

Demonstrating and Amplifying Impact beyond Bibliometrics (Room 0.47)

Speakers:

Jack Spaapen (Chair)

Ursula Stricker

Andy Tattersall

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Demonstrating and Amplifying Impact beyond Bibliometrics

Jack Spaapen (Chair)

*Vice Chair, COST Action ENRESSH, The
Netherlands*

Jack Spaapen

AESIS Impact Conference 2023

Cardiff 18 – 20 October

Demonstrating and Amplifying Impact beyond Bibliometrics

How to demonstrate impact through economic and societal narratives and how can it be used to strengthen impact?

Jack Spaapen (*Chair*) Vice Chair, COST Action ENRESSH, The Netherlands

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Heidelberg University, Germany

Andy Tattersall Information Specialist and Research
Communications Trainer, University of Sheffield, United Kingdom

Tasha Calvert Head of Evaluation Team, Economic and Social
Research Council, United Kingdom

Goal of this session

- Focus on strengthening societal impact and how to demonstrate impact through economic and societal narratives
- To have a good interaction between different expertises and perspectives, looking at assessment methods and impact pathways
- Questions and discussion after each talk
- Final discussion, focus on one recommendation

Major 'Impact' Developments

- Changing context for academic researchers
 - *Growing demand from society and policy*
 - *Focus on MIT research*
- Responses from the academic world
 - *New challenges for academia, exp: Erasmus plus – TD oriented*
 - *Methods to evaluate 'research in context', Theory of Change*
- National / Institutional systems for impact evaluation
 - UK REF impact case studies, Netherlands SEP productive interactions*

Policy makers view

‘Publish or perish’ and metrics have led us into a blind alley. Let’s start recognizing the full breadth of value created by researchers.

Marc Schiltz, President of Science Europe

I believe in a research culture that recognises a diversity of contributions to science and society; that celebrates high quality and impactful research; and that values sharing, collaboration, integrity and engagement with society, transmitting knowledge from generation to generation.

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth

It is now time to go beyond existing declarations and define clearly what we want for the future of research assessment. Universities, researchers and all stakeholders need to choose how they want to be assessed and need to choose now.

Michael Murphy, President of the European University Association, EUA

Policy Goals at the Global and Local Level



Productive Interactions between Academia and Society

Develop collaboration outside academia, different formats
for the *in-between space*

business and industry; government at local, national
and international level; NGOs, consumer
organisations, general public

Engage in MIT research:

Input from many different disciplines, both from the
technical sciences and social science and
humanities; other expertise (legal, ethics, political,
economical, etc.) <https://www.shapeidtoolkit.eu/>

Improving societal impact in the Netherlands

- **Top Sector Policy:** Stimulating collaboration in the golden triangle between science, industry, policy/society: Energy, high tech, water, agriculture and food, creative industry, ...
- **National Science Agenda:** combining forces, strategic choices
- **KIC** Knowledge and Innovation Agreement, mission oriented, societal impact
- **NGF** National Growth Fund, 20 Bn, 4th round running, 'earning power' is the keyword

Assessing societal impact in the Netherlands

Table E1: Categories of evidence for the quality domains of research quality and relevance to society

		Quality domains	
		Research quality	Relevance to society
Assessment dimensions	Demonstrable products	1. Research products for peers	4. Research products for societal target groups
	Demonstrable use of products	2. Use of research products by peers	5. Use of research products by societal target groups
	Demonstrable marks of recognition	3. Marks of recognition from peers	6. Marks of recognition by societal target groups

SEP_2021-2027

The World in 2050: 9,8 Bn people



Demonstrating and Amplifying Impact beyond Bibliometrics

Ursula Stricker

Project Manager, hei_INNOVATION Heidelberg

University, Germany

Heidelberg University

From “Universitas” to the Comprehensive University of the Future

hei
INNOVATION



UNIVERSITÄT
HEIDELBERG
ZUKUNFT
SEIT 1386

- Oldest university in Germany (founded in 1386)
- Research university of international reputation
- Comprehensive university with a broad spectrum of subjects
- Three Pillars: Research / Study / Transfer
- hei_INNOVATION since 2019



How do you measure transfer and impact???

