Research Impact: how to empower your University to deliver the King's experience

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Objectives and caveats

- Primer on 'research impact' and why it matters to you and your colleagues
- Introduce King's experience of supporting impact and some tool to help secure 'impact by design' and communicate impact

Caveats

- Impact is not for everyone
    - UK REF effectively says 'universities from your research activity over the past 20 years we expect 10% of it to lead to a social contirbuton'
    - It does not and should not 'threaten' blue skies, basic research, nor other disciplines such as in the arts and humanities
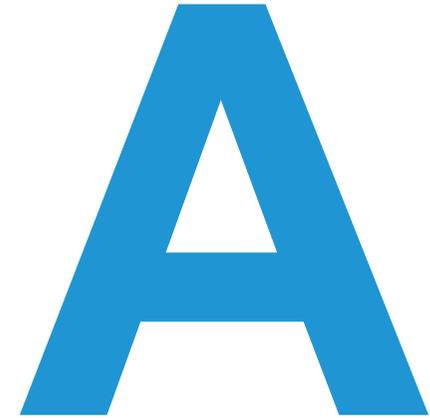
What is impact and why does it matter?

Why assess research impact?

Accountability – To taxpayers, donors, etc

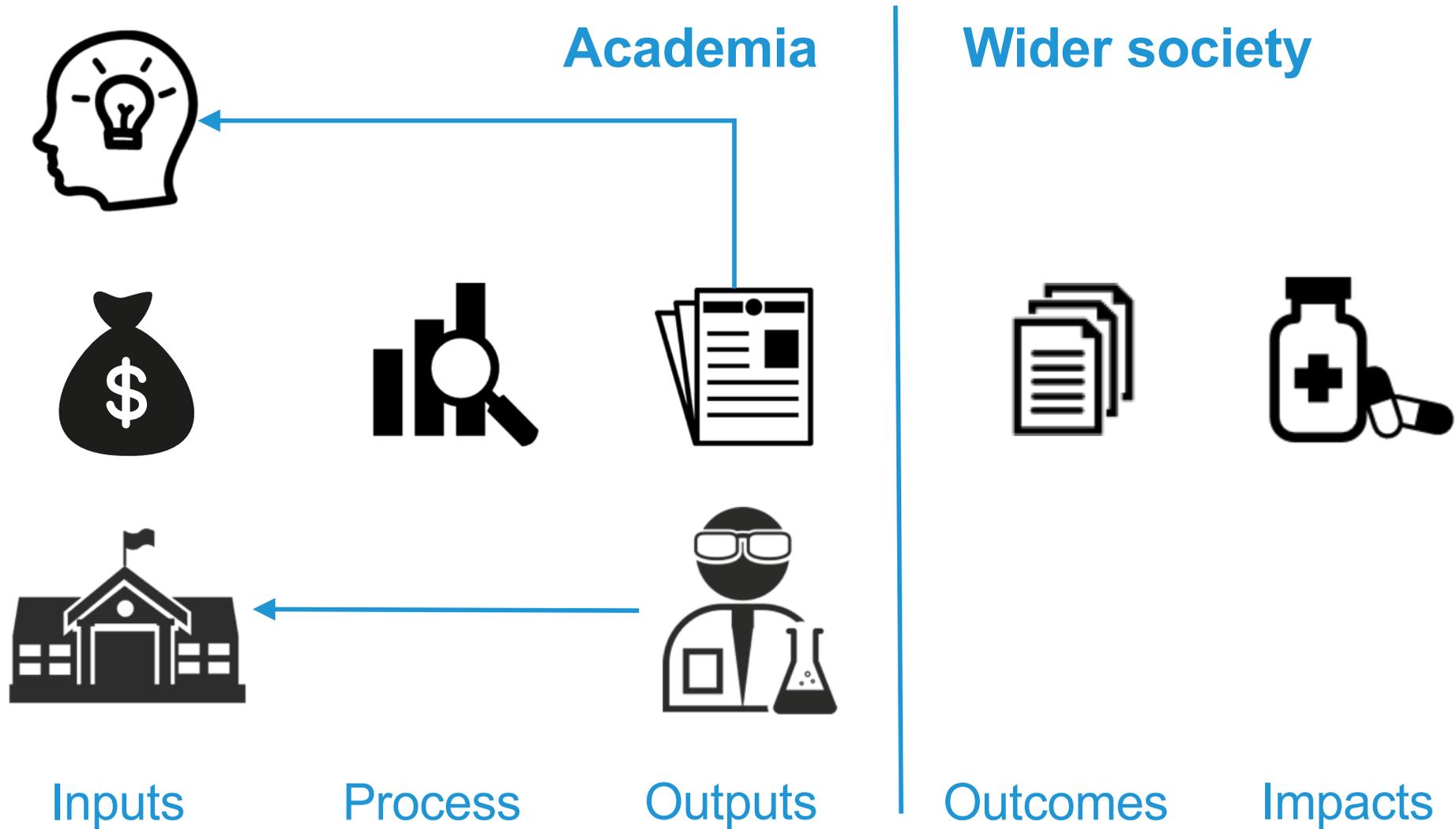**Advocacy** – 'Make the case' for research funding

Analysis – What works in research funding?

Allocation – What to fund (institution, field, people, etc)

Source: Morgan Jones and Grant, 2013

What do we mean by research impact?

Academia | **Wider society**

Inputs — Process — Outputs | Outcomes — Impacts

Impact is defined as…

"… an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond academia**"

"…is the demonstrable contribution that research makes to the economy, society, culture, national security, public policy or services, health, the environment, or quality of life, **beyond contributions to academia**"

Impact Assessment 1: UK Research Councils

- All RCUK funders require a Pathways to Impact Summary now, usually 2 sides

- Applicants set out who might benefit from the research and how (both academic and non-academic beneficiaries)

- RCUK funders are seeking a return for their investment: '*who benefits, and when*' is the governing principle when drafting your impact sections

Impact Assessment 2: UK REF

- REF is the Research Excellence Framework, succeeding the Research Assessment Exercise (RAE) which has assessed the quality of research in UK universities every 5 years since 1986

- For the first time REF assessed the impact of research

- Impact is defined as '*any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia*'

Quality of research outputs 65%	Impact of research 20%	Research environment 15%

Engagement & Impact Assessment 3: Australian ERA

- "Companion" to ERA
- Includes engagement metrics
- Case studies on *approach* to translating research into impact, less so the *actual* impact of research and associated research
- Tested in 10 2-digit FoR disciplines, interdisciplinary and Indigenous research
- Report on pilot outcomes late 2017
- Full assessment in 2018

