Institution: Brunel University

Unit of Assessment: 19 Business

a. Overview

Created in 2004, Brunel Business School (BBS) is located in a brand new, purpose-built building as part of a £300M university-wide investment at Brunel University's highly attractive, selfcontained campus in West London. The School has a diverse staff and student body, commensurate with the demographics of its location and its global ambitions. Building on established expertise in innovation, strategy and enterprise, its research is characterised by a range of research epistemologies and methodologies that are *internationally focussed*, based on *strong collaborative partnerships and networks*. The School has an inclusive research culture and, supported by robust and effective leadership, is committed to building a sustainable community which produces cutting edge research of benefit to an increasingly globalised business world.

This commitment is reflected within and operationalized through our six internationally renowned University Research Centres (URCs) that coordinate and foster research activities, informing parallel teaching programmes. These URCs share an orientation towards nationally and internationally collaborative research that addresses key contemporary business issues. All research-active staff and doctoral students have primary membership of one centre.

The BBS Research Committee, headed by the Deputy Head (Research) **(Simpson)** coordinates research across URCs and has a clear remit to foster and enhance research quality. Each Research Centre Head (RCH) reports to this committee as does the Research Manager and the Head of the Doctoral Programme (**Ozbilgin**). The Research Committee is supported by a Doctoral Committee that oversees the management of the School's expanding and successful doctoral programme. Together with the Head of School (**Irani**), the Research Committee is responsible for the formulation and implementation of research strategy, the provision and distribution of resources, ethical conduct, furthering of impact and of research/teaching links. The committee meets twice a term and reports to the School Board, the School's governing body.

Administrative support is provided by: the Operations and Finance Manager who is secretary to the Research and Ethics committees. Supported by a research student administrator, the post-holder oversees visiting researchers, the management of the doctoral programme and provides support for the recruitment and admission of research students including the administrations of bursaries.

b. Research strategy

BBS entered the post RAE 2008 period with the strategic drive to secure and consolidate its position as an internationally recognised, research intensive school that is producing high quality, inter-disciplinary and business relevant research. In RAE 2008, the School secured a grade point average of 2.35 and was positioned 25th out of 90 business schools in the UK in terms of research power (GPA x FTE count). We seek to improve on this through our on-going strategic aim of *enhancing the quality of our research and creating a thriving, dynamic and participative inter-disciplinary research culture that is appropriate to the scale and diversity of work within the School.* Our approach is a) to create synergies and the sharing of good practice through inclusive and supportive research networks within the School and b) to build external, future oriented national and international partnerships that, together, enable us to address key global concerns. The agenda of enhancing research quality underpins our research structure and drives our staffing, international, collaborative and research funding strategies – informing the following objectives:

1. To increase research income from external sources by identifying strategic priorities, building strong national and international relationships and staff support

Supported by an **EPSRC grant consultant** and **Research Manager** responsible for developing collaborative grants, BBS has achieved measurable success in increasing the number and quality of its grant applications (our grant income has more than doubled over the REF period to above £5million). This has developed research capacity and sustainability, a key strategic aim, through the direct involvement of mid- career and ECRs, through improving the support given to academics and through increased training, advice and mentoring. As a result, we have been able to respond swiftly and robustly to opportunities from funding bodies e.g. in 2012 the School was successful in





two EU projects: "*Live Video-to-Video Supporting Interactive City Infrastructure*" and "*Openly Accessible Services and Interacting Society*", combined value: £744,852.

2. To accelerate our research success through high quality published research outputs

The above direction and approach are also oriented towards enhancing the quality of published research outputs. Since 2008, staff at BBS have published 725 papers in peer reviewed journals and 33 books. Nearly two thirds of REF submitted articles are in journals considered to be world leading or of international excellence in terms of originality, significance and rigour representing a 20% increase compared to the RAE period. This achievement is supported by BBS's successful **Journal Article Publication programme**, by a generous staff conference budget (normally £80,000 annually) that enables national/international collaborations through the sharing of ideas within the wider academic community and University initiatives that allow dedicated research time.

3. To strengthen URCs through appropriate support and to realign or establish centres to reflect shifts in research expertise

Reflecting our approach of enhancing quality and supporting 'clusters of excellence' through inclusive, collaborative and synergistic research activities, URCs have been developed and realigned since 2008 around priority areas to form six centres. These address key issues of sustainability, innovation, entrepreneurship and inclusion.

CEIBIEM: Centre for Entrepreneurship, International Business and Innovation in Emerging Markets

BRESE (Brunel Research into Enterprise, Sustainability and Ethics) and CIBSEM (Centre for International Business in Emerging Markets) were merged in 2010 to create a new international research centre, CEIBIEM (16 members) under the professorial leadership of Ramani, Athreye, Moscone and Baptista. A longstanding expertise in strategy, SMEs and innovation opened up possibility for the new centre to address contemporary global concerns around technology, entrepreneurship and innovation in Europe (Athreye, Balta, Moscone, Stoian, Koufopoulos, Clear), in emerging and developed countries (Ramani, Singh, Ko, Li, Althonayan, Chen) and in transition economies (Fallon). A new professorial appointment, Baptista, has consolidated this developing area through international expertise in Entrepreneurship and Innovation. The Centre has achieved outstanding funding success notably a £155,946 grant awarded in 2012 to Moscone and Tosetti (digitalisation of contents of tissues in biobanks across Europe); and a £83,585 ESRC Knowledge Exchange project with Intellectual Property Office awarded in 2012 to Athreye (Patent use and IP management in the UK). Early career researchers Stoian and Ko won an ISBE/RAKE Research Grant (2012) to investigate the role of accountants in supporting the international expansion of SMEs. Outputs from these and other centre based work have been published in top journals including Regional Studies (Fallon), International J of HRM (Singh, Mmieh); Research Policy (Ramani, Athreye, Baptista), J. of Business Ethics (Ko) and The Lancet (Moscone) and have led to policy outcomes relating to patent protection in the UK (Athreye), development gap strategies in Ghana (Mmieh) and sanitation in India (Ramani).