© maeching | stock.adobe.com

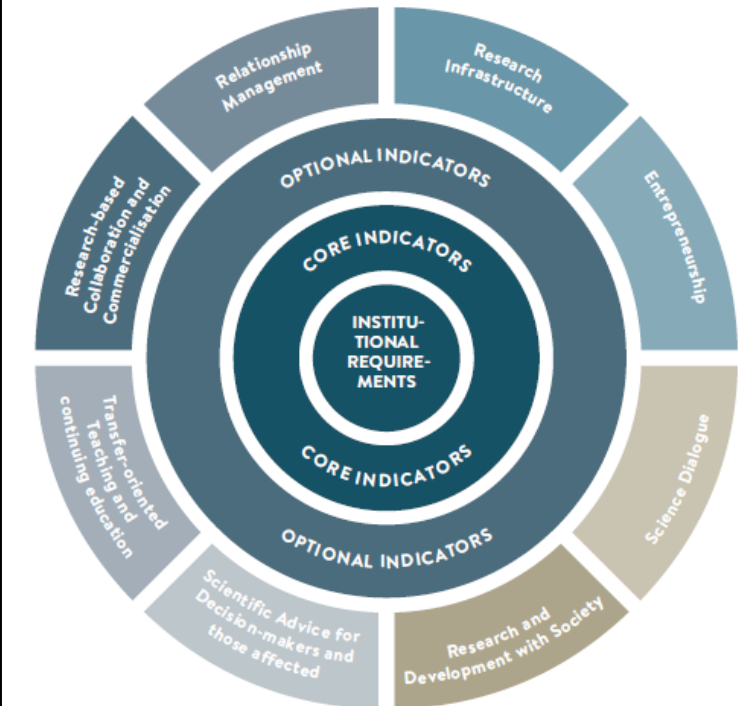


Transfer Barometer Stifterverband für die Deutsche Wissenschaft e.V.

- Development of a transfer indicator
 - Five universities and six Helmholtz Centres
 - Since October 2020
 - Heidelberg University since January 2023
- Stifterverband as institution
 - 3,500 companies, foundations, scientific organisations, private individuals
 - 33.6 million euros flow into the Stifterverband's initiatives and programmes on average each year

FIGURE 2: CORE AND OPTIONAL INDICATORS

Indicators for a broader understanding of transfer



Source: own elaboration

Transfer Barometer Framework

- 8 transfer fields

1. Research Infrastructure
2. Research-based Collaboration and Commercialisation
3. Entrepreneurship
4. Transfer-oriented Teaching and Continuing Education
5. Scientific Advice for Decision-makers and those affected
6. Research and Development with Society
7. Science Dialogue
8. Relationship Management



Survey within the administration



Online-Survey in all faculties and
institutes – Autumn 2023

Transfer Barometer at Heidelberg University

FIGURE 1: TRANSFER CLASSIFICATION

Conceptual framework for a broad understanding of transfer



Source: own elaboration

Aims

- Fundamental inventory
- Strengths and weaknesses of the university in the area of transfer
- Which support services should the university set up and expand?
- What potentials can be developed from the different departments?



STRATEGY

Examples of Knowledge Transfer

Townhall project - giving a voice to family carers of people with dementia

- An analogue or digital town hall meeting lasting approximately 3 hours with 16 municipalities across Germany
- Family carers of people with dementia entered into an exchange with various actors from municipality

Changes in the municipality

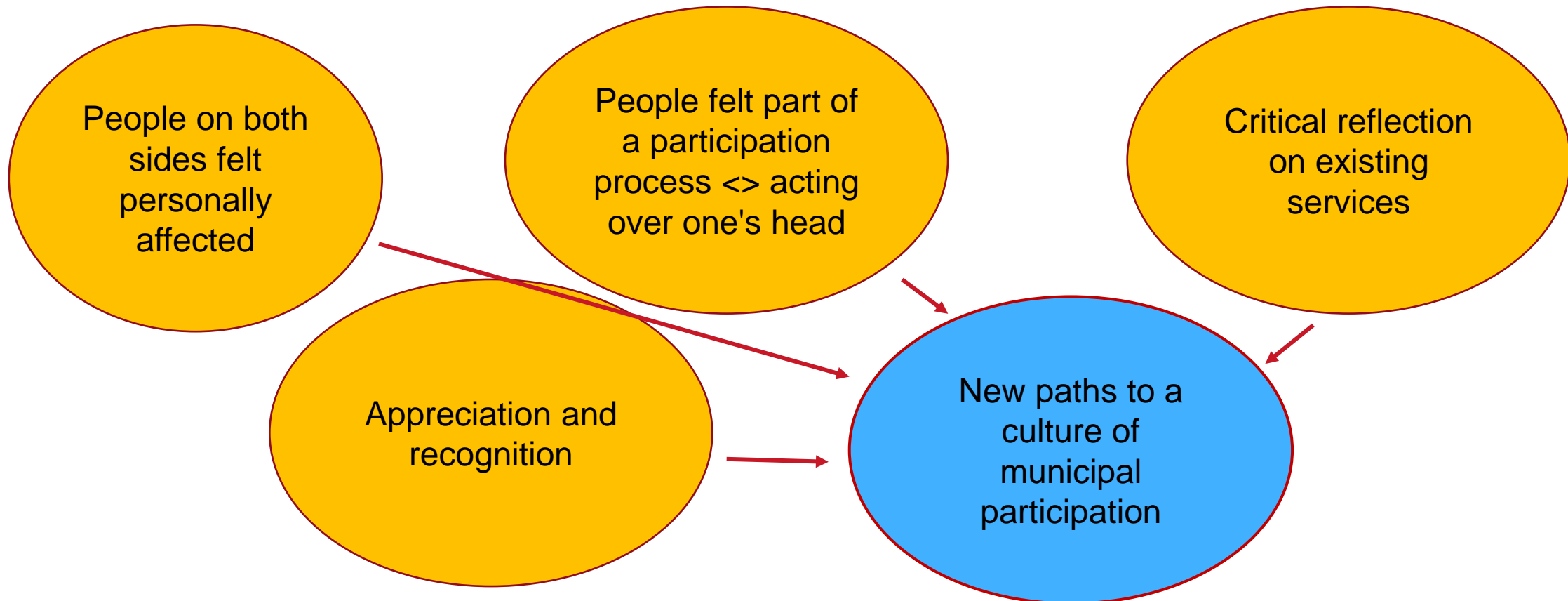
- Optimisation of existing information channels
- Promotion of networking processes and participation through central coordination
- Expansion of easement and leisure facilities
- Strengthening the voluntary work and caring communities
- Promotion of awareness-raising processes in the society