Pilot assessment framework

King's College London

The Policy Institute at King's
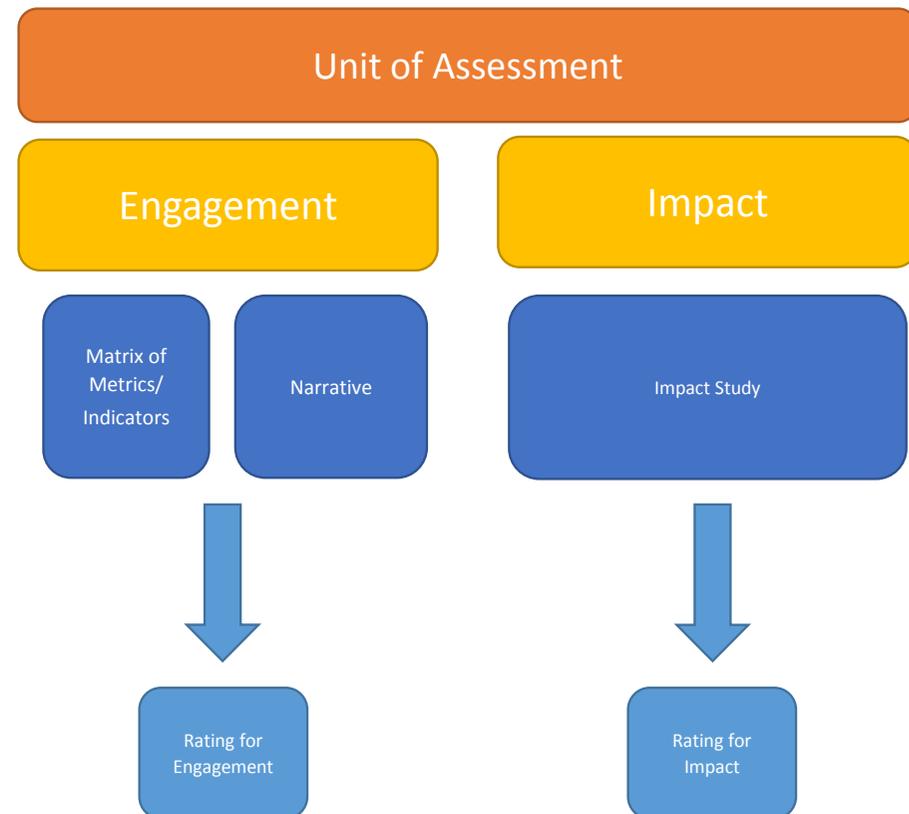
Supporting Impact at King's

Research Impact Strategy

- University Impact Strategy (one of 5 pillars of research strategy)
- Impact Institutes
- Research Impact Committee
- Dean for Research Impact
- Associate Deans for Research Impact for each faculty
- Impact and Engagement service
- 5 Dedicated Research Impact Managers
- 6 Dedicated Partnership Managers
- Impact accelerator funding
- Impact training
- Impact evaluation in PDRs and promotions
- Professors of Practice

Policy Institute

The Policy Institute at King's College London works to solve society's challenges with evidence and expertise.
We combine the rigour of academia with the agility of a consultancy and the connectedness of a think tank.
Our research draws on many disciplines and methods, making use of the skills, expertise and resources of not only the institute, but the university and its wider network too.

The Policy Institute works across six main research areas, with communications, impact and engagement an important connecting thread. Our research themes are:

- The value of evidence

- Defence and security policy

- Health systems and delivery

- Communities and opportunity

- Cities, growth and innovation

- Trust, facts and democracy

Commercialisation Institute

King's Commercialisation Institute (KCI) is different from a traditional university technology transfer office. We accelerate biomedical technologies so that they're validated and development-ready.

As life science industry experts, we understand how to identify projects with great commercial potential. We foster a vibrant entrepreneurial environment for investigators at King's College London and within the King's Health Partners Hospital Trusts.

Our aim is to help turn groundbreaking research into outstanding licensing opportunities or spin out companies to make the world a better place.

We turn projects into viable products.

- We foster an entrepreneurial environment for researchers at King's College London and within the King's Health Partners Hospital Trusts.
- Every year, our King's Health Accelerator fund awards up to £150,000 to a number of selected life science projects ready for development.
- We then bring these projects with potential to life, either as licensing opportunities or through external financing of new spin out companies.
- We aim to act as an engine for positive change: for society and our research community, and for our industry and investor partners.

King's Cultural Community

The Culture team is led by the needs of the cultural community and aims to support faculty and student priorities across research, education and service to deliver the ambitions set out in King's Vision 2029.

The Culture team includes sector specialists with expertise in collaborative education, research and innovation, public programming, partnerships, cultural engagement and cultural policy. A regular series of programmes, developed to support faculty and student needs, are available each year.