WORC: Work and Organization Research Centre

Previously the Centre for Research into Emotion Work and Employment Studies (CREWES), <u>WORC</u> (13 members) has substantially developed and extended past themes to explore broader issues in employment relations, HRM, and performance at work. Led by **Anderson**, **Ozbilgin** and **Simpson** as professorial staff, and with a healthy mix of mid-career (**Costa, Kumra, Smith**) and early-career (**Hajro, Mordi, Slutskaya, Ugyur, Valsecchi**) researchers, the centre has developed clusters of research excellence in <u>workplace innovation</u> and <u>social inclusion</u>. **Anderson** and **Costa** won a Leverhulme grant of £228,492 in 2012 to explore innovation and psychological well-being and have co-edited a prestigious series of major works collections with Sage (selection and performance; innovation and knowledge management). **Anderson** co-authored a prize winning paper in the *Academy of Management Journal* (2011) on job satisfaction and turnover. Within the area of Social Inclusion, the Centre has produced a total of 58 journal articles and 11 books between 2008 and 2013. **Ozbilgin**, with 33 journal publications in the field, won a £29,839 grant in 2013 from ACCA to model the ESRC/ACCA business case for diversity in the UK and abroad including Brazil, Russia, India and China. **Kumra's** co-authored *Managing Equality and Diversity* won a Chartered Management Institute book competition in 2013; **Simpson's** work on emotional

Environment template (REF5)



labour has formed the basis of a case study on 'emotional entrepreneurs' and fringe theatre. Her international research on gender in organizations has led to high quality papers (e.g. *Human Relations, Management Learning, British Journal of Management*). Three ECRs (**Sluskaya, Hajro, Valsecchi**) have won British Academy grants to explore dirty work and identity; networks and organisational learning; and occupational health service delivery to small firms, respectively.

AARC: Accounting and Auditing Research Centre

To develop an emerging research profile in the area of Accounting, and to exploit synergies through shared expertise in SMEs and micro-entities, a new centre, <u>AARC</u> (10 members) was established in 2010 – led by **Collis** with support from **Jarvis** (0.4 appointment) who brings professional and academic expertise. **Collis**' research into the costs and benefits of accounting and auditing regulations to SMEs has twice formed part of the UK government's regulatory impact assessment and has been used as the model for surveys in other EU member states – contributing to the 'think small first' approach to regulation in Europe. **Theodosopoulos** is focussing on the urgent issue of business models adopted by voluntary hospices that provide end-of-life and palliative care and has published work recommending new frameworks to satisfy service demand. **EI-Tawy** and **Tollington** have developed criteria to recognise intangible assets in financial statements. Other successes include **de Cesare's** work on philosophical ontology and IS development, which has led to a £397k EPSRC grant *Empirical Modelling of Business Patterns with Ontologies*. AARC hosts an annual symposium on key issues in accounting which attracts keynote speakers representing national and international regulators (e.g. BIS, FRC and IASB), the accountancy bodies (e.g. ACCA, ICAEW) as well as high profile researchers.

ISEing: Information Systems Evaluation and Integration

ISEing (18 members) has established internationally renowned, ground-breaking work on **e**-**Government** that applies interdisciplinary problem-solving approaches with cutting edge potential to deliver close linkage between theory and practice. These developments are increasingly demanded by funding bodies and include aspects of **design science**, **entrepreneurship**, **innovation** and **sustainability**. Drawing synergistically on experienced (**Irani, Lee, Hackney**) and mid-career researchers (**Weerakoddy, EI-Haddadeh**), the Centre has attracted high levels of external funding (£1.9M on e-Government in Europe and the Middle East). Recent successes (2013) include two EU FP7 projects: *Smart Cities* (**Irani**) seeks to deliver an ICT service platform to foster energy efficiency at neighbourhood, city and district levels in Europe and beyond; and *Policycompass* (**Lee**) that seeks to develop tools for social networks and e-participation platforms. Together, this research has led to over 20 articles in peer reviewed journals including **Weerakoddy** (2008) in *Information Systems' Frontiers*, cited by 101 (Scopus); **Irani** (2008) in *J. of Strategic Information Systems*, cited by 66 (Scopus) and has had wide-reaching social/economic impact supporting 3 impact cases. ISEing is creating capacity in this expanding area through doctoral (6 PhD students graduated or currently working in this area) and post-doctoral research.