Presentation of results at Altes Frauenbad Heidelberg, 23th September 2022



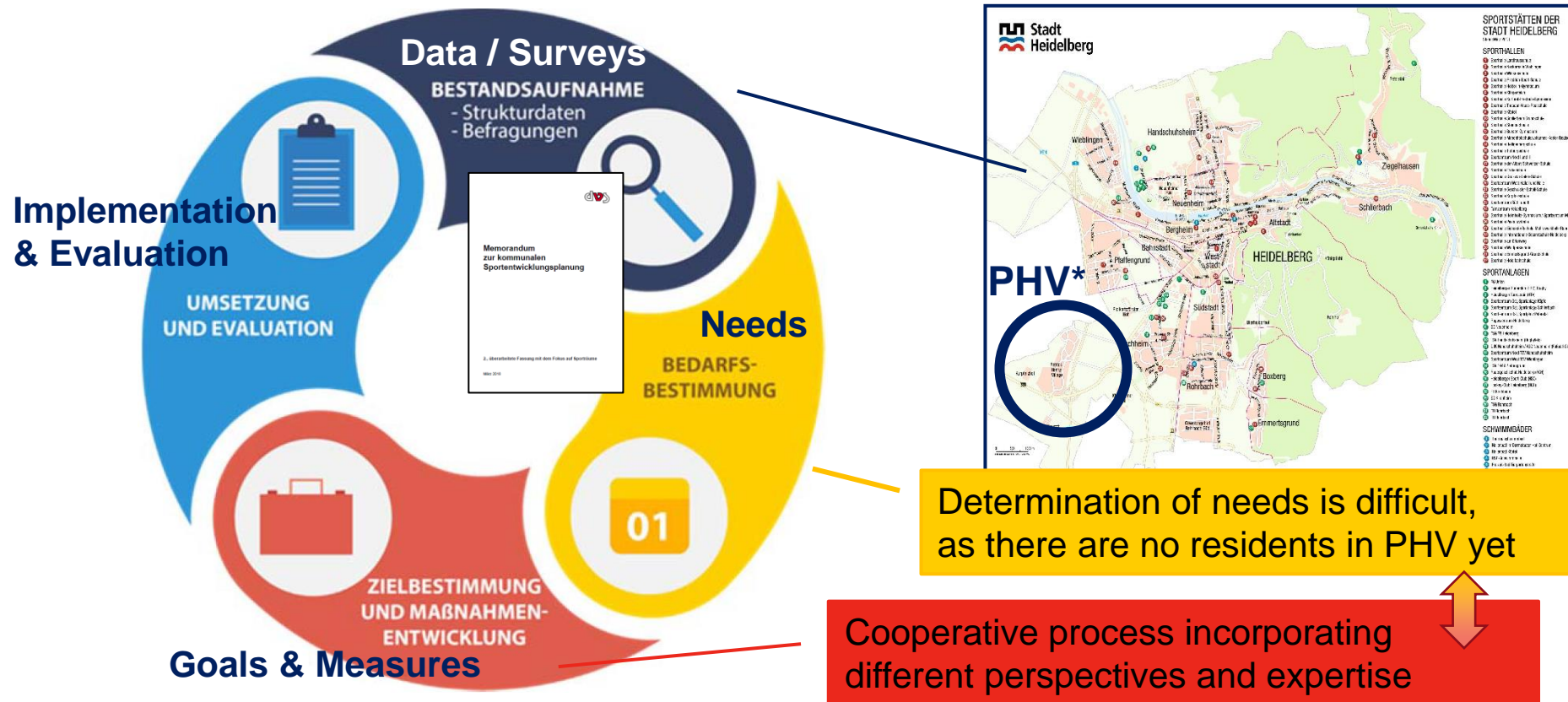
Examples of Knowledge Transfer

Townhall project - giving a voice to family carers of people with dementia



Examples of Knowledge Transfer

Sports Development Planning Heidelberg (Focus on PHV)