Supporting

The Culture team helps to join up, surface and support the cultural community and its activities, celebrating achievements and communicating success.
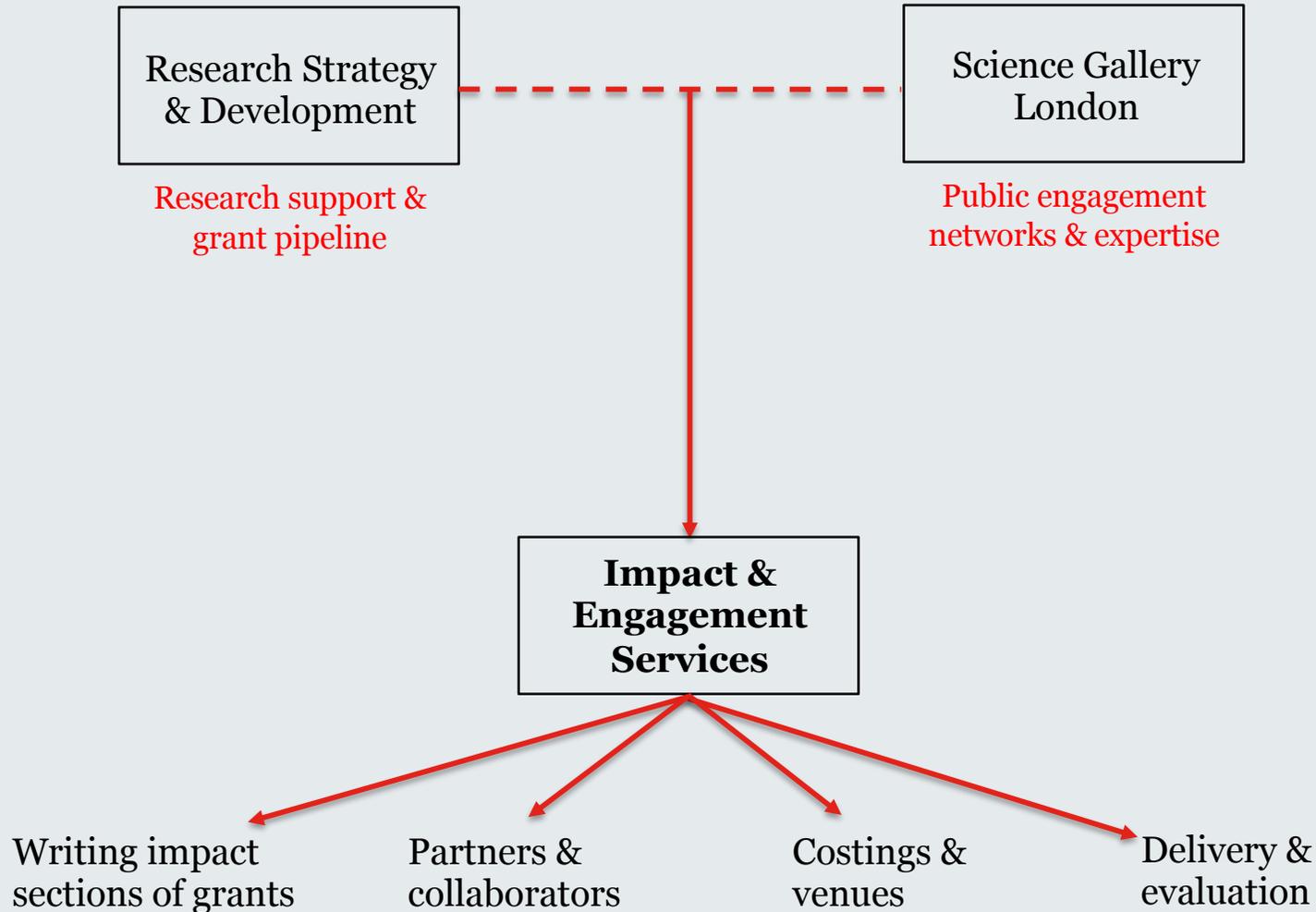
Strengthening

The Culture team aims to add value to the cultural community by brokering connections, convening collaborations, building capacity and matching curatorial and artistic input with the high quality of academic ideas.

Showcasing

The Culture team showcases the work of the cultural community and delivers a small number of flagship programmes that exemplify the community in action.

Impact & Engagement Services

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┌─────────────────────────┐                    ┌─────────────────────────┐
│   Research Strategy      │- - - - - - - - - - │    Science Gallery       │
│   & Development          │                    │       London             │
└─────────────────────────┘                    └─────────────────────────┘

  Research support &                              Public engagement
   grant pipeline                                 networks & expertise

                        ┌─────────────────────┐
                        │     Impact &         │
                        │   Engagement         │
                        │    Services          │
                        └─────────────────────┘

Writing impact      Partners &         Costings &        Delivery &
sections of grants  collaborators      venues            evaluation
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Achievements to date

£3.4m
in grant-related Public Engagement funding applied for

247
researchers supported

33%
success rate*

*quarters for which we have all decisions

£1.9m
awarded for engagement with 42 proposals

Advisors to
263
project ideas

Contributed to
154
submissions

University Impact Rankings 2019

The *Times Higher Education* University Impact Rankings are the only global performance tables that assess universities against the United Nations' Sustainable Development Goals. We use carefully calibrated indicators to provide comprehensive and balanced comparisons across three broad areas: research, outreach, and stewardship.

This first edition includes more than 450 universities from 76 countries.

Read more ...

IN PARTNERSHIP WITH
ELSEVIER
How to get your uni ranked

1	University of Auckland ♀ New Zealand **Explore**	3 · 89.1	5 · 77.6	11 · 83.8	17 · 97.0 ❶ SDG Descriptions	97.2
2	McMaster University ♀ Canada **Explore**	8 · 84.4	3 · 89.0	11 · 82.2	17 · 91.8 ❶ SDG Descriptions	96.6
=3	University of British Columbia ♀ Canada **Explore**	13 · 96.9	11 · 88.1	3 · 79.8	17 · 94.7 ❶ SDG Descriptions	96.2
=3	University of Manchester ♀ United Kingdom	3 · 85.6	11 · 85.6	12 · 81.4	17 · 97.0 ❶ SDG Descriptions	96.2
5	King's College London ♀ United Kingdom **Explore**	3 · 86.9	5 · 75.9	12 · 80.2	17 · 93.9 ❶ SDG Descriptions	95.1

What impact are you having

http://impact.ref.ac.uk/CaseStudies/

Impact story 1: 'Jesus was married'

On 18 September 2012 a newly-discovered Coptic gospel fragment, purportedly dating from the 4th century, was announced in Rome. It generated worldwide publicity: for in it, Jesus refers to 'my wife'.

Three days later, Professor Francis Watson posted a short paper online, in which he used a form of compositional analysis which he has pioneered to argue that the fragment is most probably a recent forgery.

Watson's paper was extensively read and reported, and widely regarded as conclusive. An imminent TV documentary on the fragment was promptly postponed indefinitely.

Watson's research transformed the way that this fragment was perceived by an international public. As such, it prevented a serious scholarly error from becoming lodged in the public consciousness.

It is an example of the power of a timely web-enabled intervention by a scholar in a fast-moving news story.

'The Case of the Forged Gospel Fragment', REF 2014 IMPACT CASE STUDY
http://impact.ref.ac.uk/CaseStudies/CaseStudy.aspx?Id=11837

Impact story 2: 'Platform for image-guided treatment of arrhythmia'

Atrial fibrillation (AF), a form of cardiac rhythm disturbance, significantly increases risk of stroke, heart failure and sudden death.