OASIS: Operations and Supply Chain Systems

Led by Gallear, Reader in Operations Management and Enterprise and an international expert in supply chain partnerships (previously led by **Bourlakis** who took up an external position in September 2013), OASIS (7 members) has distinction in the inter-disciplinary area of supply chain and logistics management. With a clear orientation towards a growing sustainability agenda, and with well-established industry engagement, the centre has built capacity through the direct involvement of senior (Bourlakis, Sharif, Gallear) mid- career (Eldabi, Mansouri) and early career (Aktas, Lu) researchers. Bourlakis in collaboration with the School of Engineering won a £7 million EPSRC funded project for a new, ground-breaking Interdisciplinary Centre at Brunel: "Sustainable Energy Use in Food Chains". Aktas's work on supply chain management and transportation has led, impressively, to 11 high quality journal publications since 2008. The centre has acted as a springboard for a developing interest in humanitarian supply chain, spearheaded by Mansouri and supported by Sharif. Mansouri and Lee have in 2013 received EU FP7 funding (£248k) to develop solution techniques to reduce greenhouse gas emission from shipping. Mansouri's innovative work on disaster relief in Iran, funded by ESRC, has attracted 3 PhD students and led to conference papers with journal articles under review. Still in early stages, this research addresses urgent global issues and, together with sustainability and SCM, are areas of



strategic importance to the School.

CREAM (Centre for Research in Marketing)

Led by **Balmer**, Professor of Corporate Marketing and world- renowned expert in *corporate branding* and *identity*, previously supported by **Melewar** (who took up an external appointment in August 2013), <u>CREAM</u> (9 members) has built on a well-established background in corporate *branding, identity and marketing.* The Centre is leading the way in developing international research into *corporate heritage identity and branding* (**Balmer, Chen**) – an underexplored concept that has potential to offer powerful symbolic and cultural value in a global, commercial context that is increasingly disengaged from the past. Following an influential positioning paper in the *European J. of Marketing* (2011, cited 37 times), **Balmer's** work on heritage branding and the monarchy has received particular attention – notably during the royal wedding and jubilee celebrations in 2012. Relatedly, mid-career researcher **Yen** is addressing the influence of *guanxi* for corporate identity and performance in China–work that has already led to two internationally recognised journal articles. As ECRs, **Alwi** is developing the field of internal corporate branding and reputation (one article published in the *European J. of Marketing*); **Gupta's** work on B2B branding has been published in internationally-ranked journals e.g. *J. World Business;* **Ko** won best paper at the *Academy of Marketing Annual Conference*, for her work on social enterprise and performance.

Overall, URCs drive our quality agenda by developing research capacities within an inclusive and supportive culture. With *strong leadership* and through *effective collaborations and partnerships*, centres are well placed to identify and address major business and management problems, referred to above, within the context of a rapidly changing world.

4. To build a sustainable and high quality doctoral programme that trains future researchers and produces excellent research.

Our successful and vibrant doctoral programme has doubled in size since 2008. An external review was undertaken in 2010 in order to monitor and maintain quality of the programme. This led notably to a) the setting up of a doctoral committee chaired by the Deputy Head (Research) to oversee quality b) a formalised and more extensive research training programme detailed below.

5. To enhance the significance and reach of impact from our research through effective dissemination strategies and active user engagement

The School has sought to further the dissemination of our research and maximise the benefit to users through engagement with policymakers, practitioners and industry. This is supported by University initiatives, run on a competitive basis, such as Knowledge Transfer Leave. Supported by an Impact Director within the School, regular staff development sessions and stakeholder workshops help integrate impact into all research stages and activities. We disseminate research through websites, video podcasts as well as social and traditional media.

Evaluation of our Current Position

Our intention post RAE 2008 was drive up the quality of our research and to secure and consolidate our position as an internationally recognised, research intensive school known for internationally focussed and collaborative research. As a measure of recognition, BBS was shortlisted by Times Higher Education for the 2012 and 2013 Business School of the Year award and is positioned in the top 20 in the UK according to the Financial Times rankings. Our commitment to sustainable growth and our success in enhancing quality can be seen in:

- An outstanding increase of 158% in research income (comparing RAE and REF periods) facilitated by a programme of support and by strategic expert appointments.
- Assisted by highly targeted support initiatives, an impressive improvement (20%) in refereed papers in journals deemed to be world leading or of international excellence.
- An integrated system of support for junior staff and early career researchers coupled with robust and effective research leadership through reformulated research centres.
- The fostering of 'pockets' of excellence within these groups such as the internationally renowned and ground breaking e-Government research (ISEing).
- Strong evidence of national and international benefits of our research (e.g. inclusive design practices and Age Concern; policy relating to greenhouse gas abatement in agribusiness).



- A doubling of our research student population accompanied by the introduction of sustainable policies and procedures to support this growth.
- Greater breadth in terms of partnerships and income sources (e.g. collaborative projects through EPSRC, ESRC, Leverhulme, British Academy, EU, UKIERI).
- An increase in research active staff from 51 entered in 2008 to 61 entered for REF 2014

BBS has built on the foundations established during the RAE period 2001-2008 (e.g. around innovation, strategy, SMEs) to address global issues such as international strategy, digital government in Europe, diversity and social inclusion, international supply-chain, heritage branding and the implications of international accounting standards. Our intention has been to widen the scope and 'global reach' of our research based on strong international collaborative partnerships. Outcomes reflect this approach: 75% of our grants address transnational issues; between 2008 and 2013, BBS staff published journal articles with scholars based in 167 universities in 29 countries including the UK (InCites,TM: 8.1.2013); 4 of our 7 cases involve benefits that go beyond the national user community and two thirds of our doctoral students are international. Through our research centres and supported by an inclusive and enthusiastic culture that seeks to engage all staff in collaborative and cutting edge research, we have developed expertise and capacity in key strategic areas – enhancing our ability to address major business and management concerns.

