

**Institution: Brunel University**

**Unit of Assessment: 19 Business and Management Studies**

**a. Context**

Brunel Business School (BBS) research is based on applied, internationally focussed collaborative work which has public benefit as a prime objective. Beneficiaries include national/international non-governmental organizations; local councils; public servants and policy makers; industries and firms from manufacturing and service sectors; senior managers, consultants and practitioners; national and international associations; public sector and governments in and outside of the UK.

Our research culture emphasises industrial collaboration and ensures public benefit that is generated across a wide spectrum. Our research has led to **economic impact** from efficiency gains and operational improvements that have benefited public and private sector organizations nationally and internationally. New processes and models developed from our research have improved project implementation and assessment (e.g. through novel participative systems and evaluation modelling) and product/service development (e.g. through new consumer profiling) within retail (Mall Corporation; Harrods), within health and elder care (NHS Plus, Age UK) and within the provision of e-Government services in Turkey, Qatar, Lebanon and the UK. This and other BBS research has had clear **practitioner impact** and **impact on professional services** through knowledge transfer e.g. giving DEFRA (Department for the Environment, Food and Rural Affairs) new tools to manage environmental risks; and enabling the accountancy body ACCA to inform practitioners of the business case for diversity. Our research, equally, has profound **policy impact** that reaches within and beyond the UK. Thus, research in collaboration with the Intellectual Property Office (IPO) on the economic benefits of intellectual property rights has underpinned IPO policy on patent protection and has informed the agenda in developing countries; research on interdependence among economic agents has informed policy on health economics in the UK, US and Canada leading to more effective measurement of costs and value in that sector; research on accounting and auditing regulations has formed part of the UK government's regulatory impact assessment and been used as the model for surveys in other EU member states. **Health and welfare** impacts have been generated from research on new product development and on ways to improve public service delivery through, as examples, improved product specifications for the elderly (with Age UK); greater awareness of sanitation challenges in India (supported by Water Aid); greater citizen participation with and satisfaction from e-Government services in Turkey (with e-Government provider, Turksat); and more effective relief networks dealing with disaster relief in Iran. Other research has had **impact on creativity and culture** through skills training and support networks in the creative industry (with production company, Scenepool); the development of a toolkit of employability for the creative sector (with Arts Council England); and the development of corporate heritage that has helped organizations (heritage hotels, London taxis, Harris tweed) capture value from heritage brands.

**b. Approach to impact**

A core component of Brunel University's mission since it gained Royal Charter in 1966 is engagement with industry and the generation of research which is of benefit to individuals and society at large. In keeping with this mission, the School is committed to supporting and developing cutting edge research that addresses key national and international concerns. Our culture reflects the primacy placed on knowledge transfer and applied research that, together, creates benefits regionally, nationally and internationally.

Furthering collaborative partnerships is a cornerstone of our research and international strategy where we seek to engage users from the beginning of the research cycle in order to promote public benefit. To address key questions that have practical relevance in the user community, the School has strengthened existing partnerships and built new collaborations. This has been facilitated by a **Research Manager** post created in 2010 to develop and maintain collaborative arrangements with academic and non-academic partners and to progress collaborative grant proposals. This has led to a measurable increase in our research income since 2008 - currently standing at £5M from 39 successful projects with 43.9% of our income coming from collaborative EU grants where we are part of larger research consortia; 24.7% from research councils (ESRC and EPSRC) and 10.2% from KTP and TSB. As example, in a project funded by the EPSRC, newly developed ontologically

based systems modelling in collaboration with Shell, the Swedish Armed Forces and an Italian IT company, has resulted in implementation of better quality information models in these organizations, significantly reducing development costs.

A **Large Grant Strategic Initiative Fund** of £15,000 annually, managed by the Deputy Head (Research) and open to all staff, further enables the forging of collaborative networks e.g. through meeting with key collaborators or stakeholders. This has enabled the School to establish an International Policy Community dealing with ICT solutions for Governance and Policy Modelling with 18 partners from 16 countries in and outside of the EU. To date, the research has enhanced learning and cultural awareness through the development of 'Live to Live Video' in schools and museums across Europe and has led to better medical decision making, potentially saving lives, at the interface between hospital A&E departments and ambulance services. At a more local level, collaborative partnership with the Kent Police has led to the incorporation of emotional labour into training programmes – allowing custody sergeants to deal more effectively with emotionally demanding events. Such work has strengthened our position in applied research and has enabled **consultancy** in the School resulting in £263k income since 2008 (enabling ICT Qatar to effectively evaluate the delivery of its online services); **KTP and Knowledge Exchange** (ESRC) funding of £604k which has led to a) a new accreditation scheme for goods and services for the elderly and b) has informed policy and practice on patent rights in the UK and abroad; and industry relevant **third strand funding** from, as example, Instrumental Media Group, Mall Corporation and Harrods that has resulted in the expansion of digital signage in shopping malls, improving customer experience and raising store sales. In total, **sixty public and private sector organizations** outside academia have been involved in research projects across the School during the REF period, reflecting the commercial, end-user value seen in our research.