The concept of using pre-procedural 3D imaging to augment real-time intra-procedural imaging was first investigated by imaging researchers at KCL during the microscope-assisted guided interventions (MAGI) project that focused on guidance for neurosurgery [1]. In 2002, the approach was translated to cardiovascular applications when researchers at KCL developed technology that for the first time allowed the integration of pre-acquired MRI and real-time X-ray fluoroscopy images for guiding cardiovascular catheterisation procedures. This allowed either a live 2D projection X-ray image of the catheters or a 3D reconstruction of the catheters made from multiple X-ray images, to be overlaid with an anatomical model derived from previously acquired MRI in an accurate and robust way [2].
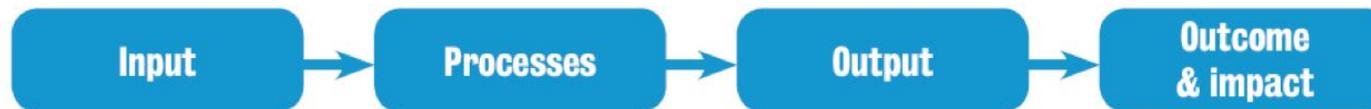
Working with Philips Healthcare the KCL researchers translated their research into "EP Navigator" a commercial, clinical product that integrates pre-acquired magnetic resonance and computer tomography images with real-time X-ray fluoroscopy. This enhances visualisation, thereby reducing procedure time and the patient's exposure to radiation. The EP Navigator is used in around 350 out of 2,000 centres worldwide that carry out ablation therapies for cardiac arrhythmias, despite strong competition.

'Platform for image-guided treatment of arrhythmia', REF 2014 IMPACT CASE STUDY
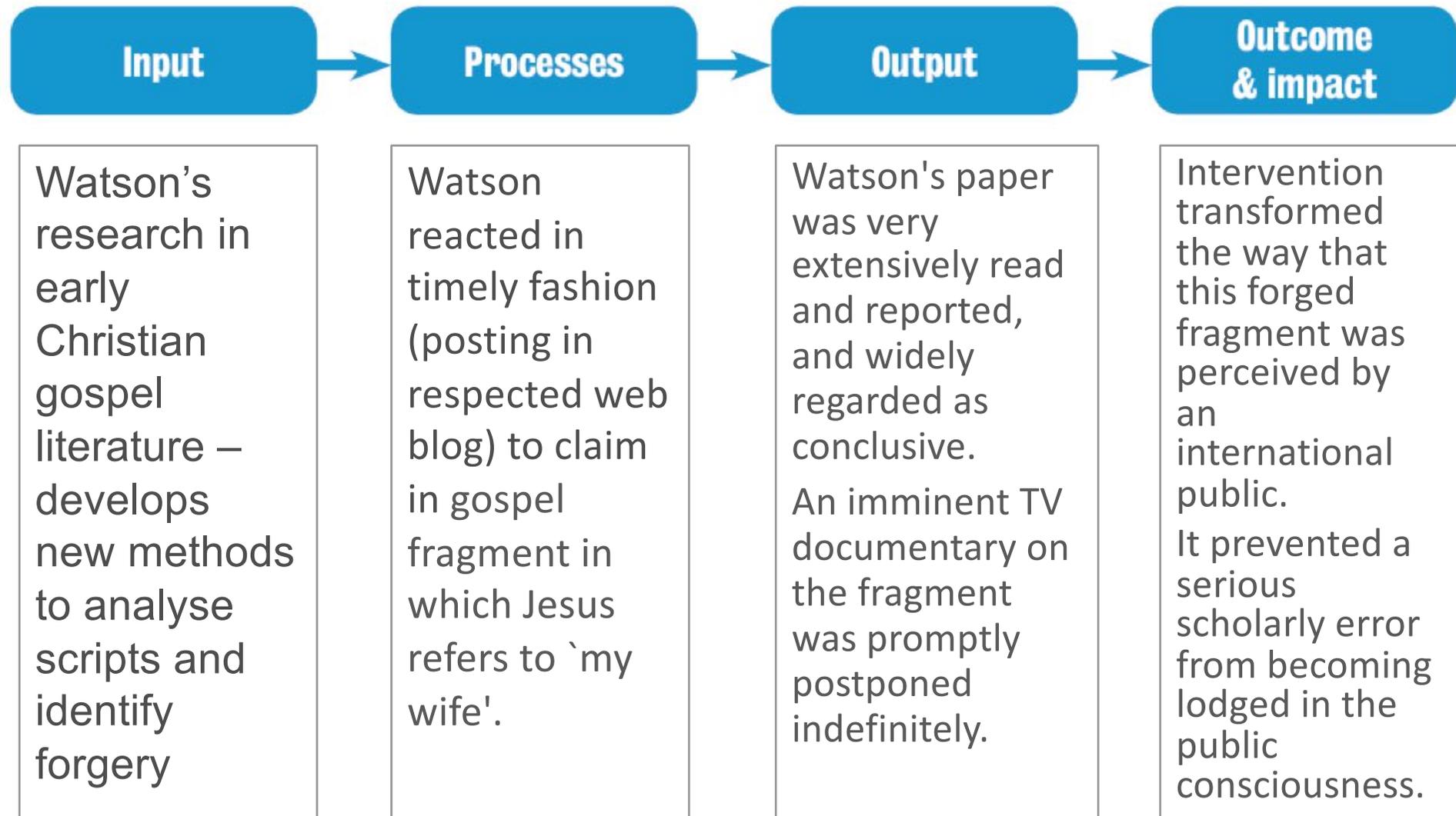https://impact.ref.ac.uk/casestudies/CaseStudy.aspx?Id=41232
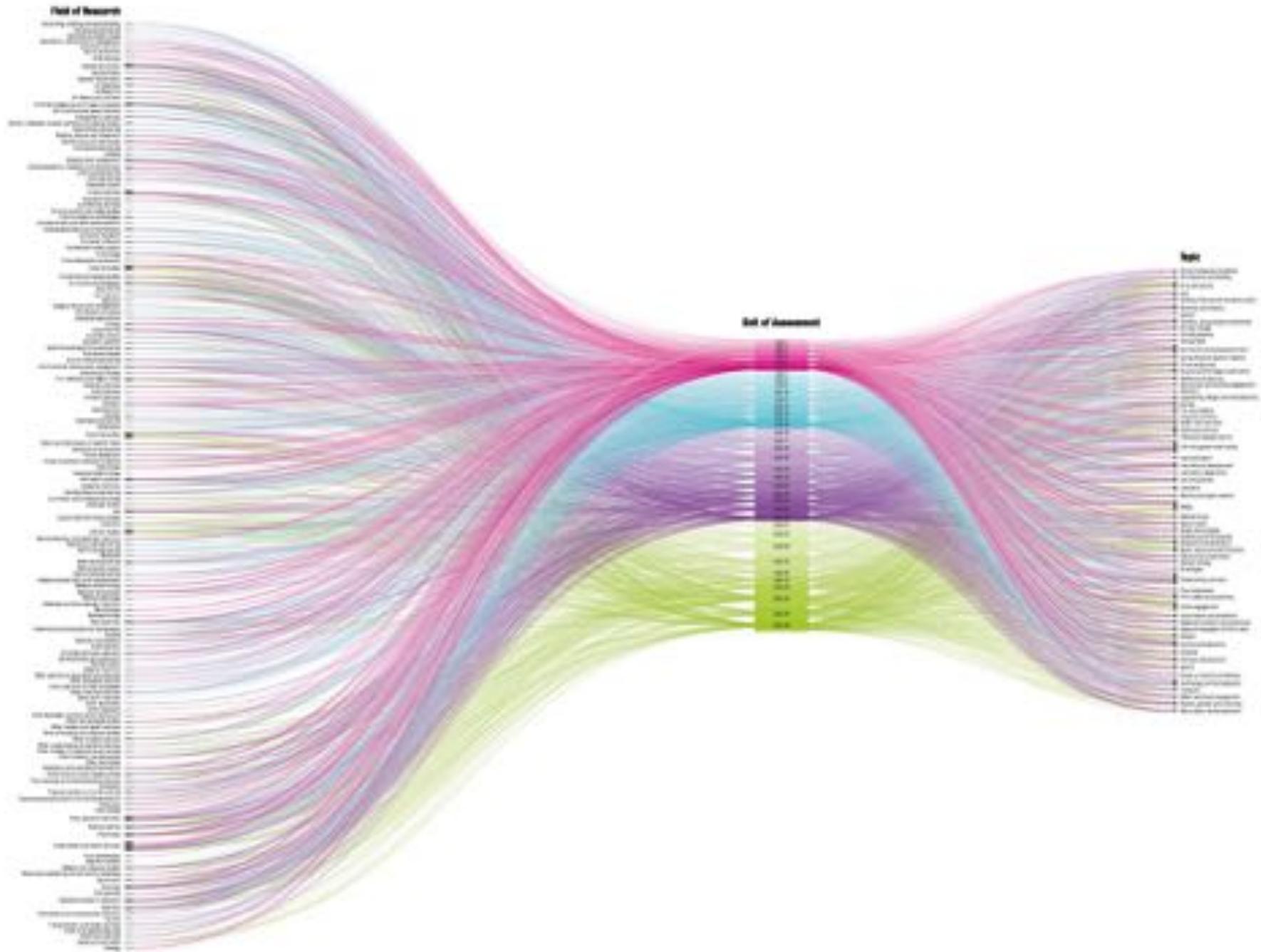
What is the change you are trying to achieve?