Research Strategy and Priority Areas 2014-19

Against a background of an on-going quality driven and interdisciplinary research agenda, our strategic aim over the next 5 years is to build on the capacity, research expertise and collaborative partnership developed during the REF period to engage and lead in research areas identified as priority by Government, national/international policy programmes and research councils.

Our research expertise in business and management dimensions of sustainability speaks directly to the priority area of **Sustainable Global Economic Growth**, made more urgent by rising global poverty and differential national, regional and local growth rates. We will address these through focussed interdisciplinary research that includes: brand creation and MNEs' role in meeting millennium development goals in emerging markets (CEIBIEM and CREAM), sustainable supply chain in transport and shipping (OASIS), entrepreneurship behaviours and growth strategies of SMEs (WORC, AARC, CEIBIEM) and ICT service platforms to deliver energy efficiency (ISEing).

Our clusters of excellence in areas of e-Government (ISEing) and diversity (WORC) afford the School unique positioning with respect to research on a) the **Digital Economy** and future developments and applications of e-Government policy making, e-inclusion and citizen participation in contemporary democracy in different national and international contexts and b) **Population Dynamics and Social Diversity** where we will address pressing, contemporary challenges that pertain to an ageing and increasingly diverse population as well as to an austerity agenda that has led to different configurations of wellbeing, inequality, mobility and exclusion.

Our research expertise in the areas of **Technology, Innovation and Adoption** reflects the primacy attached to economic resilience in the context of a globalised economy characterised by a high degree of uncertainty. This interdisciplinary area will be developed further to explore, as example, new population dynamics and inclusive design, social innovation in emerging markets and the links between creativity, job performance and wellbeing.

Our research strategy will focus on collaborations with industry, policy-makers and academics in order to further *promote impact* as well as *the international development* of our research. We will develop overseas research by placing emphasis on regions in which we are already active (e.g. EU, Turkey, Qatar, India); by extending the strategy to other priority areas where we will promote further multi-disciplinary collaborative research (e.g. BRIC countries, South Asia, Middle East); by responding effectively to funding calls and calls for international collaboration; by exchanging researchers with overseas research centres to support the development of priority areas.

We will sustain our strategic direction of continuing improvements in the quality of research outputs with a focus on producing outputs that are deemed to be world class or of international excellence. We will seek a 5% year on year increase in research income growth from external sources by identifying strategic priorities of funding bodies, by building strong relationships with potential



collaborators and through staff development, in the form of a focussed grant writing programme.

We will develop a high level of public visibility for our research and its impact through outward facing dissemination, public engagement activities across research centres, active user engagement and by making our research available freely to the widest possible audience.

This strategic direction will be underpinned by a research structure that supports interdisciplinary and synergistic research whilst monitoring effective strategy implementation. Our URCs will be aligned to fully exploit established and developing expertise in the above priority areas. Under the direction of the Deputy Head (Research), the Research Committee will drive emerging research agendas at URC and School level, underpinned by internal and external programmes of support.

c. People, including

i. Staffing strategy and staff development

Of our 74 staff, 63 are on full-time permanent, 9 on a full-time temporary and 2 on part-time permanent contracts; 63% of staff are male; the average age is 46.2 years; 57.35% are white. Of the 19 senior staff (Professors and Readers), 79% are male and 68% are white. For lecturer and senior lecturers, 58% are male and 53.33% are white. 15 staff are on probation and 9 staff are classified as ECRs. The School employs 4 research fellows and 6 research assistants. In addition, the School has 12 Associate Professors from inside and outside academia and 3 Emeritus Professors who help cement industrial and commercial links (e.g. Harrison, previous director of NHS Plus is working with Valsecchi on a BA funded project on occupational health and SMEs). In line with its inclusive culture, BBS has entered **92% of it eligible staff to the REF.**

Staffing strategy is developed and managed by the Head of School with support of the School's Executive Committee and is oriented towards enhancing research quality. This is reflected in recent appointments, rewards structures and probationary/promotions processes. The School has sought to appoint top international scholars who can develop key areas of research and provide effective leadership to our ECRs and junior staff. **Anderson** an international scholar in HRM was appointed in 2010 to take over the Directorship of WORC; **Collis** in 2010 to develop research in the accounting area and to establish the AARC research centre; **Ozbilgin**, editor of the British Journal of Management, in 2011 to develop the area of diversity and to strengthen support for staff seeking to publish in top journals; **Ramani**, an international expert in technology innovation in 2012 to provide new direction and leadership of CEIBIEM; **Baptista** in September 2013 to develop the growing area of innovation and entrepreneurship.

All appointees at lecturer level hold a PhD, have at least one high quality publication and must demonstrate promise of international excellence in research. University and School processes have been revised since 2010 to integrate high quality research outputs and intellectual capability more fully into promotion and appraisal criteria, outlined below.

The School Ethics Committee, which reports to the Research Committee and the School Board, oversees the conduct of research in accordance with the University's Code of Practice and is accountable to the University Research Ethics Committee (which provides training to Schools).

Career Development Support

Support takes place at University and School levels that work together to promote world-leading research and support a vibrant academic environment.

