

<p>Institution: University of Warwick</p>
<p>Unit of Assessment: Business and Management Studies</p>
<p>a. Context</p> <p>The long tradition of Warwick Business School's research having far reaching impact on the state, business and society has continued throughout the assessment period, supported by a diverse range of external research awards from, inter alia, the European Union, the UK research councils (e.g. ESRC), government departments and charitable foundations. Although WBS is a large, full-service business school, there are three major impact-intensive research themes running through the history of the School, namely, the public sector and healthcare management, employment relations, and enterprise & innovation. In recent years, they have been supplemented with a fourth: behavioural science. The impact of the School's work can be divided conveniently into four categories, corresponding to these research themes, as detailed in the 'Approach to impact' section below. More generally, the context of WBS research impact may be categorised as follows:</p> <p><u>Influence on Government Policy, Legislation and Practice</u></p> <p>In addition to the highly influential work of Cave and Neuberger (detailed in the impact case studies), there are many other examples of WBS research impacting on public policy and public sector practice. For example, a number of projects undertaken by members of the School's Industrial Relations Research Unit (IRRU) between 2008-09, and supported by a number of different funders including the Austrian Government (Meardi), the ESRC and European Foundation for the Improvement of Working and Living Conditions (Marginson, Hall), have impacted on the debate around the European Works Council Directive and its amendment. The Communities of Practice (Phase 2) research produced by the Knowledge Innovation Network (KIN) and funded by the ESRC from 2008-2009, was used by the Local Government Agency to improve operational standards and to develop training materials for their Communities of Practice leaders; the training was rolled out to over 250 managers over a 3-4 year period. Further examples are provided in the discussion on the public sector and healthcare theme below.</p> <p><u>Impact and Capability Building in the European Union and among NGOs and Third-Sector Players</u></p> <p>There are, similarly, many examples of the manner in which WBS research has had an impact on and contributed to capability development in these areas. For example, the 2010 Industrial Relations in Europe report edited by Marginson, was the principal source material for the design and implementation by the European Commission Directorate-General for Employment, Social Affairs and Inclusion, of a training course in European employment relations for its staff in the field, following the need to evaluate the impact of and responses to the current financial crisis, including structural reforms of labour markets and collective bargaining.</p> <p><u>Impact on Business Practice</u></p> <p>Other work has contributed to improvements in relation to a wide range of practices in organisations, thereby enhancing effectiveness, operational efficiency, and stakeholder satisfaction. Roper's work with DETI/Invest (2012-2013) contributed to the development of a regional innovation strategy in Northern Ireland. As a Director of the former Warwick University spin-out company, Decision Technology Ltd, Nick Chater has worked on projects on understanding consumer behaviour, such as sensitivity to price, and customer acquisition and retention, with clients including EON, Sky, Tesco and Vodafone.</p> <p><u>Enriching Wider Public Knowledge and Debate</u></p> <p>Engagement with the public, as the ultimate stakeholders of most policy and practice research, is another central strand of WBS's impact activity. A key objective of the Behavioural Science Group in this respect is to increase public understanding of the contribution of behavioural science to business and society. A good example of this aspect of the Group's work is a highly successful on-going Radio 4 series, The Human Zoo, which Chater has been instrumental in developing. As a further illustration, the Behavioural Design Lab, co-launched by the Behavioural Science Group in conjunction with the Design Council (http://www.behaviouraldesignlab.org/) has held high profile events in London to inform a range of stakeholders about the contribution of behavioural science to the improvement of design.</p>
<p>b. Approach to impact</p> <p>The School's vision is to be Europe's leading university-based business school, founded on high quality research that is world class both in terms of scholarship and in terms of its reach and significance for policy and practice. WBS is a full-service school, with research expertise and</p>

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impact across the full spectrum of business and management disciplines. However, four research themes enjoy a great concentration of expertise and capabilities:

Public Sector and Healthcare Management

The School has established expertise and a strong record of outreach in the broad area of public services and healthcare management. For example, Shaw has worked with governments worldwide on safety and security issues. He has been appointed to expert panels and delivered commissioned expert independent reviews for several government bodies (ONR/HSE, ISO, BSi, Cabinet Office, European Commission, Scottish Government International Organisation for Migrations). In recent years, a particular area of strength has been healthcare in the UK, centring on the School's Organising Healthcare Research Network. The Network is highly practice-oriented, with staff working directly with UK hospitals and the NHS and internationally through partnership with other parts of the University including the Medical School. The Behavioural Operations Police Research Consortium (BOPCon) brings together researchers at WBS and the Psychology Department at Warwick together with 12 regional police forces (including the Metropolitan Police Service), to change policing practice for the benefit of the police forces, victims of crime, police staff and society, and to provide a more efficient and equitable dispensation of police powers in England and Wales. On-going work is evaluating and seeking to enhance the quality of service and throughput time in custody processes and gathering evidence to examine changes in police behaviours as a result of Black, Minority and Ethnic (BME) staff realignment and move toward police professionalisation (certificated entry requirement). The National Policing Improvement Agency has used the benchmarking tool, developed through ESRC and EPSRC funded research by Swan and colleagues from 2006 to 2009, to improve their Knowledge Management practices.

Employment Relations

Employment relations research at Warwick has contributed directly to policy formation by government, the European movement and social partners. For example, research conducted by Hall and Purcell funded by the Department for Business Innovation and Skills, on the effects of UK legislation on Information and Consultation of Employees was discussed in the House of Lords debate on amendments to the Enterprise Regulatory Reform Bill, in February 2013. Research funded by the European Foundation for the Improvement of Working and Living Conditions conducted by Hall, Donaghey and Purcell from 2010 to 2013 evaluated the Information and Consultation of Employees Directive (2002/14/EC) and shaped subsequent debates during the 'fitness check' of the directive that will lead to a Communication by the European Commission for possible amendments. Impact has been achieved through dense and on-going ties with a network of key stakeholders, ranging from government departments and ACAS to the labour movement.

Enterprise & Innovation

There is a similarly long history of enterprise and innovation research in the School, with strong relevance and impact on practice. In the early 2000s, Storey served on the government's advisory Small Business Council. Present impact-relevant work in this area ranges from innovation and growth to global enterprise. For example, Roper has contributed to innovation and enterprise policy for a wide range of organisations including the OECD, the Department for Business, Innovation and Skills (BIS), the UK government's Small Business Service, East Midlands Development Agency, Advantage West Midlands, the Scottish Executive, Invest Northern Ireland, Forfas (Dublin), Enterprise Ireland, Northern Bank, the Department of Enterprise Trade and Investment (Belfast), and the Department of Education and Learning (Belfast); work that has taken place since RAE2008 and is on-going. Roper is a member of the Academic Working Group on Growth Vouchers led by BIS. WBS is a founder member of the national Enterprise Research Centre (funded by the ESRC, BIS, the Technology Strategy Board (TSB)) and, through the British Bankers Association (BBA), by the Royal Bank of Scotland PLC, HSBC Bank PLC, Barclays Bank PLC, Bank of Scotland PLC and Lloyds TSB Bank PLC, which further contributes to enhancing the impact of the School's research on this diverse stakeholder community.

Behavioural Science

This interdisciplinary research cluster brings together insights across the social sciences. Its aims range from promoting a better understanding of individual decision processes to developing new methods for understanding aggregate behaviour. The Head of the Group, Nick Chater, is on the Advisory Board of the Cabinet Office's Behavioural Insight Team (BIT), popularly known as the 'Nudge Unit', and plays an active role in setting direction in this regard.

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Supporting Impact

Mechanisms for supporting impact include:

- Enhancing individual research budgets (to £5k p.a.) and supporting greater flexibility in their use specifically to encompass activities that support impact.
- The wider institution has provided infrastructural support for the School's research impact through: (a) appointing a faculty-level Research Impact Officer to support and enable research impact by working with stakeholder relations and communications to facilitate contact between academics and the wider community through events, networks and public communication of research, as well as advising academics on impact planning and strategy; (b) providing seed funding via the University's Research Development Fund for engagement and knowledge transfer activities.

Kiefer's research, documented in the impact case study entitled 'Enhancing Employee Engagement During Radical Transformational Change', is an example of an impact activity which benefitted from both of these sources of support (see 'Associated Grants', Section 2 of the impact case study), as is Sullivan-Taylor's research on risk management and resilience in the face of extreme events (see impact case study entitled 'Informing Debate on and Improving Preparedness for Extreme Events').