- Used to understand input-process-output relationships
- Useful in breaking down research programmes to understand where and how impact may have, or might, occur
- Useful in identifying 'contribution story' of the potential impact of your research

Input → Processes → Output → Outcome & impact

Impact story 1: 'Jesus was married'

Input	Processes	Output	Outcome & impact
Watson's research in early Christian gospel literature – develops new methods to analyse scripts and identify forgery	Watson reacted in timely fashion (posting in respected web blog) to claim in gospel fragment in which Jesus refers to `my wife'.	Watson's paper was very extensively read and reported, and widely regarded as conclusive. An imminent TV documentary on the fragment was promptly postponed indefinitely.	Intervention transformed the way that this forged fragment was perceived by an international public. It prevented a serious scholarly error from becoming lodged in the public consciousness.

Creating impact:
Trust, Timing and Translation

Assessment of impact story

	Jesus was married
Trust	Theologian with 30 years of experience, specialising in compositional analysis of ancient gospel literature. Worked at respected universities including Durham, Aberdeen and King's
Timing	Wrote online paper and blog within three days of original news story breaking.
Translation	Wrote online paper and blog (for non-specialists). Made number of TV appearances
Other comment	Serendipitous, ie could not anticipate impact. Example of an impact stopping something: 'it prevented serious scholarly error from becoming lodged in the public consciousness'

Impact needs to be designed into research

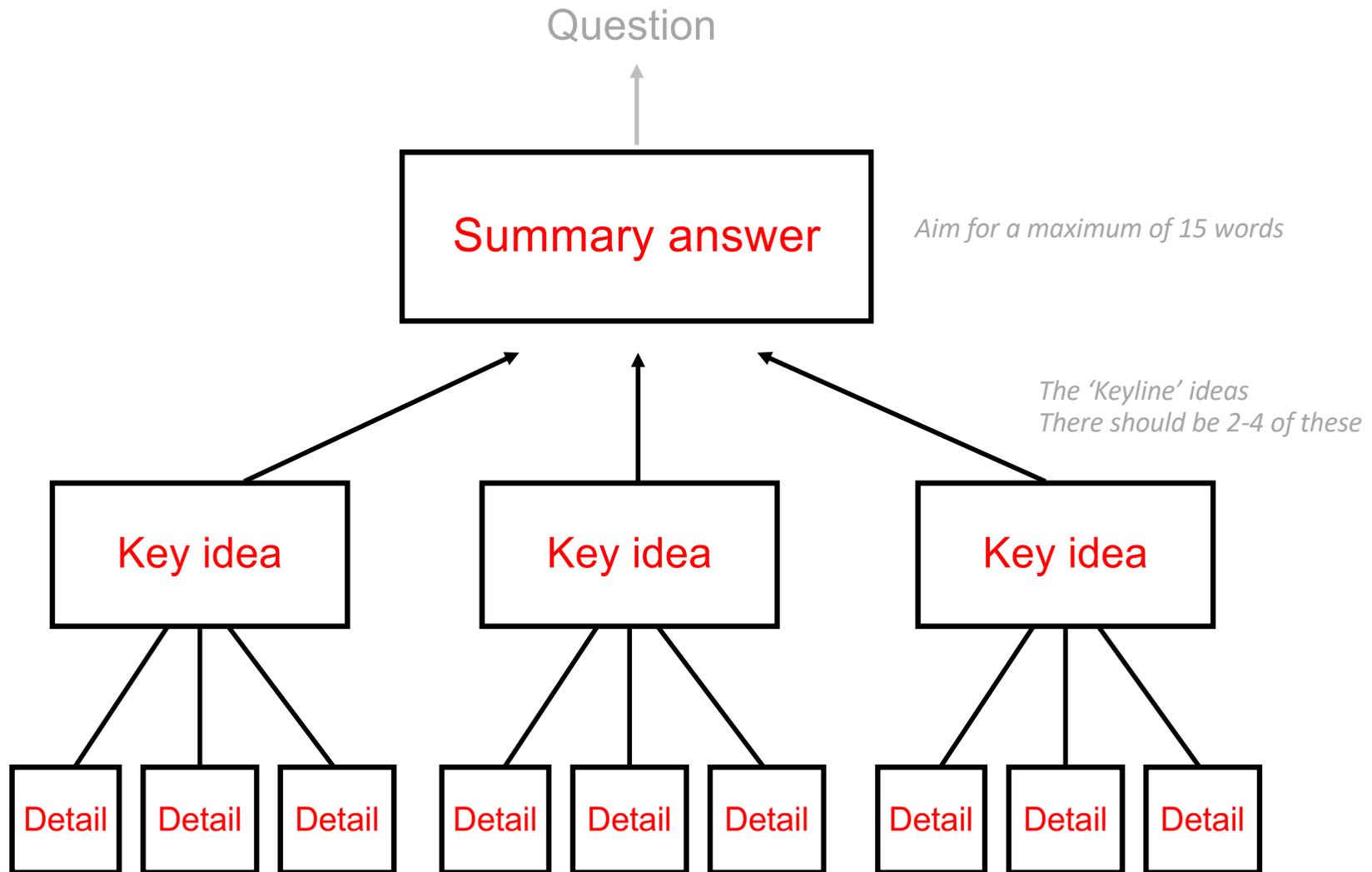| Context	Constituencies		Channels	Capture
Know your policy and practice environment	Establish and maintain 'communities of practice'	**Construct questions**	Understand and target barriers to and enablers of change	Know your sources of data for impact
Be strategic	Involve 'users' at all stages	**Communicate**	Involve intermediaries and knowledge brokers as translators and amplifiers	Capture any instance of a 'near' impact pragmatically