University Career Development Initiatives

Led by the Pro Vice Chancellor for Research and managed through the University's Research and Knowledge Transfer Committee, University Career Development Initiatives are driven by the strategic goal of *developing a sustainable world-class research community through appropriate support for staff and through incentives for high quality research.*

The University has an excellent track record in this respect. As evidence, it was awarded the **HR Excellence in Research Award in 2011** from the European Commission in recognition of its commitment to the *Concordat to Support the Career Development of Researchers*. To that end it has a publically accessible Concordat Action Plan (subject to internal review in Sept 2013); the



University was given the **Athena SWAN bronze award** in 2012 for promoting the equal opportunity for women in science-related subjects; it has recruited an **Equality and Diversity Champion** to provide valuable insight and leadership. Equality and Diversity is supported through various mechanisms including workload adjustment for staff with disabilities, flexible work arrangements for staff with childcare responsibilities and central support for maternity leave.

The agenda to drive up quality through career development support is underpinned by a raft of support structures and measures:

- a dedicated *Research Support and Development Office* (RSDO) that supports a range of research activities including grant preparation and managing collaborative partnerships
- a *Graduate School Researcher Development Programme* of core skills and on-line research training for all research staff and an active staff development office that has a termly programme of research support. The Graduate School plays an active role in the Vitae London Regional Steering Committee, encouraging researchers in development opportunities provided.
- the successful BRIEF (*Brunel Research Initiative and Enterprise Fund*) scheme, open to academics below senior lecturer level, where up to £15,000 pump priming is awarded on a competitive basis to start research and to seek external funding to support on-going projects. Since 2009, **10 BBS staff** have received awards. Five have already led to successful external grants (e.g. British Academy and ESRC) and high quality outputs e.g. **Slutskaya**'s work has been published in the high quality journal *Work Employment and Society*; **Abbott**'s award has led to three journal papers, a conference best paper award and a grant from the CIGREF foundation, a France based industry-led funding agency.
- 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 applied research. Since 2009, Singh, Dennis, Hatzakis and Valsecchi have been awarded KT leave that has led to high quality journal publications (Singh) and a British Academy award (Valsecchi).
- A criteria-based promotion process that rewards research excellence and facilitates succession planning, overseen by Senate and subject to an annual Equality Impact Assessment to drive equity improvements. Since 2008, 7 BBS staff members were promoted to SL; 6 to Reader and 2 to Chair. Fixed term and part-time staff are fully integrated. Workshops, led by the Equality Champion, help support women applicants.
- Aspire Programme set up in 2010 and designed for mid-career leadership development also supports succession planning. Sharif (2010), Spinelli (2010), King (2010), Braganza (2011) and Fallon (2012) have benefited from the programme.
- Research Leave, open on a competitive basis to all academic staff outside probation offers a period of teaching/administrative relief for up to one year (and supported by up to £5,000). Since 2009, **Balmer, Spinelli, Mmieh, Gallear, Lee** and **Fallon** have been awarded leave to focus on a research related activity or programme. As example, this allowed Spinelli to complete her KTP funded research that has formed the basis of a case study (*Improving the lives of Ageing Consumers through Product and Service Innovation*) and Balmer to undertake field work on heritage branding in China that has led to 2 special issues and 2 submitted journal papers with ECR Chen and a doctoral student.
- A University funded seminar series geared to user engagement: Balmer, Slutskaya and Smith have run series on Heritage Branding, Dirty Work and Problem Solving within a Learning Set respectively
- Active support to URCs and University Interdisciplinary Research Centres through central marketing and promotion, websites, research publications, access to internal funds
- A *Research Development fund* which offers up to £5,000 for staff to undertake a pilot project towards a larger (e.g. ESRC) grant application; a *programme of training and support* for ECRs in preparing ESRC bids (**Slutskaya** and **Yen** have taken part).
- External regional collaborative workshops e.g. Building Collaborative Networks (Brunel, UCL, KCL and UEL)
- Athena SWAN Research awards given on a competitive basis to staff returning from maternity, adoption or paternity leave to recommence their research (**Hajro** has an award).



School level career development initiatives

The School's approach to career development support is based on strong leadership as well as active engagement and input of staff in the direction and form of practices and initiatives that are designed to support staff and enhance research quality. Led by the Deputy Head (Research) and working closely with the Head of School (who line manages professorial staff), the Assistant Head of School (who lines manages all staff at lecturer and senior lecturer level) and the Deputy Head for Staff Development, our programme of support draws directly on the needs of staff who discuss their requirements with their research centre heads (RCHs).

Effective **research centre leadership** forms the basis for on-going support of centre members and for the monitoring of research quality. Each centre, with an annual budget of £14,000 to support research initiatives, has monthly team meeting that includes staff and doctoral students to act as a forum for sharing ideas and providing the basis for collaborative efforts. Supported by staff development from the University, RCHs are responsible for the annual appraisal of lecturers and senior lecturers in the group. He/she develops an annual research plan with the individual, sets up a series of meetings during the year to monitor progress and to offer mentorship and guidance where necessary. RCHs therefore have a specific role in furthering and monitoring the quality of research in their groups and in assisting centre members to meet their individually set targets.

