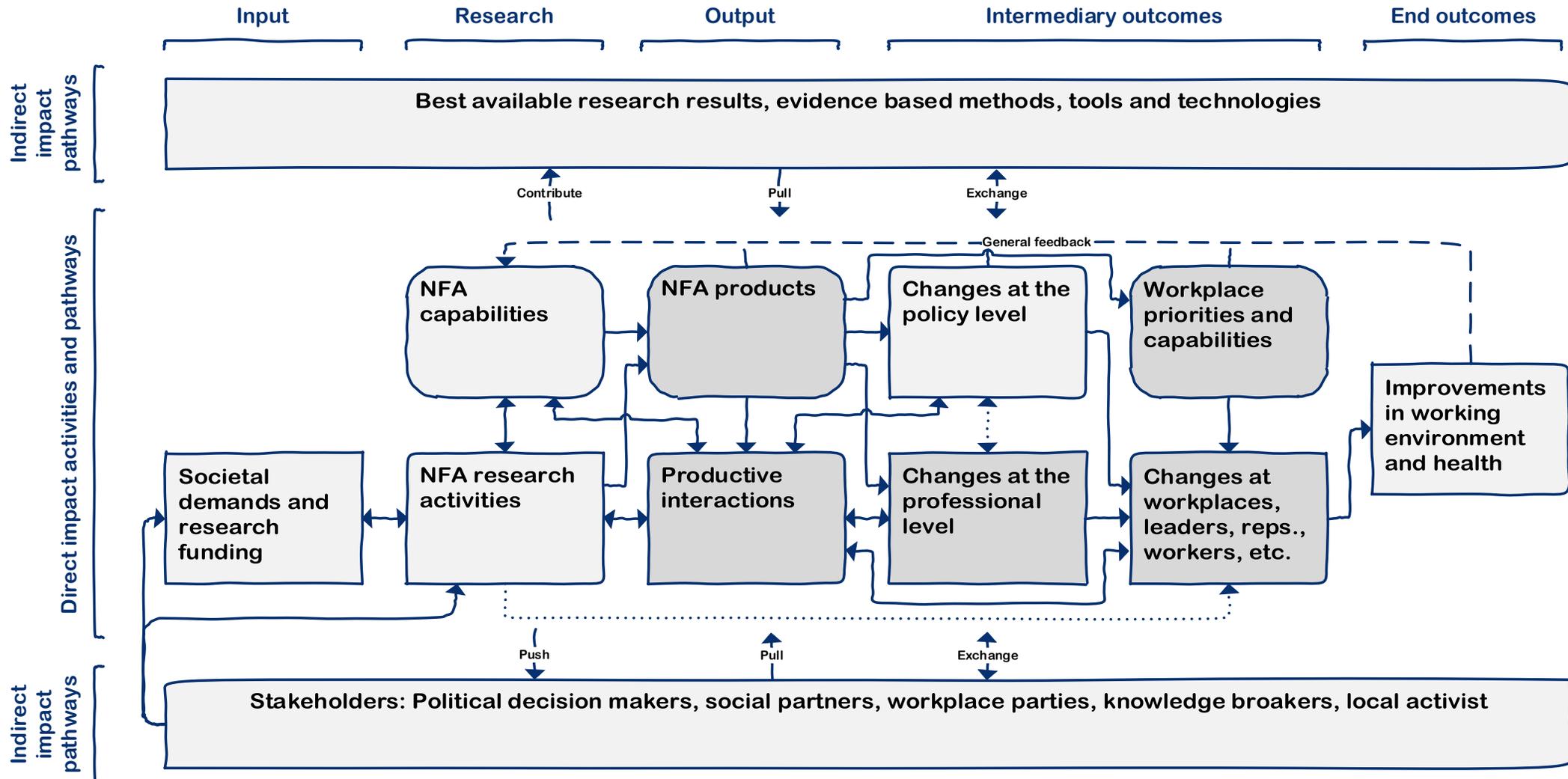
2 Use (intermediate)