Trust • Timing • Translation

Communicating your findings

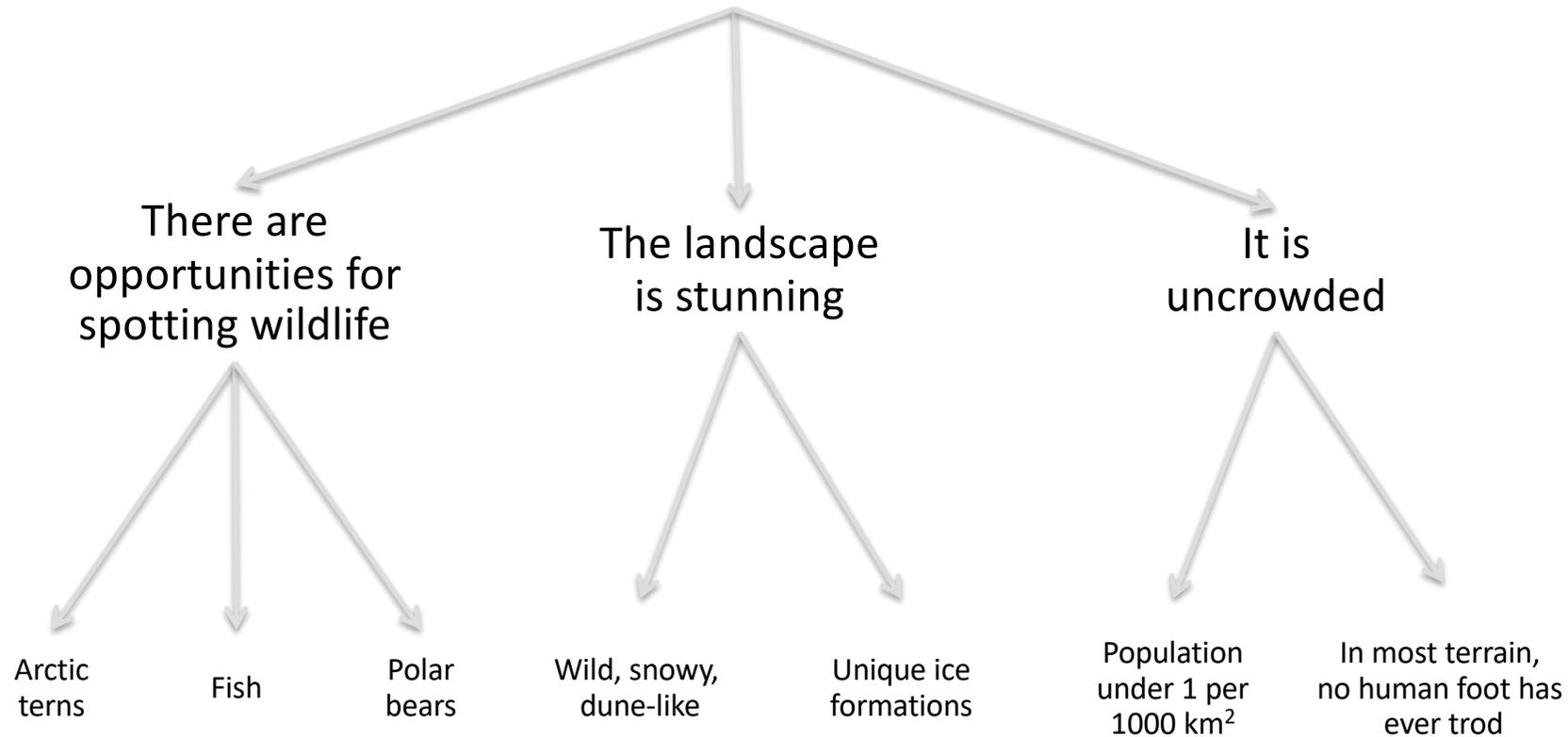# Use the '**Pyramid Principle**' to structure your ideas