New academics have a reduced teaching load and undertake a period of probation (normally 3 years) where targets are clearly defined and where progress is carefully monitored by both the RCH and the Assistant Head. Research staff have access to the same performance/review procedures. Readers/Professors agree their targets for the coming year with the Head of School

A School based programme of research support, led by the Deputy Head (Research) includes:

- A successful and popular *Journal Article Publishing Programme* (run by Simpson and Ozbilgin), supported by University and School funds, has the objective of improving the quality and quantity of research outputs specifically in translating working papers to journal articles. Oriented towards ECRs and those returning from a period of leave, the programme comprises regular writing workshops, expert sessions on publishing, a two- day writing retreat and mentoring from the professorial team. In 2011, twenty staff took part in the programme and submitted papers to top tier journals within the time frame.
- Grant preparation seminars led by the Research Manager and the School's EPSRC consultant as well as *individual 121 support* for internal (e.g. BRIEF) and external grant preparation and submission. Particular support is given to ECRs applying for small grants: since 2009, this has led to 12 successful applications to small grant funding sources.
- A successful *seminar series* including expert external speakers (drawn, in 2012, from CASS, Manchester University, Rouen Business School and Roskilde University) and BBS staff that seeks to encourage internal research communication across the School.
- Impact workshops facilitated by our Impact Director and by impact experts within the RSDO
- An *annual research day* at the end of the academic year that gives time and space for reflection on new research themes and directions.

ii. Research students

Led by a Doctoral Programme Director and supported by a Doctoral Committee that reports to the School Board, our strategic aim during the REF period has been to expand the scale and further improve the quality of the doctoral programme. Research student population has grown from 122 registered in 2009 to a current total of 210 students. Since 2008, 105 students have successfully been awarded with doctorates with an average completion time of 4.1 years.

BBS seeks to embed research students within a vibrant and supportive environment that provides appropriate training opportunities. We act in compliance with institutional benchmarks and guidelines: the Researcher Development Framework and Researcher Development Statement; the ESRC Post Graduate Training and Development Guidelines and the Concordat to support the career development of researchers – as well as Brunel based quality assurances.

Environment template (REF5)



Activities and awards targeting PG students include: the Isambard Scholarship scheme that supports excellent PG candidates and the Vice-Chancellor's Travel Prize to support conference attendance (since 2010, 5 BBS PhD students have received this prize). All graduate students use the facilities within the Graduate School: Common Room, study room, networked computer kiosks, leading to an inclusive culture that is capable of supporting high quality, collaborative work.

Evidence of the quality, training and supervision of PGR students

A rigorous process of **selection** requires: an undergraduate degree (2.1): a Master's degree (or equivalent) in relevant areas: 6.5 IELTS; 1,500 word proposal and, if this is deemed to be of a suitable standard, an interview conducted by two staff members.

The School offers a number of competitive **scholarships** in line with ESRC guidelines (£14,000 plus fees) as part of the Graduate Research Assistant (GRA) Scheme to doctoral students who also take on some teaching duties. GRAs contribute, through priority themes, to the vibrant research culture of the School. Nineteen scholarships have been awarded during the REF period.

Training provision is undertaken at University and School levels.

At University level, the Graduate School offers *on-line Research Methods* courses and a highly successful *Researcher Development Programme*, mapped onto the national Researcher Development Framework to doctoral students and contract research staff (e.g. Research Ethics and Research Integrity; Preparing for your Viva; NVivo and SPSS software training). *Library sessions* for PhD students include: exploiting e-journals; RefWorks; on-line statistics.

BBS subject-specific training through the *Doctoral Engagement Programme* which follows European Doctoral Association Management Business Administration guidelines comprising 6 workshops and 40 hours of contact time to augment supervision arrangements (Research Resources, Research Design, Research Methods, Research Practice and Research Outputs).

An annual *Doctoral Symposium* requires students to make a 20 minute presentation based on a 2000 word paper that is internally (staff) reviewed. The University holds an annual multidisciplinary Brunel University Research Student Poster Conference with over 150 contributors (2 BBS PhD students have received prizes in 2008/09 and 2009/10).

Progress is monitored and supported through an in-house induction programme, personal supervision and an annual review. All students work under the **supervision** of two supervisors with the 1st supervisor holding primary responsibility for the management of progress. Both supervisors must be academic staff or have Recognised Supervisor Status. Supervisor/student relationships are subject to clear guidelines, set out in the staff and the student handbooks including the requirement to formally record at least 10 supervisory meetings per year.

Supervisor training is arranged through our centralised Graduate School. Further, a **programme of training** for ECRs and/or those staff who are new to supervision is provided within BBS - designed to introduce staff to key skills required in managing the process to completion.

Evidence of a strong and integrated PGR culture

Each PhD student is assigned to a research centre and is expected to take full part in centre activities and the School seminar series. Students are encouraged to present at conferences and £30,000 is normally set aside for this purpose. Supervisors are encouraged to publish with their doctoral students (11% of our journal articles submitted to REF are co-authored with PhD students). Our PhD students therefore contribute to a vibrant research environment in the School.

Employability is a strategic goal, facilitated by the School's **Business Life Employability Programme** of professional workshops and events, delivered in association with leading employers from industry and the public sector. Our PhD graduates are employed in public and private sector positions commensurate with their qualification both within and outside the UK. For example, of 40 students who graduated since 2011, 21 have taken up academic positions in universities abroad; 12 are similarly employed in the UK; 3 took up government posts in their own country and the remainder are in senior positions in government and private sectors.

d. Income, infrastructure and facilities



Research Income

The School recognises that *research quality* both depends on and reflects our ability to attract external funding. As part of our wider goal of driving up quality, our strategy for generating grant income is based on a *well-defined funding support structure* and includes:

Investment in dedicated professional support: A **Research Manager** post, carrying responsibility for developing collaborative grant proposals, was created in 2010. The post-holder develops collaborative arrangements with academic and non- academic partners and works with staff at all stages of the application process. A **grant consultant and EPSRC expert**, appointed in 2009 gives further one to one support. Overseen by the Deputy Head (Research), these post-holders meet on a monthly basis to monitor progress of applications and target support.