*PHV: Patrick-Henry-Village: conversion area (US-Army), 115 ha, 10.000 future residents, IBA Project „PHVision“

Examples of Knowledge Transfer

Sports Development Planning Heidelberg (Focus on PHV)



Statements To Discuss

- Indicators are nice – indicators do not raise everything
- The indicator set of the Transfer Barometer can only provide a big picture
- Does “Output” help in Demonstrating and Amplifying Impact beyond Bibliometrics?
- Social impact begins when ...

Demonstrating and Amplifying Impact beyond Bibliometrics

Andy Tattersall

Information Specialist and Research Communications Trainer,

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University of
Sheffield

CAN ARTIFICIAL INTELLIGENCE HELP GENERATE IMPACT?

@ANDY_TATTERSALL

BARRIERS TO IMPACT



A pyramid diagram with four levels, representing barriers to impact. The pyramid is white and centered on a background that is blue on the left and dark blue on the right. The levels, from top to bottom, are labeled: Time, finances, confidence, and knowledge. The pyramid is divided into four horizontal sections by three black lines.

Time

finances

confidence

knowledge



Write a jargon free, plain English 10 point plan for generating societal impact from their published research for humanities researchers



View other drafts



10-point plan for generating societal impact from published research for humanities researchers

1. **Identify your target audience.** Who do you want to reach with your research? It could be policymakers, community groups, businesses, or the general public. Once you know your audience, you can tailor your messaging and dissemination strategies accordingly.
2. **Define your impact goals.** What do you want to achieve with your research? Do you want to inform policy, change attitudes, or inspire action? Once you know your impact goals, you can develop a plan to achieve them.
3. **Engage your target audience early and often.** Don't wait until your research is published to start engaging with your target audience. Get involved in public debates, give talks to community groups, and write for mainstream media outlets. The more people who know about your research and understand its implications, the more likely it is to have an impact.
4. **Collaborate with other stakeholders.** Don't try to go it alone. Collaborate with other researchers, policymakers, and community groups to amplify your impact. By working together, you can reach a wider audience and have a greater impact on society.
5. **Use plain language and make your research accessible.** Avoid jargon and technical language that your target audience may not understand. Instead, use clear and concise language to explain your research and its implications. You may also want to consider creating visual aids, such as infographics and videos, to make your research more accessible.
6. **Tell stories.** People are more likely to be engaged by your research if you tell stories about how it is impacting real people. Share case studies, testimonials, and personal stories to illustrate the impact of your work.
7. **Use social media.** Social media is a powerful tool for reaching a large audience and sharing your research. Create social media accounts for your research project and use them to share news, updates, and blog posts about your work. You can also use social media to engage with your target



Can you expand on points 6 and 7, in particular co-creation, finding partners, connecting to relevant audiences and debates

When looking for partners to collaborate with, it is important to consider the following factors:

- What skills and expertise do the potential partners have?
- What resources do they have access to?
- What are their motivations for collaborating with you?
- Do you share the same values and goals?

Connecting to relevant audiences and debates

Once you have identified your target audience, you need to find ways to connect with them and share your research. This may involve attending conferences and workshops, writing blog posts and articles, giving presentations, or participating in social media discussions.

It is also important to connect with relevant debates and conversations that are happening in society. This will help you to ensure that your research is relevant and timely. You can find relevant debates and conversations by following news and current events, attending conferences and workshops, and reading academic journals and books.

Here are some specific examples of how humanities researchers can co-create, find partners, and connect to relevant audiences and debates:

- A historian who is studying the history of climate change could co-create a research project with a climate scientist and a community organizer to develop recommendations for adapting to the impacts of climate change.
- A philosopher who is working on a theory of social justice could partner with a human rights activist to develop a training program on human rights for policymakers.
- A literary scholar who is studying the work of a marginalized author could connect with a book club or a literary festival to host a reading and discussion of the author's work.

By co-creating, finding partners, and connecting to relevant audiences and debates, humanities researchers can increase their chances of generating societal impact from their work.