Barbara Minto´s The Pyramid Principle
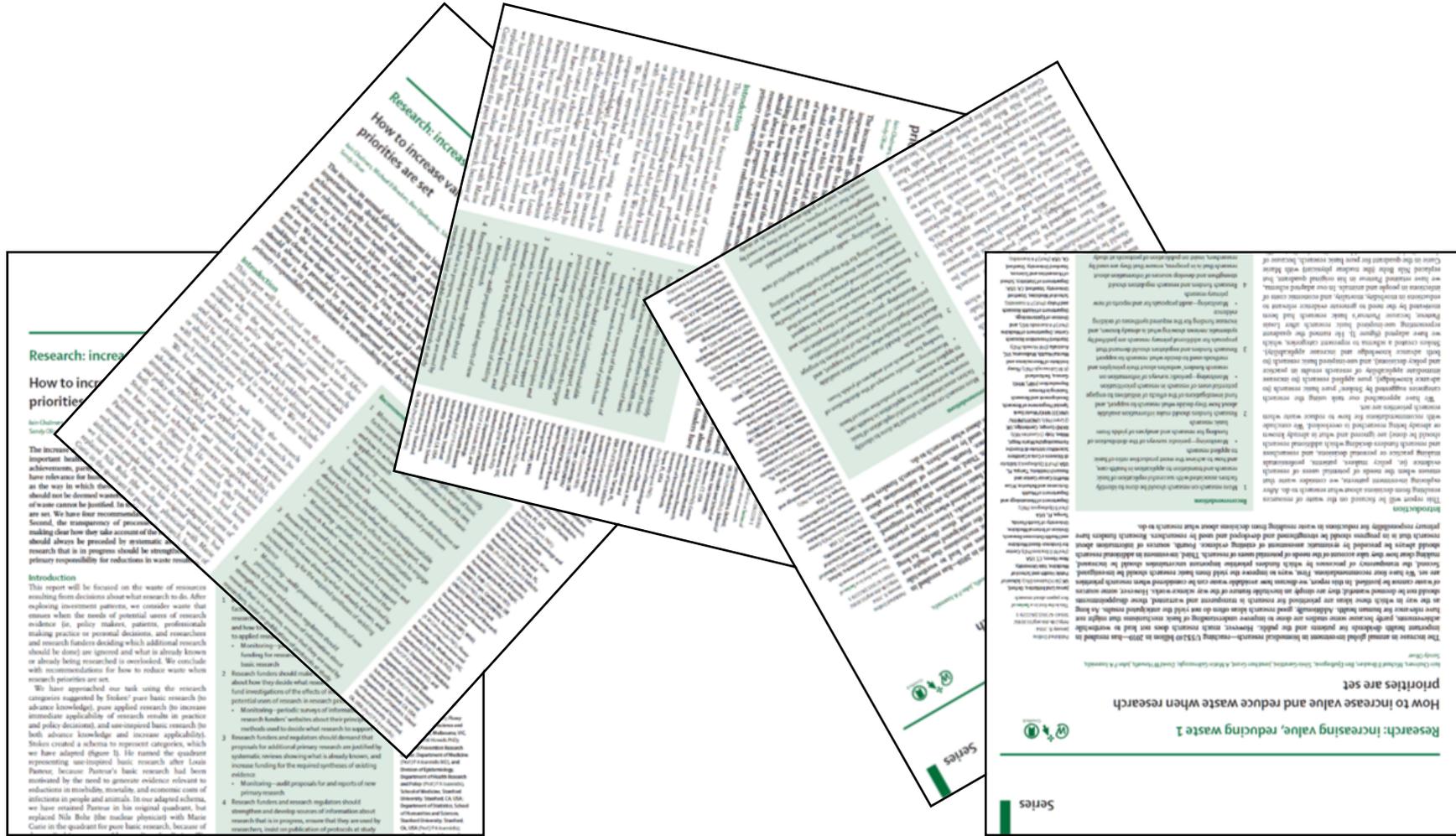
The thought pyramid: logical ordered arguments

Question

Summary answer

Aim for a maximum of 15 words

Key idea

Key idea

Key idea

*The 'Keyline' ideas
There should be 2-4 of these*

Detail | Detail | Detail | Detail | Detail | Detail | Detail | Detail | Detail

Where is a good place to go on holiday?

The North Pole is an attractive holiday destination

There are opportunities for spotting wildlife

The landscape is stunning

It is uncrowded

Arctic terns

Fish

Polar bears

Wild, snowy, dune-like

Unique ice formations

Population under 1 per 1000 km^2

In most terrain, no human foot has ever trod

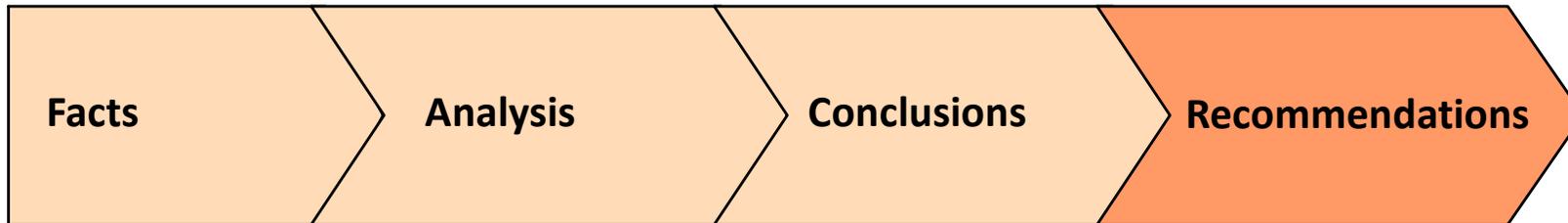# Turn your paper on its head!

From describing research to describing impact

For an academic audience

| Facts | Analysis | Conclusions | Recommendations |

For a non academic audience

| Impact in the real world | Recommendations | Conclusions | Analysis & Facts |
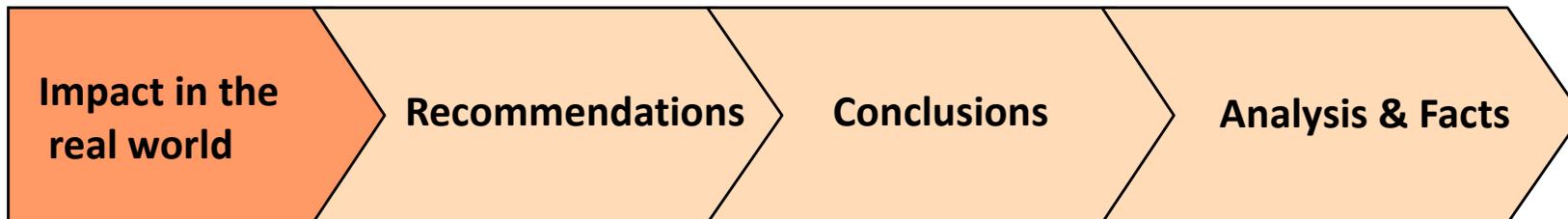
Telling the story