- Impact instrument that measure indicators of knowledge use and reach

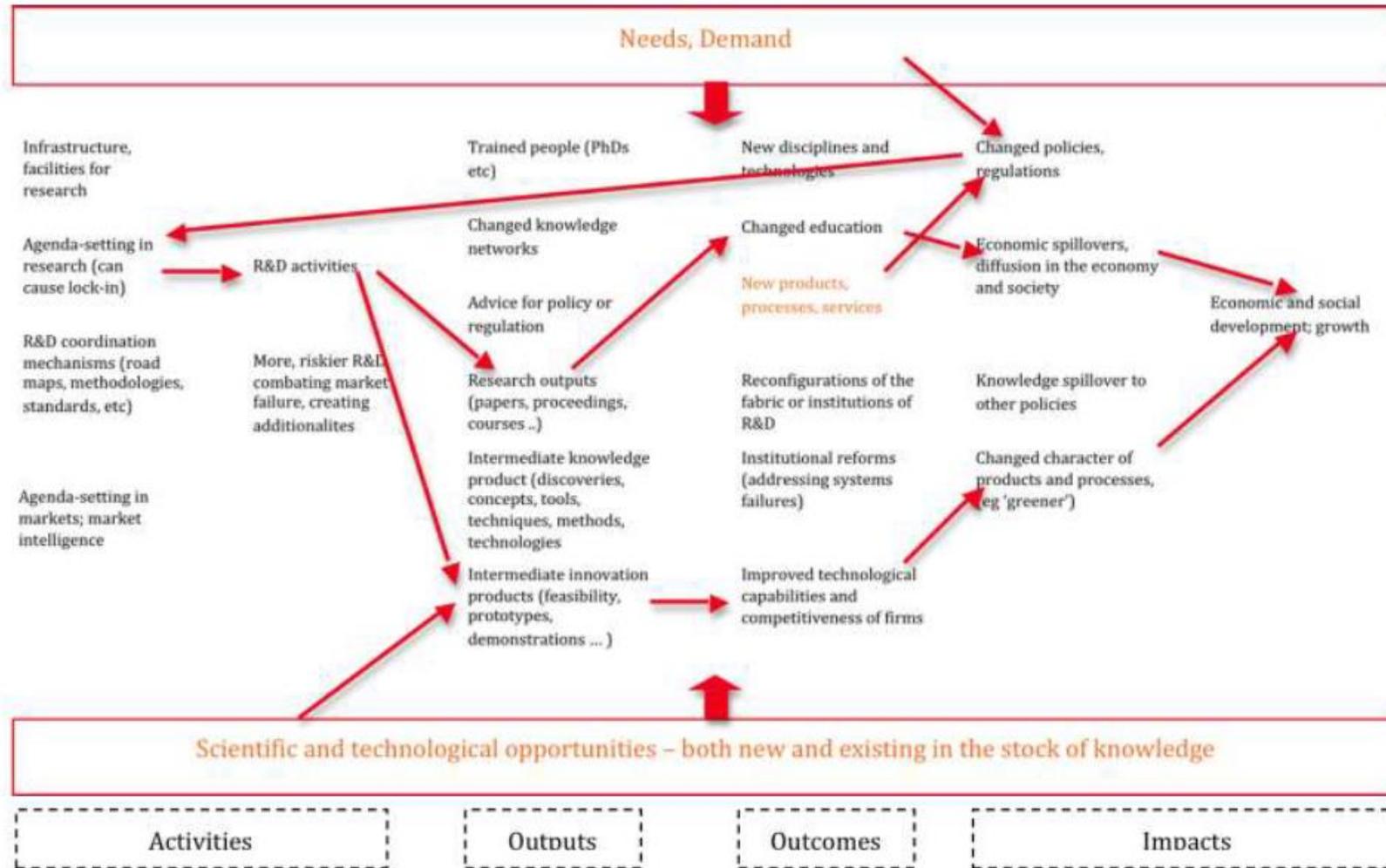
1 Dissemination (short term)

- Registrations of publications, events, SoMe experiments and tracing, qualitative evaluations...

Overall impact-model



Complexity of impact pathways



Source: (Arnold, 2013)



Parallel Session

Monitoring Societal Impact to inform Institutional Strategy

Angela McGuire & Rachel Herbert

Collaboration Manager, Research Evaluation & Senior Research

Evaluation Manager, Elsevier, United Kingdom

& Iha Diwan

AESIS

Senior Strategy Manager, University of Tasmania, Australia

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Tasmanian Societal Impact Model

Institutional planning to maximise societal
impact



Universities need to rethink efforts to create impact in their communities

Experiential learning should build innovation and reciprocity so that both students and partners learn new skills.

How can we measure universities' contributions to society?