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Outline

[Abstract](#)[Keywords](#)[Introduction](#)[Background](#)[What can we learn from the role of LRFs during t...](#)[Rethinking local resilience for extreme heat events](#)[Authors statements](#)[References](#)[Show full outline](#) [Cited by \(1\)](#)**Public Health**

Volume 218, May 2023, Pages 146-148



Themed Paper – Short Communication

Rethinking local resilience for extreme heat events

[John George Richmond](#)^a , [Rowena Hill](#)^b[Show more](#) [+](#) [Add to Mendeley](#) [🔗 Share](#) [📄 Cite](#)<https://doi.org/10.1016/j.puhe.2023.03.005> [Get rights and content](#) Under a Creative Commons [license](#) [open access](#)

Abstract



FOR IMMEDIATE RELEASE

Researchers from The Sheffield Centre for Health and Related Research at The University of Sheffield have shared important findings on how we can protect our communities from extreme heat. Dr. John Richmond, an expert in the field, highlights the critical role of local communities in ensuring everyone's safety during heatwaves.

Dr. Richmond emphasizes, "Harnessing shared situational awareness from a local community level is critical to ensure targeted public health interventions for extreme heat reach their intended audience, the most vulnerable people in society. The structure provided by a local resilience forum, due to their multi-agency nature, offers a shared understanding of need in their local communities. Such information is critical to ensure messaging about heat risks and available resources are tailored to reach specific at-risk groups within their communities."

As England faces hotter summers, with temperatures even reaching above 40°C in some places, there's growing concern for our health. In 2022, there were 3,271 more deaths than usual during the hot months, reflecting a six percent increase. This is a serious issue that demands attention.

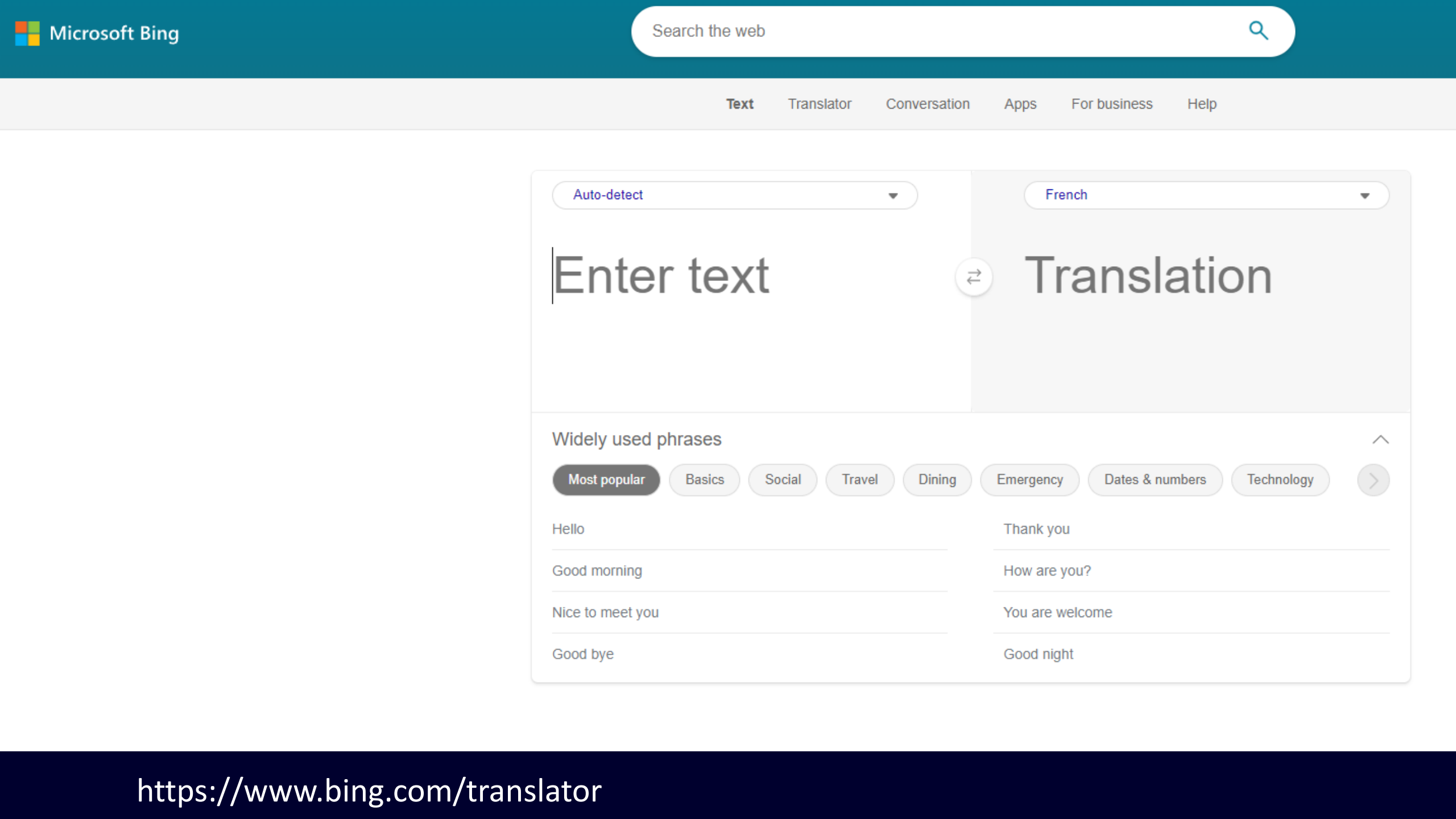
Local Resilience Forums (LRFs) are groups that bring together different agencies to help communities during crises. They understand local needs and help us understand the risks of extreme heat.