Embedding research grant preparation and feedback into development and support programmes, underpinned by rewards systems and other initiatives. Regular **staff development sessions** are provided, either centrally or at School level, to develop the skills necessary for successful proposal writing and for effective project management. An expert **peer review system** was introduced in the School to give feedback on all grant applications. This is underpinned by a **Large Grant Strategic Initiative Fund** of £15,000 annually - managed by the Deputy Head (Research) and open to staff to enable them to (e.g.) forge collaborative networks; meet with key collaborators or stakeholders; obtain teaching relief in order to devote time and energy to writing a large grant proposal.

Creation of capacity through targeted support for ECRs. **Specialist workshops** are provided by the Research Manager and Deputy Head (Research) for junior staff applying for internal (e.g. BRIEF) and small external grants. **One to one sessions** are provided on a monthly basis by the grant consultant as above and **professorial staff take an active role** supporting and mentoring grant applicants (3 professors are currently working as CIs on separate projects run by junior staff). Our achievement in small grant awards (British Academy) is currently 34% (against 25% national average) – indicative of the success of our strategy.

BBS seeks to foster clear *research funding progression* – capitalising on current successes and building capacity and sustainability through the development of more ambitious proposals. Thus, **Irani** built on his EPSRC successes at national level to gain significant funding (£868K) from the European Commission and Qatar Foundation in the REF 2014 period (e.g. his recently awarded EU FP7 project DAREED draws on a methodology that was validated at a local level under his EPSRC funded VIEGO project). **Slutskaya, Hajro** and **Mansouri** developed their 'seed-corn' BRIEF awards into external funding e.g. **Mansouri** went on to secure an ESRC travel grant on "humanitarian supply chain management", now followed by a successful EU FP7 project: "Minimising carbon footprint of maritime shipping". Equally, internal research leave and UK TSB/ESRC sponsored KTP granted to **Spinelli** was followed by her DAIWA foundation award to support international collaboration with Tokyo University.

This investment and strategy has paid dividends: our research income has *more than doubled* over the REF period. The total generated income for the School stands at £5,086,688.39 from 39 successful projects with 43.9% of our income coming from collaborative EU grants where we are part of larger research consortia(4 projects are on-going); 24.7% from research councils (ESRC and EPSRC) and 10.2% from TSB. This is broken down as follows:

2007-08 **£172,096.00** (UNU-MERIT, EPSRC, DEFRA, NESTA) 2008-09 **£1,178,255.16** (EC, EPSRC, ESRC, Barclays Bank and Advantage West Midlands). 2009-10 **£579,556.01** (Intellectual Property Office, International Federation of Accountants, London Borough of Ealing, Institute for Small Business and Entrepreneurship, EC and ESRC). 2010-11 **£735,154.69** (ACCA, The Scottish Accountancy Trust for Education and Research, Qatar National Research Fund, British Academy and Technology Strategy Board). 2011-12 **£1,290,840.94** (Leverhulme Trust, EC, Daiwa Anglo-Japanese Foundation, British Council, India/UKIERI).

2012-13 £1,130,785.59 (ESRC, EPSRC, UKEIRI, British Academy, EC, ISBE, ACCA)

These projects have led to top quality outputs e.g. Moscone's ESRC grant (*Statistical Modelling of Interdependence in Economics*) has led to 12 journal articles (seven of which are published in journals ranked as ABS 3* or 4*), 3 conference papers, 4 workshops and 3 discussion papers. In



total, outputs have included 37 conference papers, 25 journal articles and 10 published reports and are forming the basis for 4 of our impact case studies - evidence of the wider economic and social, as well as academic, benefit coming from our funded research.

Infrastructure and Facilities

The School and the University provide excellent infrastructure and facilities to early career, midlevel and experienced researchers supporting high quality research. This includes the **£28M investment in a new, state-of-the-art Eastern Gateway Building -** part of the University and School strategy of creating a building suitable for a world class business school. Previously operating on 5 sites, the School now has purpose built, dedicated space available for research centres, workshops and seminars, visiting researchers, PhD and MBA students - allowing all activities to be coordinated in one location. This enhances our profile and enables greater opportunity for internal collaboration and sharing of best practice, integration of PhD students into School activities, effective delivery of staff support programmes as well as interaction with external academic and non-academic collaborators.

Other infrastructural support includes: an excellent campus library with on-line access to specialist Business and Management resources (32,083 books; 2,400 journals and e-journals); the Library's Academic Skills service that includes research skills; IT services and computing facilities; a BBS Research 'sharepoint' site with accessible research information. Other information sources include a termly RSDO e-newsletter, a BBS Research Essentials document (that gives details on external funding, internal financial support, industry links), a quarterly Leading Edge Research Newsletter as well as a termly BBS newsletter that publishes research news and initiatives.