The School has promoted the appointment of industry and other practitioners onto the **BBS Industrial Advisory Board** which meets on a termly basis to support teaching and research objectives. Members include senior executives from BG Group (FTSE top 10, Oil and Gas company); Deloitte; BT Global Service; Africa Foundation; Conwy County Borough Council; HM Revenue and Customs; Uxbridge College Vocational programmes. This is supported by **programme specific industrial advisory boards** that include senior executives from London Borough of Hillingdon, Hewlett-Packard, Walt Disney Co, Buckinghamshire NHS, BUPA, PricewaterhouseCooper, Telefonica, BAA and Network Rail. Together, advisory boards foster research and knowledge transfer relationships allowing the School to be at the forefront in engaging with emerging industrial, commercial and societal issues. For example, an advisory board member from Uxbridge College Vocational programmes joined the School in an externally funded project on skills development for SME owners in India (through the British Council's UK-India Education and Research Initiative) that has led to training programmes in that sector. Further, the School has supported **30 international visiting researchers** since 2009 and has **12 Associate Professors** from inside and outside academia who help cement industrial and commercial links e.g. Associate Professor and previous director of NHS Plus is working with the School on a British Academy funded project that is informing SME practices in occupational health through a more effective advice line.

BBS fosters close relationships with users through **workshops** and **symposiums** notably the annual Accounting Symposium draws on practitioners (e.g. from International Financial Reporting Standards, Financial Reporting Council and Deloitte) and academics to debate current accountancy issues; a Sustainability Marketing Symposium (2013) involved senior managers from Coca-Cola and Eurostar International Ltd; a "Sustainable Food Logistics" Symposium (2013) was sponsored by the Chartered Institute of Logistics and Transport, where industry speakers (Food and Storage Distribution Federation and DHL) presented and engaged with participants. Research outcomes have been presented at forums organized by user groups e.g. AgeUK, IPO, DEFRA.

Led by an **Impact Director** drawn from the professoriate and overseen by the Deputy Head (Research), staff are supported at School level in enabling impact through a) regular staff development sessions, drawing on experts from the *Research Support and Development Office* (RSDO), on embedding impact into all stages of the research process b) help, from the Research Manager, with the development of strategic partnerships with end users c) the inclusion of impact into staff appraisals and rewards, supported by personal mentoring from the professoriate d) the

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promotion of the benefits coming from BBS research through websites and social media.

Key infrastructure at **institutional level** helps realize the public benefit from our research by facilitating knowledge transfer and relations with national and international end users and by embedding impact into mechanisms for supporting, developing, recognising and rewarding colleagues. Our dedicated RSDO office provides an *'Impact Toolkit'* to support effective impact pathways (used in all our research projects), advice on liaising with end users, staff development sessions on adding value through impact; dissemination and engagement strategies and on managing collaborative partnerships. *Knowledge Transfer Leave*, open on a competitive basis to academic staff outside probation, offers a period between one term and one academic year to concentrate on a KT programme of research (this has enabled, as example, collaborative research with SMEs improving their services for occupational health services). A University funded *seminar series* geared to user engagement has enabled Hillingdon Council to work with the School on the use of learning sets to improve problem solving; and Richmond Council, following a British Academy funded project, to be more aware of and address employee engagement issues among their manual workers.

As part of the wider development of the impact agenda, public benefit forms an essential component of a criteria-based *promotion process* that recognises and rewards the benefits from research. It is a key criteria for BRIEF (*Brunel Research Initiative and Enterprise Fund*) awards, a University-wide funding stream that provides 'seed-corn' resources to junior staff and which, as example, has enabled work on humanitarian supply chain that formed the basis for a successful EU FP7 project: "*Minimising carbon footprint of maritime shipping*" with potential for a future stream of benefits relating to the 'blue' sustainable economy;

Increased visibility of Brunel's research is facilitated through the *Brunel University Research Archive* which provides a showcase for staff's publications by making the full text freely available. The University Open Access Publishing Fund, along with an Open Access Mandate (2010), ensures articles are published in open-access journals and widely available.