Kalinga Seneviratne and Brendan O'Malley

Productive interactions
societal impact of
academic research
in the knowledge society

LERU position
March 2010

Let's judge universities for their social impact, not graduate salaries

Loughborough commits to social impact framework

Imperial College
London

Vincent

Pathways to Social

Universities need to look outwards: their local economic and social impact really matters

improve —

the environment

Measuring social impact allows universities to be held accountable

New *THE* metrics challenge universities to think about their societal contributions and encourage them to be responsible employers, says Jonathan Grant

13pm GMT

University Rankings as a Tool for Social Impact

How Times Higher Education developed and implemented a new set of social impact rankings for higher education for a more sustainable, resilient future. Part of the *Innovating Higher Education series*.

How the societal impact of universities improved both conceptually

Paul Benneworth

Universities need to rethink efforts to create impact in their communities

Experiential learning should build innovation and reciprocity so that both students and partners learn new skills.



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Universities need to look outwards: their local economic and social impact really matters

Published: March 9, 2020 1.13pm GMT









A place where we do things for Tasmania, and from Tasmania

“Our unique location, our island character and our complex history bring both the obligation and the opportunity to make a distinctive global contribution”

University of Tasmania, Strategic Plan 2019-2024



UTAS societal impact principles

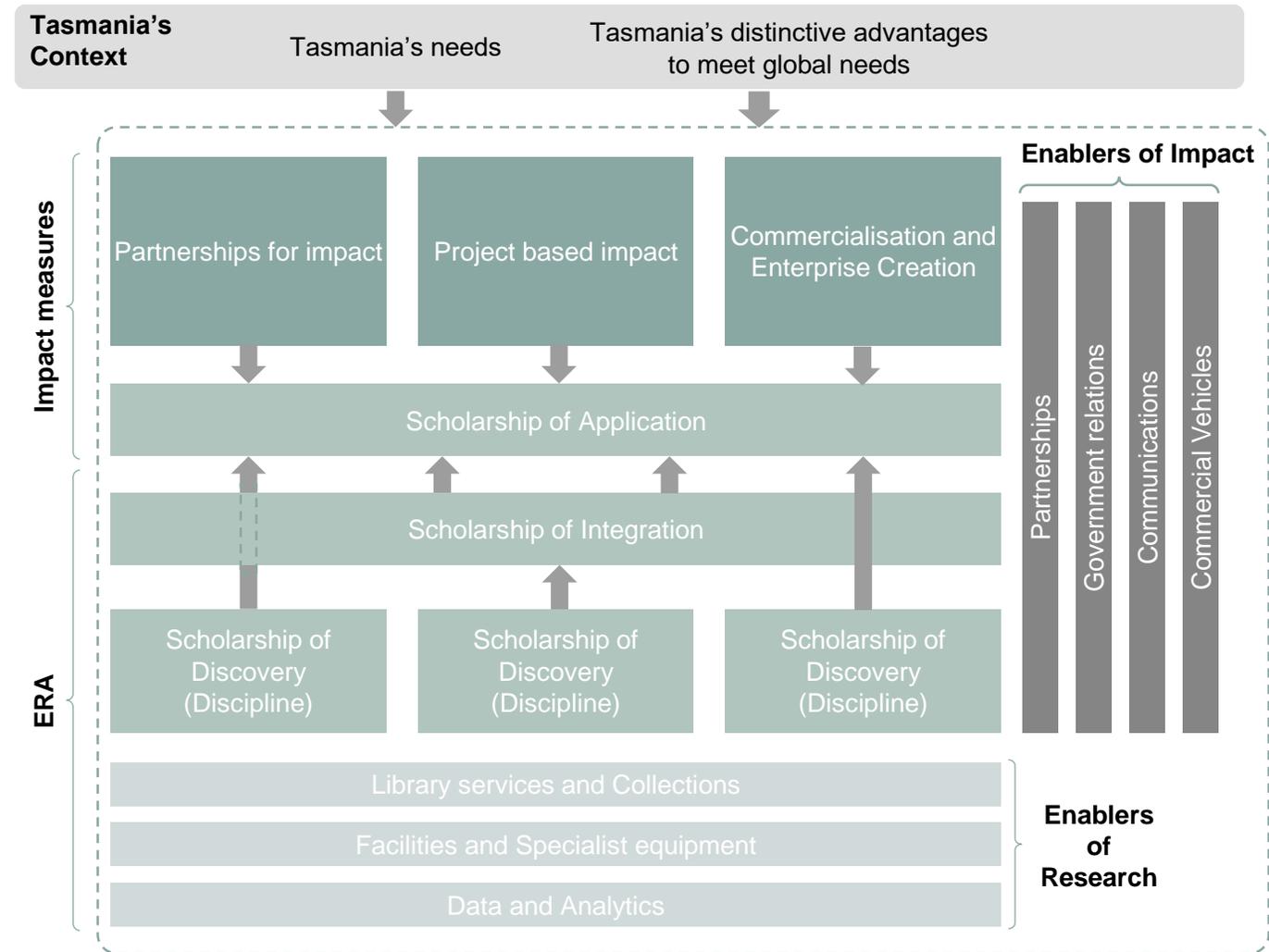
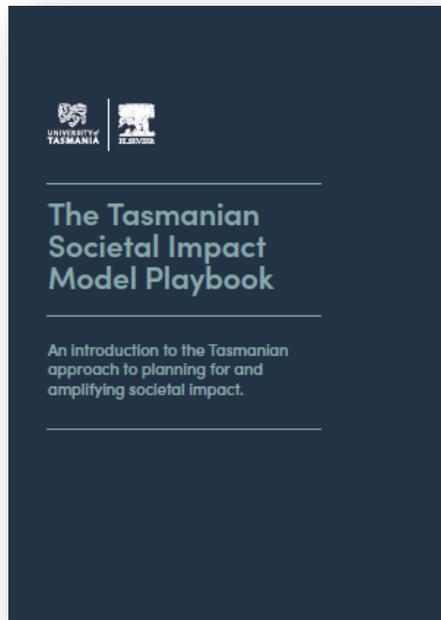
- We think long-term
- We want to continue building on their strengths to maximize the potential impact
- We aim to solve important and systemic societal problems
- We intend to organise and align with partners to solve the problems
- And we want forethought: we want to plan for impact

