

WHAT IS SOCIETAL IMPACT OF RESEARCH?

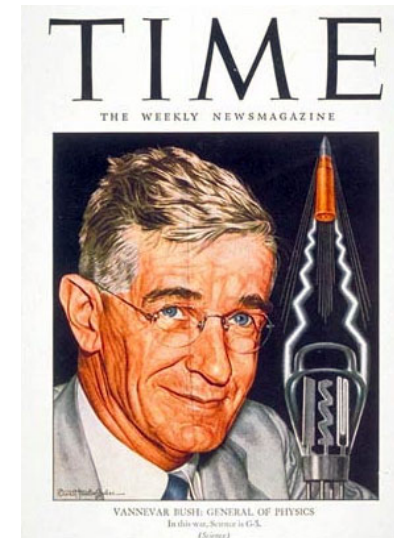
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A brief historical overview – based on the US, but it may still sound familiar to you...

Based on Luz Bornmann (2013), 'What Is Societal Impact of Research and How Can It Be Assessed? A Literature Survey', *Journal of The American Society for Information Science and Technology*, 64(2):217–233.

- *Until the 1970s, there was never any doubt in the minds of policymakers that public investment in R&D also would have a positive impact on areas such as communication; the way we work; our housing, clothes, and food; our methods of transportation; and even the length and quality of life itself (Bornmann, 2013, p. 217, with reference to Burke, Bergman, & Asimov, 1985)*
 - Vannevar Bush, Director of the Office of Scientific Research and Development, July 1945: *The publicly and privately supported colleges, universities, and research institutes are the centers of basic research. They are the wellsprings of knowledge and understanding. As long as they are vigorous and healthy and their scientists are free to pursue the truth wherever it may lead, there will be a flow of new scientific knowledge to those who can apply it to practical problems in Government, in industry, or elsewhere.*
 - From the late 1980s the pressure on public budgets led to an increased focus on the scientific quality of research.
 - Since the 1990s, there has been a trend away from automatic trust in the validity of the assumption that a society could derive the most benefit from science conducted at the highest level.
- A development from focusing solely on peer review and indicators to measure scientific output and impact towards also asking for evidence that can demonstrate the value of research of science for society.



Vannevar Bush on the cover of *Life* magazine, September, 1945



Focus on societal impact at the Social Sciences Faculty

- Based on national and international trends towards emphasising the societal impact of research, the Social Sciences Faculty in 2016 established a working group with the aim of
 - processing national and international experiences with making societal impacts more visible,
 - proposing how the Social Sciences Faculty can strengthen its work with documenting and communicating societal impact.
- Starting point/premise of the work:
 - AAU and the SS Faculty has a favourable position with respect to the increased focus on the societal impact of research: AAU has always emphasised that research should be of use/relevance for society (the PBL approach, collaboration with partners outside AAU).
 - Pro-active rather than re-active: possibilities of influencing how societal impact is perceived, documented etc.



Defining societal impact

- Distinguishing outreach from impact
 - **Outreach** encompasses the efforts made by researchers, research groups or organisations to reach out to society and make it aware of the nature and findings of research
 - **Impact** describes the – more or less tangible – effects of research on society.
- Accordingly, the Faculty working group suggested the following definition:
 - Scientific impact of research: *research's effect on, change or benefit to the economy, society, culture, policy, public services, health, the environment or quality of life.*
- The definition is based on UK's Research Excellence Framework (REF) definition of "impact of research outside of academia"
(<http://www.hefce.ac.uk/rsrch/REFimpact/>)

Challenges for documenting societal impact

- The results of research are often conceptual, process-related and epistemological rather than material by nature, implying that the impacts of the research often will diffuse slowly and only in rare cases will present themselves as discrete "discoveries", which can be readily transformed into specific products or services.
 - Risk of a "Timescale problem" where premature measurement may result in policies that over-emphasise research bringing short-term benefits (Martin & Tang, 2006).
- Contextual circumstances, in particular the political and cultural climate, will often influence how social sciences research results are used in practice.
- There is a lacking consensus within social sciences about the appropriate metrics for documenting societal impact.
 - A tendency to focus on one-way transfer of knowledge rather than on dynamic collaboration and co-creation processes involving external partners – where impacts manifest themselves in changes in mind-sets, perceptions, technologies etc.