Sustaining Collaborative Engagements

Collaborative engagements are, inter alia, sustained through the following mechanisms:

- The School has appointed leading figures from business, public service, and government as associate fellows, honorary professors and members of advisory boards, networks, and governance committees in relation to research activities. The current WBS Board includes: Craig Baker (Boston Consulting Group), Anne Gunther (Director, Co-operative Banking Group), Paul Kehoe (CEO, Birmingham International Airport), Lord Woolmer of Leeds (House of Lords), Richard Wright (Chairman, API Group) – see <http://www.wbs.ac.uk/about/people/the-board/>
- Developing strategic partnerships and networks that institutionalise links between the School and arenas of practice. The Behavioural Design Lab is a strategic partnership between WBS and the Design Council, aimed at bringing together behavioural science and design-thinking to provide solutions to societal problems. WBS is also home to the Knowledge and Innovation Network (KIN), which seeks to promote, foster and support collaboration between practitioners, researchers and experts. A recent ESRC study on 'Evaluating the Business Impact of Social Science' examined the work of KIN and concluded that 'the network... provides a very fluid space for businesses to seek out academic help for their practical problems in quicker and more collaborative ways than many mainstream academic-business relationships.' (<http://www.esrc.ac.uk/research/evaluation-impact/research-evaluation/impact-on-business-by-business-and-management-schools.aspx>)
- Fostering multi-disciplinary research by appointing new staff to roles that span subject areas, for example joint appointments in Behavioural Science and Strategy & International Business (Hodgkinson, Eubanks, Liu), Economic Modelling & Forecasting and Strategy and International Business (Battisti), Finance and Behavioural Science (Preis).
- Ring-fencing funding for collaborative PhD scholarships that embed research partnerships between the School and external organisations. Examples of funded collaborations since 2008 include relationships with Alliance-Boots, Rugby Council, Warwick Science Park, Nottinghamshire NHS Trust, Hara Practice Ltd, Nuffield Trust, BT, the Design Council and the Royal Shakespeare Company.

Supporting Communication

Without effective dissemination, there can be no impact. The School has favoured methods of communication that promote dialogue, rather than one-way information flows. Interventions include:

- Investing in technology and e-infrastructure that facilitates wider and more effective engagement with user-groups.
- A specialised School level Marketing and Communications Group (13 Staff) that mediates dissemination of research findings through press, PR, web-based and corporate materials. It is worth noting that much of this outreach activity has led to intense debates in the media

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(for example: Ansons's research on the use of [skinny models in advertising](#) was featured in 20 countries, including coverage in the [Daily Mail](#), the [Daily Telegraph](#), [Yahoo News](#), [Vogue](#) in Portugal, [El Mundo](#) in Spain; Preis and Moat's research on [Google being used as early-warning sign of stock market movement](#) was featured in 25 countries including coverage in the [Financial Times](#), [BBC Online](#), [Reuters](#), [Bloomberg](#), while [Forbes](#) used it as a trading strategy; Preis and Moat also appeared on TV on Sky News, [CNN](#), [BBC](#) and [Fox Business News](#); Preis created the [Future Orientation Index](#) which was featured similarly in 29 countries, with coverage in [The Guardian](#), [Daily Mail](#), [Bloomberg](#), [The Washington Post](#), and [La Stampa](#) in Italy, among other outlets; Wood's research on the [private equity industry](#) was featured in [Bloomberg](#), the [Evening Standard](#), [CBS Moneywatch](#), the [International Business Times](#) and the [National Post](#) in Canada. The research sparked debate in the private equity industry, drawing a response from the [British Venture Capitalist Association](#)).

- The wider institution supports the School's research dissemination via the open access Warwick Research Archive Portal (WRAP) as well as other mechanisms for communicating research to wider audiences such as the Knowledge Centre, a 'magazine style' website which provides access to latest research and ideas from the University's academic community: <http://www2.warwick.ac.uk/knowledge/>.

c. Strategy and plans

Flowing from the School's vision, our overall impact strategy is to leverage world-leading research to impact on policy and practice. Lasting impact is more likely to be secured through genuinely pioneering, encompassing research. Hence, we see world-leading faculty and their research as an important precursor for attaining and consolidating impact that has both breadth and depth. The School went through a major recruitment exercise over the years 2010 to 2013, and it is on these new strengths – combined with existing capabilities - that we seek to enhance our impact over the coming years.