During the COVID-19 pandemic, LRFs played a crucial role in assisting communities. They

You only get out what you put in

- Avoid jargon
- Generate the output so it can be read by a typical 14-year-old
- Refrain from sensational language (world-leading, ground-breaking)
- Remember the language you are using (US/UK spellings)
- Limit sentence lengths
- Consider syllable use
- Add quotes
- Include contact details
- If in doubt, share for peer review

What you get is not the finished article



Text

Translator

Conversation

Apps

For business

Help

Auto-detect

French

Enter text



Translation

Widely used phrases



Most popular

Basics

Social

Travel

Dining

Emergency

Dates & numbers

Technology



Hello

Good morning

Nice to meet you

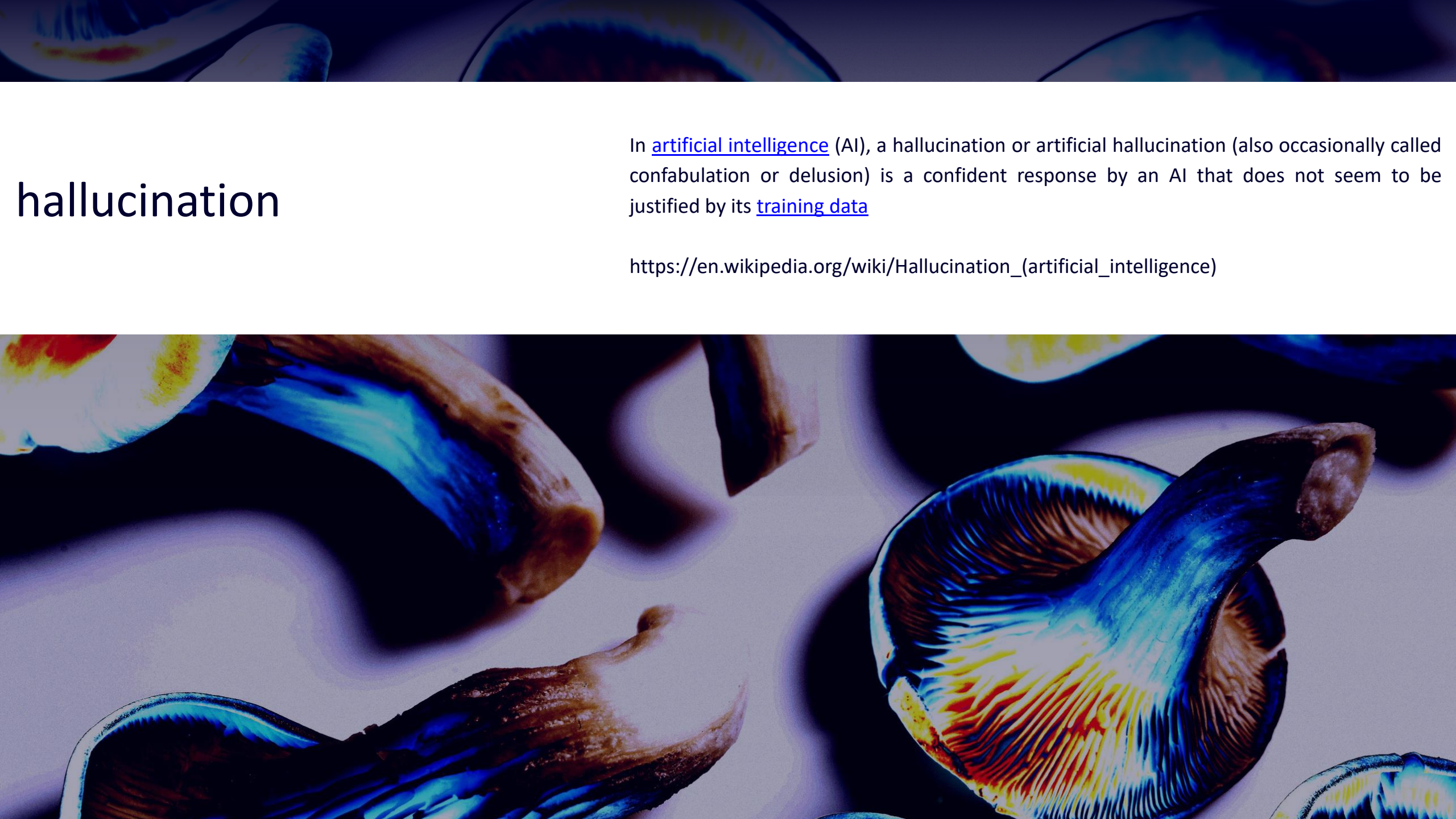
Good bye

Thank you

How are you?