“Our model begins not from within the university, but from an understanding of the critical societal challenges we all face and how we could collectively create new knowledge and capabilities to solve systemic challenges such as climate change and inequality.”

Prof Rufus Black, Vice-Chancellor, University of Tasmania

Developing a model for societal impact

- Partnering with Elsevier to share data, analytics, expertise
- Maximizing impact within Tasmania
- Flexible: can be applied to other institutions
- Resulting in The Tasmanian Societal Impact Model Playbook



As the only University dedicated to serving our island, we have a unique civic mission



Domain House - the old University campus, 1890



Menzies Research Institute, Hobart City



Student Services, Sandy Bay



Open Day, held annually

Founded in 1890, we are Australia's **fourth oldest university**

We have **three regional campuses** across Hobart, Launceston and Burnie, as well as off island campus in Rozelle, NSW

We are the **primary higher education provider and research institution for the state**, and over 97% of our research is above global standards

We are one of the largest employers in the state, employing **over 6,300 people** or the full-time equivalent of over 2,900 people

Across our offerings we had over **38,200 course enrolments** in 2021, equating to over 20,787 EFTSL

Our mission is to make a difference for Tasmania and from Tasmania to the world, nurturing our distinctiveness and leveraging our intrinsic strengths



Developing **distinctive offerings** and pursuing diverse student segments, and offering flexible options to foster increased **access, participation and success**

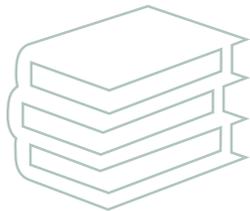
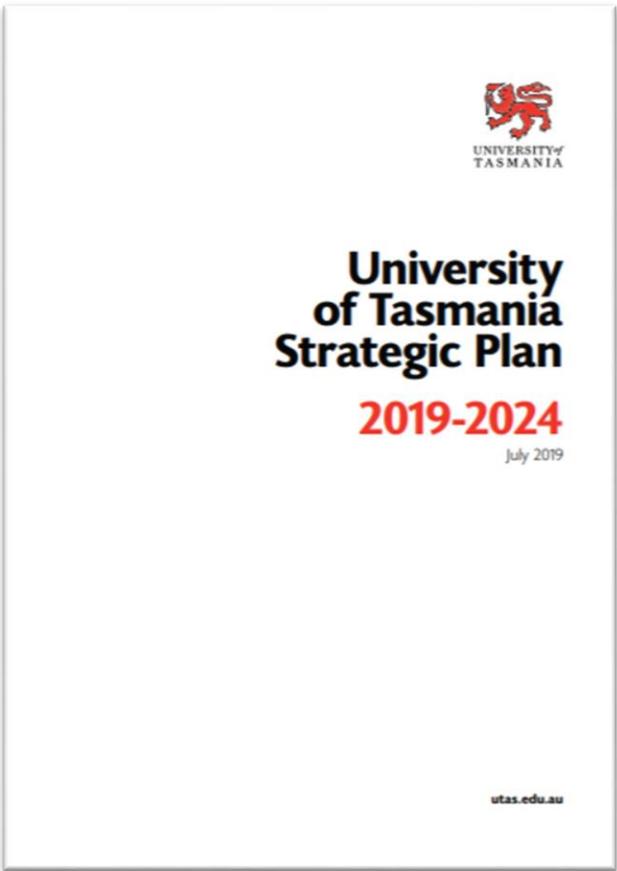
Improving our island's future through growing our **strong base of research excellence**, focussed around creating impact