EXAMPLES OF IMPACT CASES (FROM UK REF 2014)



Example 1: Informing debate in policy and professional organisations – and ultimately influencing policy making

Full case description: <http://impact.ref.ac.uk/casestudies2/refservice.svc/GetCaseStudyPDF/6927>

- Over the years 2005-2008 the Cranfield School of Management conducted research on the impact of flexible working on an individual's performance at work, and explored the factors influencing successful implementation of flexible working practices.
- The research demonstrated that offering flexible working arrangements to employees brings performance benefits to organisations.
- A number of policy documents cited the research.
- The research is claimed to be the sole source of evidence for the government to introduce a series of legislative amendments broadening the scope of the rights of parents of children up to 16 years of age to request flexible working arrangements to cover all employees in the UK.
- Documentation of impact includes publications from the researchers, government documents and a statement from a Director from Working Families (a UK work-life balance organisation) confirming the research and its influence on legislation, policy and practice.



Example 2: Influencing business education providers, SME owner-managers, and policy

Full case description: <http://impact.ref.ac.uk/casestudies2/refservice.svc/GetCaseStudyPDF/6358>

- Research carried out by the Centre for Technology, Innovation and Entrepreneurship (CTIE) at Leeds University Business School from 2003 to 2010 on SME development and entrepreneurship identified ways that managers could learn more effectively and enhance the performance of business.
- Based on the research, best-practice guidance on how business education and leadership programmes should be delivered to SMEs was developed.
- Specific impacts include:
 - Forming the Northern Leadership Academy (NLA), as part of an initiative led by Regional Development Agencies - influencing how training providers (including the 22 partners in the NLA) deliver business-education programmes.
 - Launching the first Goldman Sachs (GS) programme in the UK in 2010, which provided practical support to the leaders of established enterprises. By July 2013, 164 businesses had completed the programme – participant case studies document the benefits to their businesses (the program was later rolled-out to other areas of the UK).
- Documentation of impact includes research publications, case studies of participants in business programmes, and letters of testimony from different types of actors.



Example 3: Influencing the framing of innovation policy in the UK (changing how government understands, records and supports innovative activities)

Full case description: <http://impact.ref.ac.uk/casestudies2/refservice.svc/GetCaseStudyPDF/28889>

- Research carried out at SPRU, University of Sussex for more than a decade (first referenced publication is from 1995) influenced the policy agenda outlined by the UK Department for Innovation, Universities and Skills in a 2008 government White Paper, *Innovation Nation* – a new emphasis on finding and supporting “Hidden Innovation”
 - Focusing on “Hidden Innovation” outside those R&D-intensive sectors traditionally associated with innovation; identifying innovation in a wider range of industries – including services and creative industries – as well as in the public sector.
- Initiatives influenced by SPRU’s research include:
 - The Innovation Index and its annual report (2009–)
 - The Public Services Innovation Laboratory (2008–) – a range of initiatives supporting new methods for uncovering, stimulating, incubating and evaluating innovations in public services.
 - The Whitehall Innovation Hub (2008–2010) - creating a forum for the top 200 civil servants to develop strategies and discuss implementation plans to transform government and open up possibilities for public-service innovation and promote the dissemination of best practice.
 - The Government Annual Innovation Report (2008–).
- Documentation of impact includes research publications, policy reports and emails from a Research Director and staff at Nesta, a UK innovation foundation.



Example 4: Influencing public discourse and provoking discussion with policymakers, economists and the general public

Full case description: <http://impact.ref.ac.uk/casestudies2/refservice.svc/GetCaseStudyPDF/35288>

- With point of departure in research published in 2008, a group of economists lead by a professor from University of St. Andrews, advocated for aggressive monetary and fiscal policy as a response to deep recessions.
 - The research was based on what was argued to be more realistic modelling of assumptions (involving learning) compared to models based on the rational expectations hypothesis.
- The research influenced public discourse and provoked discussion about the need for aggressive monetary easing and fiscal stimulus in the wake of the financial crisis and recession of 2007-'09 through three main channels:
 - Policy-oriented papers presented at conferences attended by top monetary policymakers.
 - Dissemination of the research in a widely read economics blog.
 - Contact with Federal Reserve Bank presidents and members of the Federal Reserve Open Market Committee (FOMC)
- Documentation of the impact includes research publications, links to conference presentations, blogs, newspaper commentaries and speeches by the Federal Reserve Board Chairman.



Summing up

- Types of impact include:
 - Influencing public debate/discourse
 - Provoking discussion with decision makers
 - Directly or indirectly influencing/inspiring policy
 - Influencing business managers – either through direct interaction or through executive teaching programmes
- Research is a long term process, and impact may be based on decades of cumulative research.
- ‘Documenting’ (~render probable) impact is no easy task, and is likely to rely on a combination of sources.
 - The estimated costs of producing an impact case study for REF2014 in the UK were around £7,500 – **we have somewhat lower ambitions with our impact cases!!**

(Manville et al. (2015), *Preparing impact submissions for REF 2014: An evaluation*, https://www.rand.org/pubs/research_reports/RR727.html)

