GUIDE TO PREPARING A RESEARCH IMPACT CASE STUDY:

Utilising the case study model to communicate UL’s research impact. www.ul.ie/researchimpact

Introduction

When writing an impact case study, the ultimate aim is to demonstrate a clear link between research and impact. So before preparing a case study, it’s important to understand what research impact is. What is the meaning of the term? How can research impact practice beyond academia? What is the range of potential impacts (e.g., social, economic, cultural, environmental, and quality of life benefits)? What are the societal benefits beyond scientific knowledge? In a nutshell, when writing about the impact of your research you need to reflect on the ‘So what?’ question (so you did all this rigorous research, now ‘so what?’, in other words, ‘what impact did it make?’).

Defining research impact

Research Councils UK (RCUK) defines research impact as ‘the demonstrable contribution that excellent research makes to society and the economy’.

It is important to note that the RCUK definition refers to ‘excellent research’; in other words, research whose quality is recognised internationally for its originality, significance and/or rigour.

In addition, according to this definition the impact must be demonstrable. In other words, it is not sufficient to list activities and outputs that promote research impact (for example, coordinating a conference or publishing a report). You must be able to provide evidence that your research has been used outside academia, for example, by policy makers and/or practitioners, and improvements in services or business have occurred as a result.

When considering the impact of your research, it’s helpful to distinguish between research outputs, outcomes, and impacts.

Outputs include products such as publications, prototypes, datasets, software, or patents.

Outcomes result from research activities and outputs. They include citations of articles/papers; follow-on grant awards; trained postgraduates; uptake of tools or therapies.

1 This definition can be accessed at http://www.esrc.ac.uk/funding-and-guidance/impact-toolkit/what-how-and-why/what-is-research-impact.aspx
Impacts comprise the broader, longer-term ways in which research contributes to the economy and society: e.g., wealth creation, environmental benefits, health and wellbeing, community building.

Impacts can be understood as changes to:

- Products
- Processes
- Behaviours
- Opinions
- Policies
- Practices

They can benefit a wide range of constituencies, including:

- Individuals
- Public bodies
- Private sector entities
- Communities
- Regions
- Nations

It’s useful to think about the impact of your research towards the achievement of societal benefits beyond scientific knowledge including *inter-alia*: participation of underrepresented minorities; increased well-being of individuals; public engagement with science and technology; increased partnerships with industry and others and increased economic competitiveness.

In addition to considering these impacts, you should also consider your research in terms of the counterfactual: What happened that would not have occurred in the absence of your research? In your case study, you need to tell the story of how your research fed into something that made a difference (i.e. was of societal benefit).

(Appendix 1 breaks down the definition of research impact even further. It includes specific examples of both research outputs and impacts, as well as what is excluded from each category. Appendix 2 gives specific types of impacts in a number of categories.)

**Thinking about the ‘reach’ and ‘significance’ of your impact**

It’s important to think about the impact of your case study in terms of its **reach** and **significance**. **Reach** refers to the breadth of influence on relevant constituencies – how
far did it spread? **Significance** refers to the intensity of the influence or effects of the research. Please note that research can have significant **reach** within a limited geographical area; what matters is the spread or breadth of impact on potential constituencies.

In terms of research impact, best practice is to plan for impact when designing a research initiative (an *ex-ante* approach). To plan impact effectively, you need to answer these questions:

- Who are our *key stakeholders*? (e.g., public sector; business/industry)
- How will they *benefit* from our research? (e.g., influence on public policy; operational/organisational change; improved social welfare/public services);
- How will we ensure that stakeholders have the *opportunity* to benefit? (e.g., public events; conferences; media interactions)

In the absence of planning for impact, you can follow these steps in retrospect (an *ex-post* approach) to identify the impact your research has made, and sources that corroborate the impact.

**Preparing the case study**

Once you have identified the impact of your research, it’s time to prepare the case study itself. Basically, you want to tell the story of your research. You’ve had an impact beyond academia – your challenge in the case study is to unpack that impact clearly and succinctly. Remember the critical role of evidence: a case study is about demonstrating evidence-based impact.