Forging **partnerships** with government and within our community that align with our mission, and enable us to tackle complex social and economic challenges

Creating new campuses that support **access, differentiation, impact** and highly efficient operations

Insulating the University our funds for the future, leveraging our strong balance sheet to pursue **long term sustainability**

Our institutional Strategic Plan 2019-2024 sets out six outcome areas where we seek to have impact in Tasmania



Increase educational attainment rates across the education life cycle for all cohorts



Deliver **better health and wellbeing outcomes** sustainably for all Tasmanians



Increase participation in and contribution to cultural activities



Improve social inclusion and equity



Lift the economic performance of the State



Improve the environmental sustainability of Tasmania

Over the past three years, we have worked with Elsevier to pilot impact approaches, develop tools and test models

Pilot Impact Areas

We worked on two pilot areas from our Outcomes Framework: Health and Environmental Sustainability

Development of a model and tools

The learnings from our pilots led to development of an approach and tools to support planning for and measurement of impact

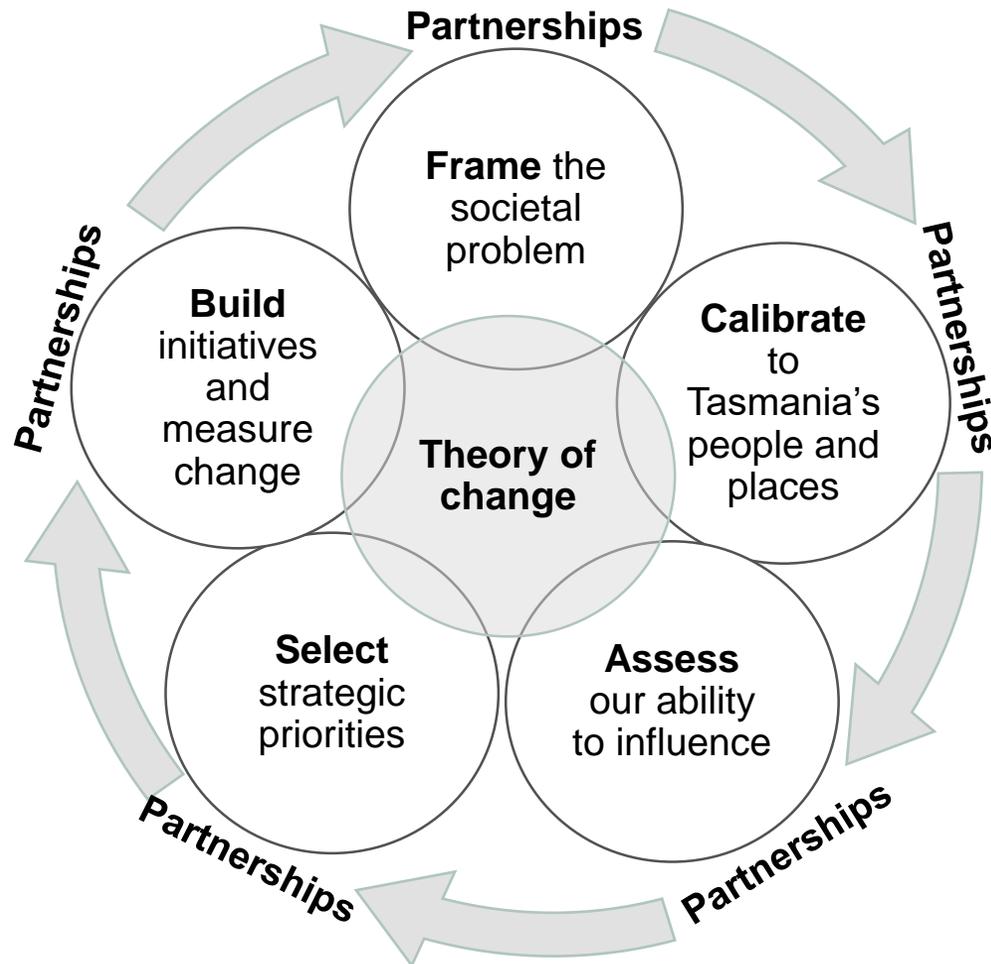
Testing in different contexts

In the past 12 months, we have tested the model in different contexts



We've learnt a lot and now have a framework that is helping guide how we measure, amplify and promote the societal impact of our work

Tasmanian Societal Impact Model



- Our Tasmanian Societal Impact Model is a **flexible and adaptive decision-making tool**
- **Partnerships are a critical component** of our ability to amplify our impact
- Continually calibrating to Tasmania's people and places i.e. our context enables us to **remain focussed on delivering our civic university mission**
- **Attribution is complex** but planning for impact is helpful
- The process is **not linear**



The 'Tasmanian Model'

External partnerships are central to every step



-  **1** Frame the societal opportunities and risks
-  **2** Assess the relative importance of the societal opportunities and risks to the places and people
-  **3** Assess the university's relative capability to influence the societal opportunity and risks
-  **4** Select which societal opportunities and risks to focus on
-  **5** Make action plans and measure change

Frame the societal opportunities and risks



The goal here is to scope and frame, with external partners, the range of possible societal impact risks and opportunities for amplification of societal impact through collaborative intervention

Broad thematic area	Education			
Societal impact opportunity	Educational attainment			
Societal Opportunities and Risks (SOR)	Increased proportion of students retained from Year 10 to Year 12	Increased number of students leaving Year 12 with an Australian Tertiary Admission Rank (ATAR) score	Increased number of underrepresented people participating in higher education	Increased attainment of higher education across the regions
Evidence	Year 10 to Year 12 retention in Tasmania is 77 percent, which is below the national average of 83 percent.			

Assess the relative importance of your selected societal impact opportunities



To achieve an agreed understanding of the relative importance of place for the addressable factors identified in Step 1.

Component of importance	Weighting	SOR 1	SOR 2	SOR 3	SOR 4	SOR 5	SOR 6	SOR 7	SOR 8
Economic impacts	20%	4	4	4	3	4	3	4	5
Incidence	20%	4	4	5	3	4	3	4	3
Public want	25%	5	3	5	2	5	3	2	3
Social / health impacts	35%	5	5	4	4	4	4	3	3

Assess the university's relative capability to influence the societal opportunity and risks