You are welcome

Good night



hallucination

In [artificial intelligence](https://en.wikipedia.org/wiki/Artificial_intelligence) (AI), a hallucination or artificial hallucination (also occasionally called confabulation or delusion) is a confident response by an AI that does not seem to be justified by its [training data](https://en.wikipedia.org/wiki/Training_data)

[https://en.wikipedia.org/wiki/Hallucination_\(artificial_intelligence\)](https://en.wikipedia.org/wiki/Hallucination_(artificial_intelligence))

IMAGE GENERATION

Finding the right image

Some research areas are hard to capture in the form of an image - Health economics

Not everything is as it seems

Areas of research such as clinical trials, are not always carried out by researchers in white lab coats holding test tubes

Creative Commons go only so far

Not everyone has access to a Getty Images account

Taking your own images can cost

Paying for actors, (the public/students) can cost money, accessing locations requires special permissions.. Photographic permission forms might be needed.

Generate a photo realistic image of an international conference with a white female academic presenting from a lectern on a stage to a large audience of adults facing her, with softly lit red lighting from above



<https://gencraft.com/>

In summary

AI can help disseminate research to wide and niche audiences
and potentially generate societal impact
(+ save time and money)

However...

- Human input crucial (no one knows your research better than you)
- Translations need further investigation
- Copyright (who owns what?)
- Hallucinations problematic



THANK YOU

@ANDY_TATTERSALL

Demonstrating and Amplifying Impact beyond Bibliometrics

Tasha Calvert

*Head of Evaluation Team, Economic and Social
Research Council, United Kingdom*



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and Social
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Demonstrating and Amplifying Impact beyond Bibliometrics



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Funder perspective

Demonstrating societal and economic impact:
Challenges and opportunities



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Introduction

What do we mean by impact?

“Demonstrable contribution that excellent research makes to society and the economy”.

Why are we interested in impact?

- To articulate the wide range of benefits and value of social science research and investment.
- To understand and learn from what works in generating impact.

We have evidence of impact

ESRC Celebrating Impact Prize

REF impact case studies

Evaluations

And we fund work to stimulate impact

Mission led calls

Impact Acceleration Accounts

Knowledge Exchange funding



Challenges

Articulating societal and economic impact more consistently and at aggregate across our portfolio...

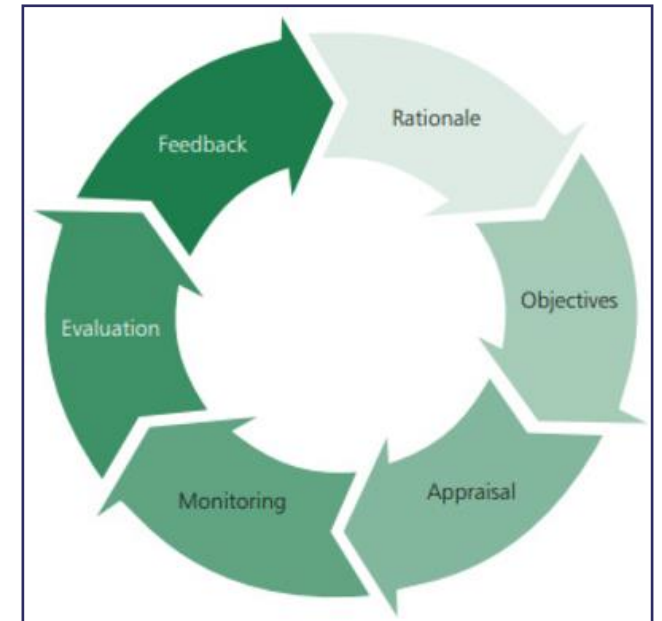
Is difficult because:

- Evidence is **fragmented**.
- Longer term impacts are often **indirect**, take a long time to appear and are **difficult to attribute**.
- Impacts from social science can be **difficult to quantify and monetize**.



Opportunities

1. Developing consistent **societal and economic impact indicators**.
2. Scoping methods for assessing **economic impact**.
3. Continue to embed high quality **monitoring and evaluation** at organisational and programme level.
 - Part of planning cycle
 - Theory of change approach
 - Impact and process evaluations.



Theory of Change

Rationale

Why are we doing this? What's the problem?

Objectives

What specific, measureable, achievable, realistic, timely goals have we set?