Here are some tips which may help as you write the case study. Please keep them in mind when completing various sections of the template:

- If possible, find a catchy title that expresses the impact of your research. Some good examples can be found at [http://www.ox.ac.uk/research/research-impact/impact-case-studies](http://www.ox.ac.uk/research/research-impact/impact-case-studies)

**For narrative sections (1, 2, 4):**

- Write a clear, coherent narrative that explains the relationship between the research, the impact, and the nature of the benefits arising. It doesn’t matter whether a case study has a narrow or broad focus, so long as the case is set out coherently and contains proper evidence of specific benefits or impacts. Case studies are not convincing when they cover a series of disconnected activities without providing details and evidence.
- Give a brief explanation of the insights generated by the underpinning research. What made them original or distinctive?
- Clearly link the underpinning research to specific impacts.
- Identify the beneficiaries of the research. Which groups/organisations changed something as a result (e.g., intermediary organisations, end users or audiences)?
• Give specific details about the research: researchers’ names and positions in the HEI, and dates and locations of all research activity.
• Acknowledge any research collaborations with other HEIs, or any wider body of research that had an effect on the impact of your research.
• Use relevant, meaningful and contextualised indicators to support your case study. Remember that indicators are not a substitute for a clear narrative!
• Whenever possible, use quantitative indicators rather than relying on anecdotal evidence (e.g., personal correspondence, quotes from members of the public). Anecdotal evidence has limited value when used in isolation, but when it is used alongside other evidence it can effectively illustrate impact on individuals.
• If part of your impact involved engaging the public with research:
  o Clearly show that the research was linked to the engagement activity.
  o Provide evidence about dissemination (e.g., audience or visitor numbers), as well as a clear explanation of what impact or benefits the public experienced.
  o Show that engagement went beyond ‘business as usual’ (e.g., public lectures), that it drew widespread interest, and/or that it involved activities which were innovative and/or sustainable and/or created ‘legacy’ resources.

• Avoid:
  o Lack of coherence. Weak case studies tend to cover the research of large research groups or centres or the career history of an individual; include a disparate range of impacts; and/or fail to provide proper evidence of impact.
  o Generalised or exaggerated statements/references about key claims.
  o Relying on potential impact rather than benefits already achieved. Any discussion of future potential should be contextual (e.g., to help explain the significance of what has been achieved); it should not be claimed as actual impact.

For supporting sections (3, 5)

• Include all material required to make a judgement, so that no additional information gathering is required.
• Provide specific, appropriate, independent sources of corroborating information.
• Provide contact details for all organisations that were key users or beneficiaries.
• Do not include long lists of unexplained publications or web references that require the reader to identify salient information.
• Do not include indicators that lack context or meaning (e.g., numbers of hits on a website without benchmarks or explanation of significance).

Please note: now that you have read the guide to preparing a research impact case study, please progress to the ‘UL Research Impact Case Study Template’
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APPENDICES

Appendix 1

The UK’s Research Excellence Framework (REF) defines research as a process of investigation leading to new insights, effectively shared.

Research includes:

- work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors
- scholarship
- the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights
- the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction
- research that is published, disseminated or made publicly available in the form of assessable research outputs, and confidential reports

It excludes:

- routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques
- the development of teaching materials that do not embody original research

The REF defines impact 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.

Impact includes (but is not limited to) an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally
- It also includes the reduction or prevention of harm, risk, cost or other negative effects.

It excludes:

- Impacts on research or the advancement of academic knowledge within the higher education sector (in our case whether in Ireland or internationally).

2 Information in this appendix can be accessed at http://www.ref.ac.uk/pubs/2011-02/
• Impacts on students, teaching or other activities within the submitting HEI.
• Other impacts within the higher education sector, including on teaching or students, are *included* where they extend significantly beyond the submitting HEI.
### Appendix 2: Examples of impact