Brunel Research Database, an online publication database system, serves as a storage point for all publications, and automatically updates publication details including citation counts. This is fully linked with Brunel University Research Archive which provides a showcase for staff's publications by making the full text freely available where possible. The University Open Access Publishing Fund ensures that articles are published in open-access journals and are widely available.

e. Collaboration or contribution to the discipline or research base

Collaboration and Partnerships

Furthering collaborative partnerships is a cornerstone of our goal of increasing research quality – informing our research and international strategy. The School has strengthened existing partnerships and built new collaborations, taking advantage of our culturally diverse staff, many of whom have overseas links and cross-national research interests and expertise.

Overseen by the Research Manager and supported by the Large Grant Initiative Fund, the School has undertaken a drive towards larger scale, collaborative and interdisciplinary research projects in line with research council priority areas. The fund is open to all staff to facilitate the building of strong relationships with international collaborators. Collaboration extends to industry (SMEs and corporates), UK and international universities, research institutes, not-for-profit organisations, local governments, and third-sector organisations. We are working on 25 inter-disciplinary projects with 8 national and 73 international research partners from the university sector, the third sector, the public sector and the private sector. For example, on externally funded grants, Mansouri has worked with the University of Tehran on humanitarian logistics; Spinelli with Age UK to capture the diverse products and service needs of the elderly; Valsecchi with NHS Plus to assess a new occupational health service advice line for SMEs; Anderson and Costa are building an International Collaborative Research Network on creativity and innovation in the UK, the Netherlands, and Spain; Weerakkoddy is establishing 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. These and other collaborative projects have enriched our research environment and enhanced our position as an internationally recognised research intensive School.

These initiatives underpin our commitment to enhancing research quality through inter-disciplinary research – as evidenced through the number of our externally funded inter-disciplinary projects e.g. ECRs **Stoian** and **Ko** (CEIBIEM) are working with **Jarvis** (AARC) and ACCA; **Slutskaya** (WORC) with the School of Social Science looking at dirty work; **Simpson** (WORC) with the School of Arts on entrepreneurs in 'fringe' theatre; **Bourlakis** (previously OASIS) is working with



School of Engineering on an EU funded project on sustainable food supply chains..

The University supports **inter-disciplinary research** through support given to five collaborative research networks and University Interdisciplinary Research Centres.

BBS has supported the exchange of researchers with overseas centres such as through the British Council's UK-India Education and Research Initiative (2 completed; 2 on-going). We have a vibrant community of **visiting international scholars** (30 since 2009) who are positioned to make a positive contribution to our research activities from, among others, the University of Malaysia, UNCTAD, University of Tehran and the School of International Affairs, China.

International Recognition and Contribution to the Discipline

Through our collaborative partnerships and the synergies created within our URCs we are shaping the business and management discipline in diverse ways e.g. ISEing is driving the agenda on e-Government policy and research; CEIBIEM is developing innovative research into emerging markets; CREAM is at the forefront of work on corporate branding/ heritage; much of the cutting edge research on social inclusion originates from WORC; AARC is developing new understandings of accounting practice in SMEs while OASIS is establishing a strong international profile on sustainable supply chain and is speaking to new agendas around humanitarian logistics.

International recognition of the above work is evidenced in 14 journal editorships held by BBS staff during REF period including Enterprise Information Management and Transforming Government: People, Processes and Policy (Irani); International Journal of Electronic Government Research; International Journal of Public Administration in the Digital Age (Weerakoddy); International Journal of E-Government Research (El-Hadaddeh); British J. of Management (Ozbilgin); European J. of Information Systems (de Cesare); Active Learning in Higher Education (Baldwin); International J. of Selection and Assessment (Anderson). Associate editorial roles include International Small Business J. (Jarvis); Gender Work and Organization (Simpson, Ozbilgin, Slutskaya); J. of Applied Psychology (Anderson); European J. of Work and Organizational Psychology (Costa); International J. of e-Adoption (AI-Shawi); J of Global Information Management (Hackney): Economic Modelling J (Moscone): International J of Information and Communication Technology Research: Advances in Information Systems and Supply Chain Management (Sharif); J. of e-Commerce in Organization (Weerakoddy). BBS staff hold 85 editorial board membership positions including Human Relations (Anderson), Academy of Management (Learning and Education (Simpson, Ozbilgin), J. of Brand Management (Balmer), J. of Change Management (Braganza), Strategic Change (Jarvis) and have acted as guest editor on 65 special issues between 2008 and 2013.

Moscone is member of the *peer review ESRC College*; **Anderson** is Fellow of the *British Psychological Society* and the *American Psychological Association*; **Jarvis** is an active member of diverse accountancy groups (e.g. *Institute of Small Business and Entrepreneurship; ACCA; the European Financial Reporting Advisory Group*). In 2013 he received a Lifetime Achievement Award from the *British Accounting and Finance Association*. **Collis** is academic advisor to the *European Federation of Accountants and Auditors for SMEs*. **Mordi, Kumra, Anderson, Ozbilgin** and **Costa** are members of *CIPD*. **Kumra** is international research fellow at *Said Business School, Oxford*. **Hackney** is executive member of the *Information Institute*. In addition, 13 visiting professorships are currently held by BBS staff.

Since 2010, we have hosted **23 conferences and workshops** at BBS as further indication of our contribution to the discipline, including the annual eLearning Conference (2012; 2013); Transforming Government (tGov) Conference (2010; 2011; 2012; 2013); 3rd International Modularity Workshop (2011); Heritage, History and Nostalgia Conference (2012); 2nd International Conference on Islamic Marketing and Branding (2012).