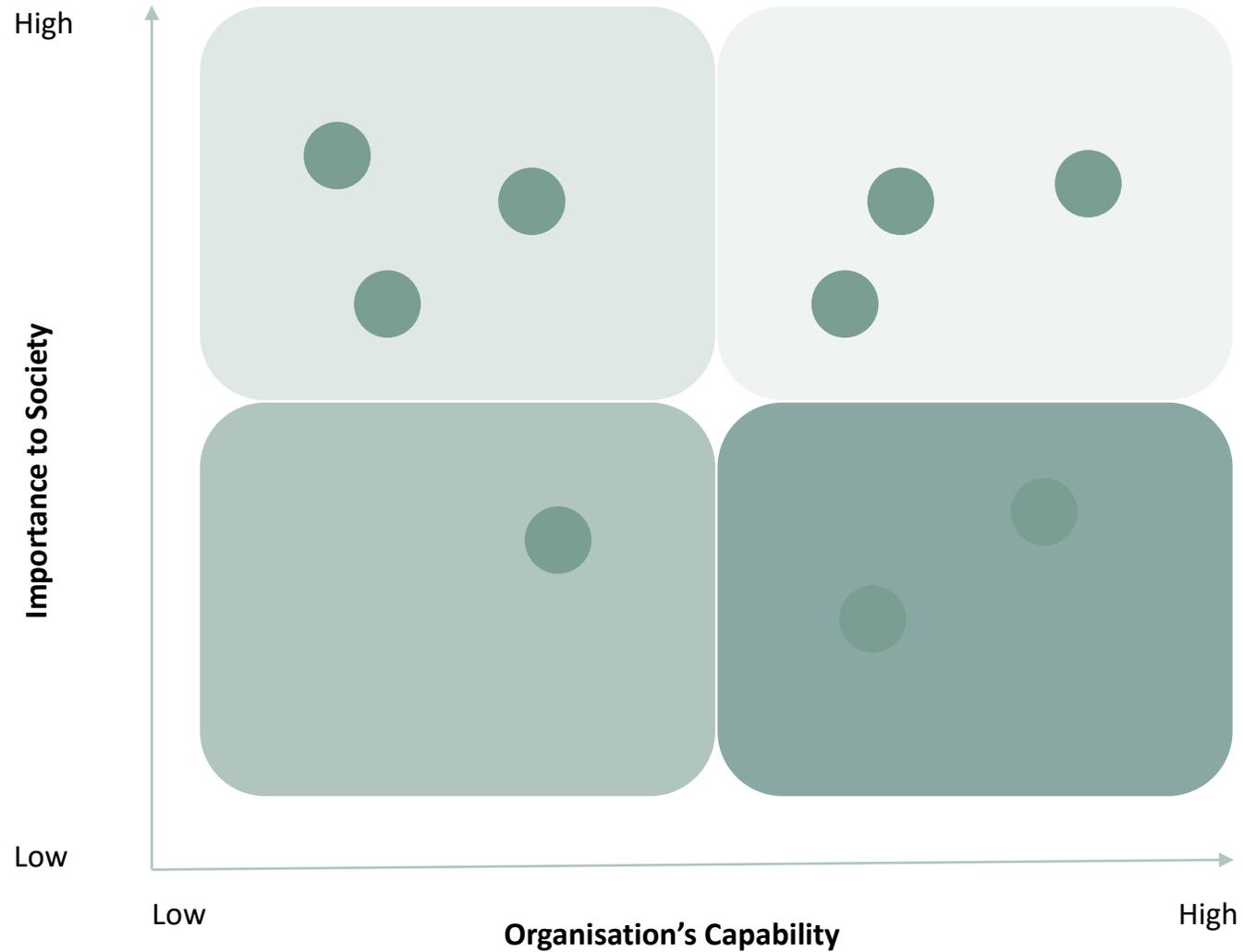
Step 3 involves assessing your organisation's relative ability to influence each of the addressable factors in conjunction with the relative ability of partners.

Component of Influence	Weight	SOR 1	SOR 2	SOR 3	SOR 4	SOR 5	SOR 6	SOR 7	SOR 8
Outreach									
Community engagement	10%	5	4	4	4	3	4	3	4
Partnerships	10%	5	4	4	5	3	4	3	4
Policy input	10%	3	3	5	4	5	5	3	4
Research									
Critical mass (staff profile and pipeline)	10%	5	4	4	4	3	4	3	4
Growth	10%	5	4	4	5	3	4	3	4
Infrastructure	10%	3	3	5	4	5	5	3	4
Track record	10%	4	5	3	5	2	5	3	2
Teaching									
Course offering	10%	5	4	4	4	3	4	3	4
Teaching expertise	10%	5	4	4	5	3	4	3	4
Unit enrolments	10%	3	3	5	4	5	5	3	4

Select which societal opportunities and risks to focus on



Step 4 is to prioritise which addressable factors you will include in your strategic plans



Build action plans and measure change



Step 5 is to develop action plans for each of the addressable factors prioritised in Step 4. These plans should specify the impact pathways of the interventions, and how societal change will be measured.