### c. Strategy and plans

The School is well placed to further strengthen its public benefit, building on a research culture that has always been industry led. In line with the University's strategic plan, one of the four key objectives of Brunel Business School's Research Strategy 2012-17 is to build on the capacity, expertise and collaborative partnerships developed during the REF period to *enhance the significance and reach of impact from our research*. Overseen by the Deputy Head (Research) and led by the Impact Director, the School seeks firstly to expand and further embed existing, successful impact-based initiatives and secondly to introduce new impact enabling schemes. In terms of the former, the School will **further embed existing initiatives** by:

- a) encouraging all staff to forge collaborative links with end users (e.g. through the recruitment of industrial fellows) and to seek funding from diverse sources (e.g. professional bodies, charitable foundations, KTP partnerships) drawing on the specific, dedicated support offered by the Research Manager and the opportunities created by the Large Grant Strategic Initiative Fund
- b) inviting users/recipients of our research to participate directly in the development of proposals which will be influenced and shaped by their input
- c) ensuring regular staff development sessions and impact training to fully familiarise staff with appropriate ways to include impact in all stages of the research life cycle
- d) embedding impact into appraisal and reward systems such as promotion criteria
- e) continuing to employ the best communication plans to maximise impact emanating from work soon after its completion.

In terms of the latter, the School will introduce **new impact enabling schemes** by establishing a fully integrated **impact team** which will draw on impact champions from each of our six research centres. The team will meet on a monthly basis to monitor and foster the benefits from our research, spearheading initiatives at research centre and School level. Reporting to the Research Committee, the new team will further embed a culture of impact into the School.

In order to shape future research for direct public benefit and to widen the reach of our research,

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the School will **expand our existing national and international collaborations with industry and policy-makers** by leading in research areas identified as priority by Government and national/international policy programmes and where we already have internationally recognised expertise. These areas include *sustainable growth* (e.g. sustainable supply chains in transport and shipping, growth strategies of SMEs, service platforms to deliver energy efficiency), *innovation* (e.g. future developments and applications of e-Government policy making, e-inclusion and citizen participation in different national and international contexts) and *inclusion* (e.g. ageing populations; equality, mobility and exclusion). Further, the School will promote industry secondment schemes such as KTP and the provision of KT research leave awards.

The School will seek direct **involvement of industry in student research projects** to encourage the student body in applied research, drawing on existing industrial advisory boards and on the School's extensive student industrial placement programme.

The School will extend its **communication plan**, drawing more systematically on the University's PR consultancy to support staff in media engagement; it will make full use of the internet and social media (e.g. blogs, podcasts, BURA) to raise the visibility of its research and advertise its benefits; it will encourage staff to disseminate their work in non-academic, practitioner forums (journals, conferences, public engagement initiatives).

#### d. Relationship to case studies

Our case studies illustrate the reach and significance of the public benefit from our research. As examples of best practice, they have informed our strategy of focussing on applied research which addresses key national and global challenges and priority areas whilst demonstrating the importance of sustained external funding, strong national and international partnerships, effective knowledge transfer and engagement with end users. Thus, in terms of priority areas, three of our case studies address national and international concerns relating to **sustainable growth and innovation** (*Estimating the Economic value of Intellectual Property in the UK ; Supporting Small-Scale Theatre Companies through the Development of Entrepreneurial Skills; The development of DEFRA environmental policy relating to climate change*); three relate to **challenges of the digital economy** (*Improving e-Government services in Turkey, Qatar and Lebanon; A roadmap towards implementation of e-Governments; Digital Signage for Shopping Malls and Retail Stores*); and one addresses **population dynamics and social diversity** (*Improving the lives of ageing consumers*).

In keeping with our focus on improving business and management practice, all cases speak in different ways to **economic, policy and practitioner impacts** and **impact on professional services**. Further, the international focus of our research translates into benefits that go beyond the national user community: three of our cases involve benefits that include international groups and entities (World Intellectual Property Office; Turksat; governments in Qatar, Lebanon and Bahrain).

Strong **national and international collaborative partnerships** underpin our cases. One is based on a KTP industrial collaboration with the charity sector (AgeUK), leading to research on inclusive design. Other partners include a government department (DEFRA), the Intellectual Property Office (IPO), a theatre production company (Scenepool), a Turkish e-Government provider (Turksat), Instrumental Media Group, the Mall Corporation and Harrods. In addition to the international beneficiaries outlined above, stakeholders and other beneficiaries include the creative industries, a network (Engage) providing goods and services for the elderly, local governments (e.g. Conwy Council) and IT professionals. All but one of our cases are based on externally funded grants.

The case studies have helped to shape our future strategy of establishing world class expertise in the priority areas on which they are based and of increasing research funding from external sources which address these areas and themes. They have underpinned the strategic drive to extend our national and international partnership with organizations in the public, private and third sectors and of proactively including end users in the research culture and all stages of research. Increased emphasis on staff training on how to exploit the public benefit from our research; on embedding impact into the whole life cycle of a research project and on dissemination of findings to user groups and practitioners through a well-defined communication plan has been a result of knowledge gained and practices developed through our case studies.