The School aims to raise awareness of, and enhance the impact of both incoming researchers and existing staff, and to sustain existing impact-rich activities through:

- Staff Induction – we are currently developing a more comprehensive induction programme for new staff, especially early career researchers, in order to enhance our capacity in relation to impact activities, and supporting staff in developing 'pathways to impact'.
- Media capabilities. The School's investment in media capabilities, including press liaison and online activities, will continue to be developed to encompass training for academics to contribute confidently to print and broadcast media, as well as to social media including blogs and other technologies which enable two-way communication about research. More broadly we are seeking to achieve a high visibility profile within the media to increase our ability to interact with key stakeholders and opinion formers. We are also in the process of rolling out Massive Open Online Courses (MOOCs) on the new FutureLearn platform in areas such as Behavioural Science, which will further facilitate the broader reach of our research and build upon our experience in delivering world-class distance learning.
- The School has recently appointed 10 'Professors of Practice', comprised of high-achievers from business and industry who have a proven ability to engage effectively with the practitioner community and to disseminate complex research results in a manner that renders them intelligible and usable to a wider audience. Their appointment also sends an important message to early-career researchers that there is more than one path to professorial status at WBS.
- Internationalisation. Although the bulk of WBS-generated research has had significant international impact, internationalisation is an open-ended process. It is intended that through further internationalisation of faculty, the deepening of collaborative research ties with leading overseas institutions, and through internationalising advisory board membership, research generated by the School will be of even greater relevance across a broader range of national contexts.

Other Areas of Impact

A major new 2013 initiative has been the establishment of an Economic Modelling and Forecasting group, led by Professor James Mitchell, formerly of the National Institute for Economic Research, which aims to provide business and regional authorities in the Midlands with insights and

intelligence into relevant economic trends.

d. Relationship to case studies

WBS research has had impact in many areas, secured by generating salient research and using it well. A significant component of our research has been commissioned by government departments, firms and NGOs in the UK to solve real-world organisational problems, to implement changes, and to review policy outcomes with a view to amendment (as evidenced, for example in the following impact case studies: Enhancing Competition and Innovation in the UK Water Industry; Improving Access to Finance for UK SMEs; Influencing Occupational Policy – The Pension Protection Fund, Labour Market Information). Many of these impacts have stemmed from contract research undertaken for UK Government Departments. WBS has a long standing reputation amongst Government for producing excellent research in response to policy relevant questions. Support at University and at School level has ensured that WBS faculty have been repeatedly successful in tendering for such opportunities.

In addition to contributions to policy development at the UK level, WBS researchers have developed a particular niche in Employment Relations policy in Europe (Reducing Inequality in European Performing Arts; Informing Law and Practice – Information and Consultation of Employees; Marketization and the Consequences of Insecurity in European Labour Markets – Informing the Policy Debate.) The strength of these case studies is indicative of WBS's expertise in this field and of colleagues' understanding of the broader policy debates in addition to success in securing European funding both through the Framework 7 programme and the European Foundation for the Improvement of Living and Working Conditions.

Other research has had impact owing to engagement with stakeholders during the research process (see, for example the following case studies: Enhancing Employee Engagement During Radical Transformational Change; Informing Debate and Improving Preparedness for Extreme Events; SimLean {Using Rapid Simulation Techniques to Facilitate Improvement in Healthcare}). These examples demonstrate how WBS researchers have built strong working relationships with organisations in the public and private sector and have been able to effectively communicate the relevance of their work; translating conceptual problems into those which have application to significant problems faced by organisations. This ethos is also embedded in the WBS approach to 'research-led teaching', where we seek to build on synergies between research, practical application and teaching in order to promote greater student engagement in research-led practice (student projects; student placements; enterprise activities; student societies).

Many of the case studies were made possible through securing external funding and many were the outcome of research specially commissioned by a diverse array of beneficiaries, facilitated by virtue of the School's strong ties throughout the communities of stakeholders with which we are engaged.