Inputs

What resources are used?
e.g. funding, skills, infrastructure



Activities

What will be done?
e.g. research, stakeholder



Outputs

What will be produced?
e.g. papers, events



Outcomes

What changed externally?
e.g. citation, policy change



Impact

Wider social/economic change?
e.g. increase in productivity

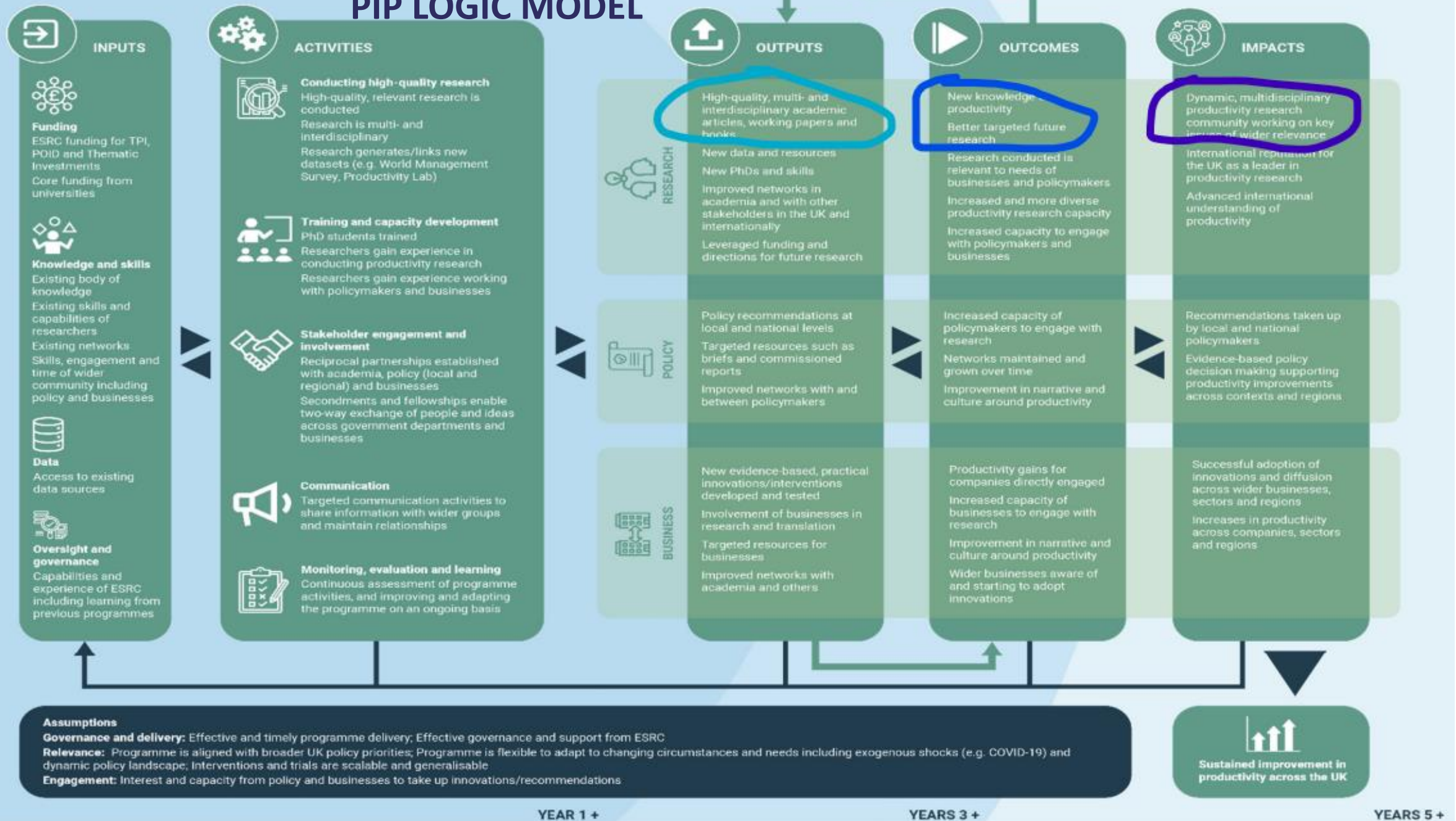
Assumptions

What testable assumptions have we made e.g. lack of research evidence

Enabling factors

What could support or hinder the activity? e.g. existing initiatives

PIP LOGIC MODEL



Concluding comments

Impacts from social science are varied and can often be indirect, meaning we need a variety of data and approaches to evidence the whole.

A challenge is to provide a coherent evidence narrative on the economic impact of social science.





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Questions?



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Thank you



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Recommendation

Parallel session: Demonstrating and Amplifying Impact beyond Bibliometrics (Room 0.47)

Recommendation: “Both indicators and AI can be used to help generate, translate & understand impact, but treat both with healthy cynicism.”