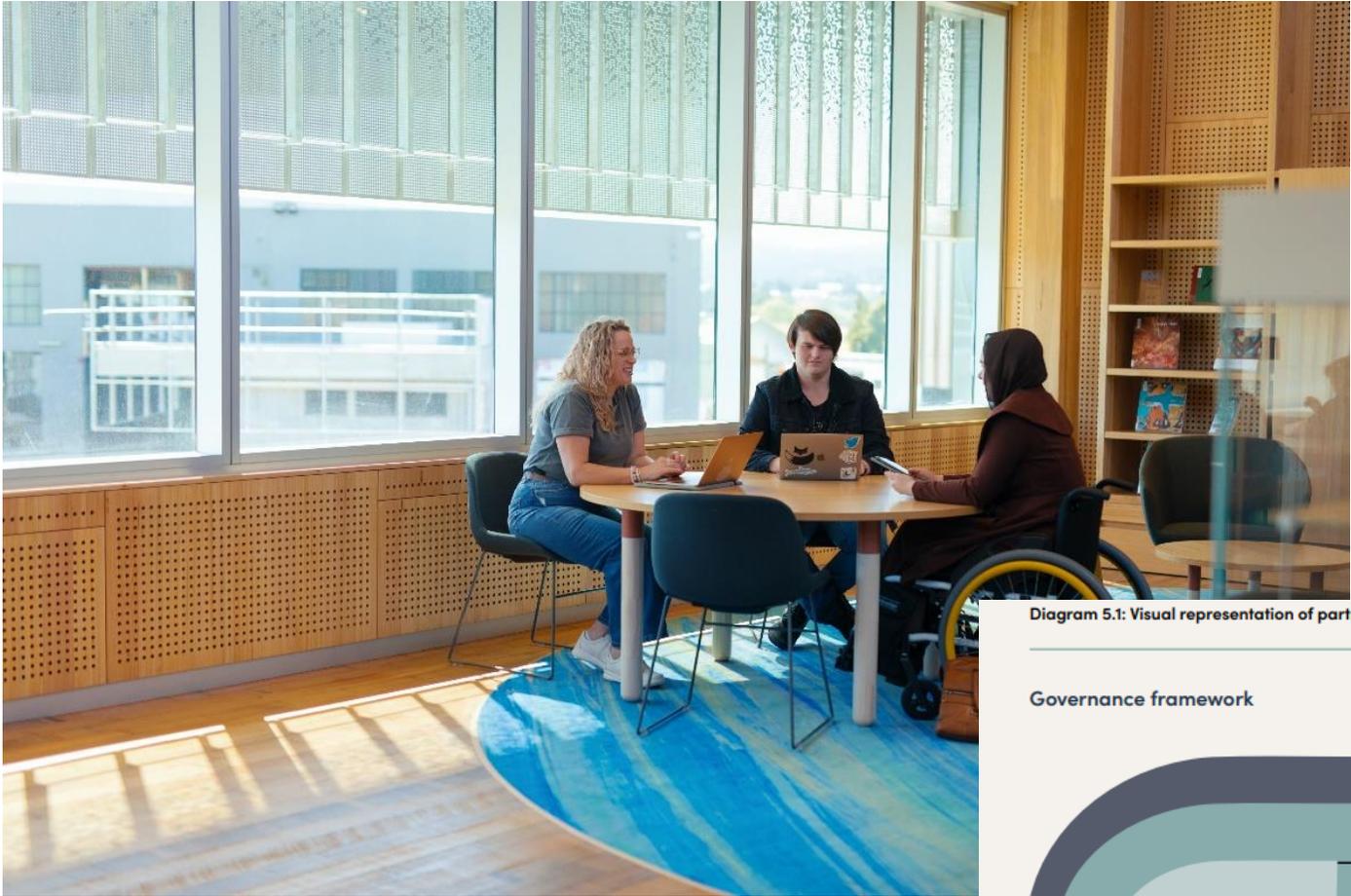
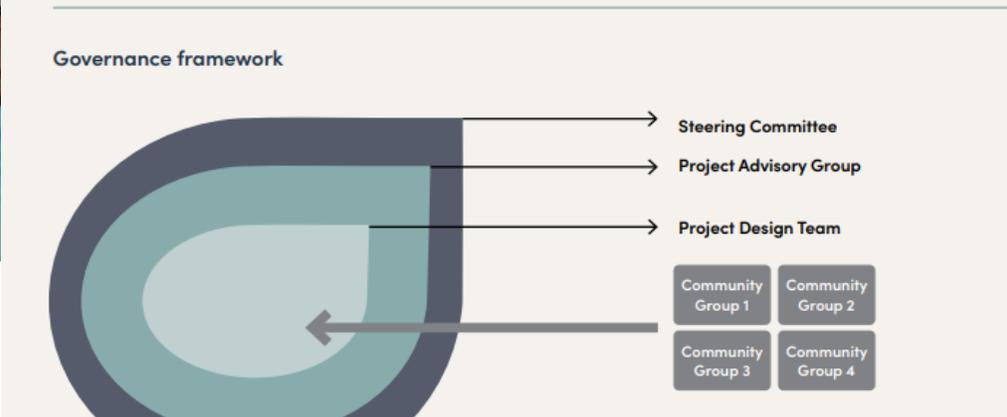


Diagram 5.1: Visual representation of partnered governance framework for UTAS Hypertension Project







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Thank you





Recommendation

“Importance of planning for societal impact from the outset to drive the change at an institutional scale.”