<table>
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<tr>
<th>Impacts on health and welfare:</th>
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<tr>
<td>Impacts where the beneficiaries are individuals and groups (both human and animals) whose quality of life has been enhanced (or potential harm mitigated)</td>
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<tr>
<td>- Outcomes for patients or related groups have improved.</td>
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<td>- Public health and well-being has improved.</td>
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<td>- A new clinical or lifestyle intervention (for example, drug, diet, treatment or therapy) has been developed, trialled with patients, related or other groups (for example, prisoners, community samples), and definitive (positive or negative) outcome demonstrated.</td>
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<td>- A new diagnostic or clinical technology has been adopted.</td>
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<td>- Disease prevention or markers of health have been enhanced by research.</td>
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<td>- Animal health and welfare has been enhanced by research.</td>
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<td>- Care and educational practices have changed.</td>
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<td>- Clinical, dietary or healthcare guidelines have changed.</td>
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<td>- Healthcare training guidelines have changed.</td>
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<td>- Decisions by a health service or regulatory authority have been informed by research.</td>
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<td>- Public awareness of a health risk or benefit has been raised.</td>
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<td>- Public engagement/involvement in research has improved.</td>
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<td>- Public behaviour has changed.</td>
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<td>- The user experience has improved.</td>
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<tr>
<td>- Animal health and welfare has been enhanced by research.</td>
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<td>- The control of diseases has changed.</td>
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<th>Impacts on society, culture and creativity:</th>
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<tr>
<td>Impacts where the beneficiaries are individuals, groups of individuals, organisations</td>
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<tr>
<td>- Public understanding has improved.</td>
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<tr>
<td>- Public debate has been stimulated or informed by research.</td>
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<tr>
<td>- Changes to social policy have been informed by research.</td>
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3 Information in this appendix can be accessed at [http://www.ref.ac.uk/pubs/2012-01/](http://www.ref.ac.uk/pubs/2012-01/)
or communities whose knowledge, behaviours or practices have been influenced

- Changes to social policy have led to improved social welfare, equality or social inclusion.

### Impacts on the economy:
Impacts where the beneficiaries are usually the NHS, private healthcare, or agriculture

- Policies have been introduced which have had an impact on economic growth or incentivising productivity.
- The costs of treatment or healthcare have changed as a result of research-led changes in practice.
- Gains in productivity have been realised as a result of research-led changes in practice.
- The roles and/or incentives for health professionals and organisations have changed, resulting in improved service delivery.

### Impacts on commerce:
Impacts where the beneficiaries are usually companies, either new or established, or other types of organisation which undertake activity that creates wealth

- A spin-out or new business has been created and established its viability by generating revenue or profits.
- Industry (including overseas industry) has invested in research and development.
- The performance of an existing business has been improved.
- A business or sector has adopted a new technology or process.
- The strategy, operations or management practices of a business have changed.
- A new product or service is in production or has been commercialised.
- Highly skilled people have taken up specialist roles (including academic consultancy) in companies or other organisations.
- Jobs have been created or protected.
- Social enterprise initiatives have been created.

### Impacts on public policy and services:
Impacts where the beneficiaries are usually government, public sector, and charity organisations

- Policy debate has been stimulated or moved forward by research evidence.
- Policy decisions or changes to legislation, regulations or guidelines have been informed by research evidence.
and societies, either as a whole or groups of individuals in society, through the implementation of policies:

- The implementation of a policy (for example, health, environment or agricultural policy) or the delivery of a public service has changed.
- A new technology or process has been adopted.
- The quality, accessibility, acceptability or cost-effectiveness of a public service has been improved.
- The public has benefitted from public service improvements.
- Control measures for infections have improved.

### Impacts on production:
Impacts where the beneficiaries are individuals (including groups of individuals) whose production has been enhanced:

- Production, yields or quality have increased or level of waste has been reduced.
- Decisions by regulatory authorities have been influenced by research.
- Costs of production, including food, have been reduced.
- Husbandry methods have changed.
- Management practices in production businesses have changed.

### Impacts on practitioners and services:
Impacts where beneficiaries are organisations or individuals, including service users involved in the development of and delivery of professional services:

- Professional standards, guidelines or training have been influenced by research.
- Practitioners/professionals have used research findings in conducting their work.
- The quality or efficiency of a professional service has improved.
- Work force planning has been influenced by research.
- Forensic methods have been influenced by research.
- Educational or pedagogical practices and methods have changed outside of the submitting unit.
- Law enforcement and security practices have changed.

### Impacts on the environment:
Impacts where the key beneficiary is the natural or built environment:

- Policy debate on climate change or the environment has been influenced by research.
- Environmental policy decisions have been influenced by research evidence.
- Planning decisions have been informed by research.
- The management or conservation of natural resources has
The management of an environmental risk or hazard has changed.

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<tr>
<th>Impacts on international development:</th>
<th>International policy development has been influenced by research.</th>
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<tr>
<td>Impacts where the beneficiaries are international bodies, countries, governments or communities</td>
<td>International agencies or institutions have been influenced by research.</td>
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<td>Quality of life in a developing country has improved.</td>
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