It was a dark and stormy night...
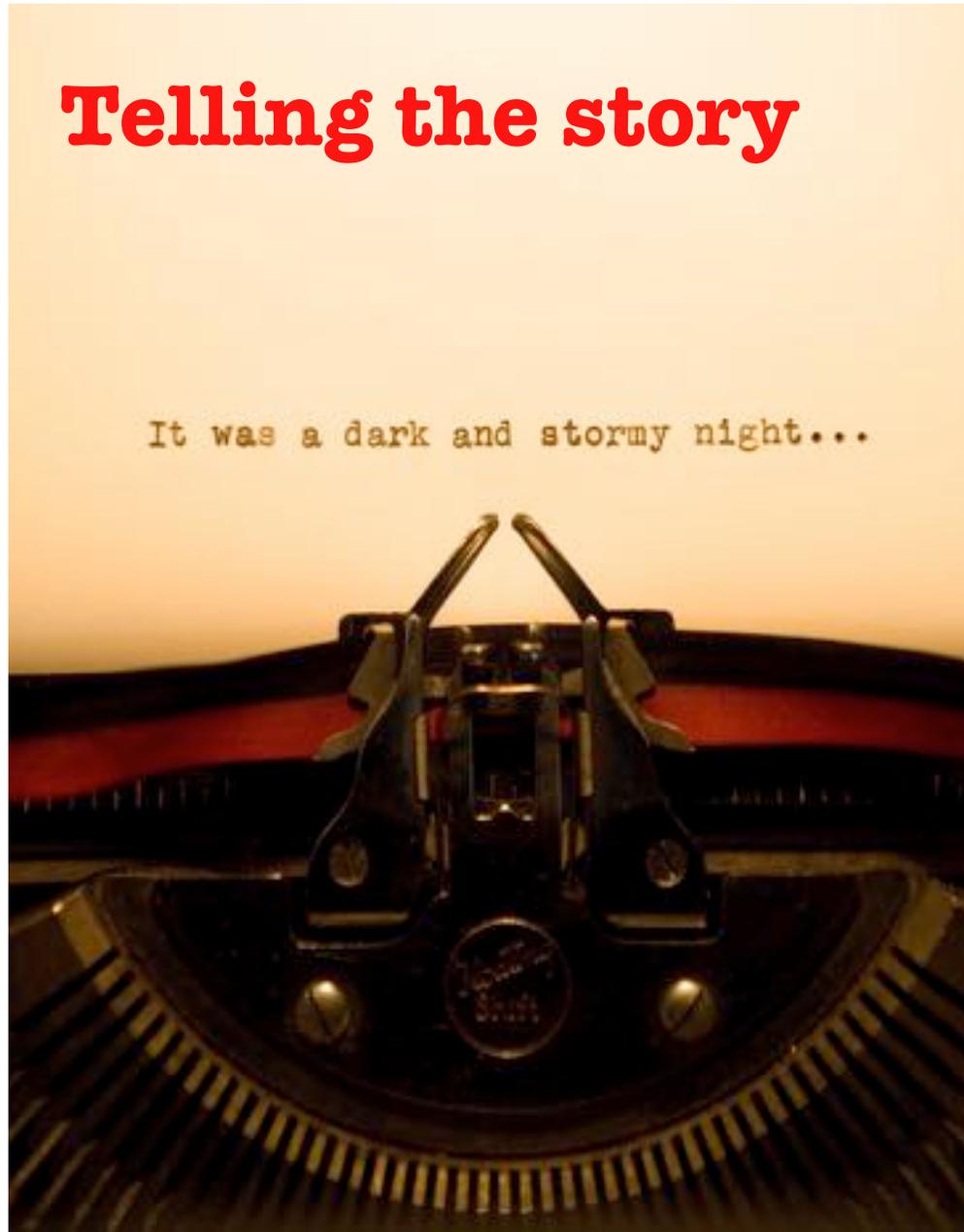
Telling the story: **three steps**

1. Get attention

2. Stimulate desire

3. Reinforce with reasons

$$2 + 3 = 5$$
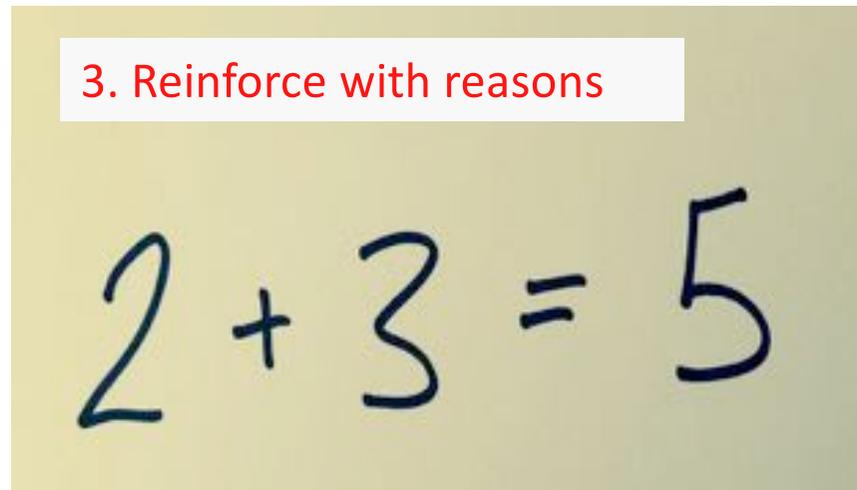
Telling the story: working on your style

Stephen Denning 'The Leader's Guide to Storytelling'

*"The queen died.
Then the king died."*

versus

*"The queen died suddenly
two weeks ago.
The king was heartbroken.
He lost his lust for life
and yesterday evening
he died too."*

See also: Fisher, Walter R. Human Communication as Narration: Toward a Philosophy of Reason, Value, and Action. Columbia: University of South Carolina Press, 1989.
Kahneman, Daniel, Paul Slovic, and Amos Tversky, eds. Judgment under uncertainty: Heuristics and biases. New York: Cambridge University Press, 1982.

King's College LONDON

Take home messages

- Impact is beyond the academic system

- Impact is here to stay

- Impact can be designed into your research

- Impact is not rocket science

Big thank you to Prof Jonathan Grant