

<p><b>Institution:</b> London South Bank University</p>
<p><b>Unit of Assessment:</b> Business and Management</p>
<p><b>a. Overview</b></p>
<p>This unit of assessment is based on the Centre for International Business Studies (CIBS) which was established in 1992 to foster excellence in research, consultancy, postgraduate teaching and knowledge transfer. In 2009, the Faculty of Business was restructured and CIBS brought together multi-disciplinary research from the three units of assessment submitted in the RAE 2008: Business and Management (UoA 36); Library and Information Management (UoA 37); and Computer Science and Informatics (UoA 23). Following restructuring, there were a number of staff retirements/departures and the disestablishment of the Institute of Computing Research (ICR). This enabled the Faculty to focus research into Business and Management and particularly around the areas of <b>Information Systems and Management, Management Education and International Business.</b></p> <p>We have been able to cover the retirement of experienced staff with the emergence of a cohort of younger academics and this submission represents a research grouping that has undergone significant change in the last 5 years. The change was driven by a clear policy for developing research active staff and the establishment of research areas that support the faculty strategic plan. CIBS is the umbrella for all staff, including established researchers, early career researchers and doctoral students from the four academic departments that were also formed in 2009. Since RAE2008, research income has more than doubled at nearly £3 million, PhD completions have increased by 50% to 21.8 (FTE), and we currently have more doctoral students registered than at any time in the past. Collaborative research with commercial and charitable organisations has featured strongly with more than 20 projects over the review period.</p> <p><b>b. Research strategy</b></p> <p>Our research strategy has been to encourage applied research and scholarship that links professional practice and subject knowledge. This underpins our postgraduate provision, provides opportunities for knowledge exchange with our stakeholders and opportunities for staff to enhance their professional profile. Our research cuts across subject research, teaching practice and student learning and we have encouraged pedagogic and educational research that supports business development. We have specifically targeted a growth in the number of research students and supported promising early stage researchers funded through an expansion of research income, international collaborations and the development of a professional doctorate in Business Administration. At the last submission a number of research objectives were identified including: 1) to double the number of research active staff and increase REF submittable staff; 2) increase research income by 30%; 3) increase the number of doctoral students by 50%; 4) increase the number of research collaborations, both nationally and internationally. Each of these objectives have been achieved.</p> <p>First, there has been an increase in the number of staff being submitted. Five staff are now submitted for the first time having either been developed by the faculty (<b>Barber, Chen, Snaith,</b>) or appointed externally (<b>Grant, Cheung</b>). The others (<b>Burrell, Rigby, Warwick, PatelS, PatelD</b>) were submitted under the three different UoAs in RAE2008; Second, research income has increased from approximately £1.5 million to nearly £3 million during the REF2014 period. Sources of income include Research Councils, Government funds, Charities and Industry (both UK and international); Third, doctoral student completions have increased from 14.75 (FTE) to 21.8. There are a further 18 students on the research phase of the DBA (estimated to complete in 2015) and 20 on the taught part; Fourth, external research collaborations have been established e.g. with Hanze University of Applied Sciences (Netherlands); Berlin School of Economics and Law (Germany), International Academy of Management (Hong Kong), University of Calgary (Canada), University of St Cyrilius and Methodious (FYR Macedonia), Technical University of Dortmund and University of Ljubljana.</p> <p>CIBS has three main research groups. There is deliberate overlap between the work of these groups through our desire to encourage research that links to education management either by providing teaching and case study material or because it affects the practice and organisation of</p>

our business and management teaching. The research groups are described below.

**Information Systems and Management (PatelS, PatelD, Burrell, Grant, Chen, Snaith)**

Building on the strengths of the RAE2008 submission, the work of **PatelD**, **PatelS** and **Burrell** extend the links developed nationally and internationally with organisations across both the private and public sectors. **Grant**, **Chen** and **Snaith** add breadth in terms of modelling skills, links with business and industry, and a real focus on the solution of practical problems within the IS domain.

The research group has a view that business must be underpinned by IS infrastructures that should support effective decision making in organisations. Efficient integration of IS and management processes requires that we understand the nature of information and are able to manage and use it intelligently by understanding the cognitive processes of individuals, the emerging culture of groups and of organisations, and by developing intelligent tools. Research is focussed around cognitive informatics and intelligent systems, knowledge management, and knowledge acquisition. While the work of the centre extends to the theoretical study of cognition, the majority of the research has a very practical orientation. There have been eight PhD completions covering IS implementation, the use of IS for organisational support, and knowledge management. All have a strong case-based practical focus and include the formal modelling of web services, integrating health and social provision using system dynamics, and organisational readiness for change in knowledge sharing initiatives.

**Burrell** has well established research links with the public sector and has continued to work with both the health sector and with the Police. His collaborative work in intelligent systems has clear practical application and demonstrates the application of theoretical ideas to tough practical problems. **PatelD** and **PatelS** exemplify the ethos of the research centre mixing the theoretical and practical elements of IS research. They have developed models of cognitive processes and human attention as well as exploring a doctrine of cognitive informatics. There is also strong collaborative research relating to IS implementation linking organisational culture, knowledge management and knowledge acquisition. **Chen's** work uses a range of modelling approaches to explore complex dynamic systems. Many organisations are faced with issues of data and systems complexity and **Chen** demonstrates the impact that modelling techniques have in cases ranging from data mining in online retail organisations to applying neural networks to help predict the availability of naturally occurring resources. **Snaith** has worked with a NHS Primary Care Trust to develop an e-protocol for effective searching in evidenced based practice and also considers the more general issues of knowledge management in organisations through a number of case studies. He also considers the failure of IS implementations and considers models and guidelines for analysing such failures. This work, and that of **Chen**, exemplifies the applied nature of the work of the research group. Finally, **Grant** is looking at the emergence of entrepreneurship as a research field and his work (with that of **Burrell** and **Snaith**) has overlap with the Management Education Research Group.

**Management Education (Warwick, Cheung, Grant, Snaith)**

With higher education in the UK going through a period of unprecedented change and the student experience gaining primacy this group's research has two broad themes: 1) the practice of business and management education which has direct impact on the classroom learning experience of students; 2) the use of systems thinking to explore educational issues which, although not primarily classroom based, will still impact the student experience. The group is focussed on identifying intervention points which can influence the student experience and support the educational requirements of our diverse student body. The outputs submitted are predominantly practical with empirical research approaches. The three PhD completions in this area each had a focus on teaching practice whether it be collaborative e-learning activities or direct classroom teaching of systems thinking.

**Warwick's** work engages with both the above themes: it acknowledges the complexity inherent in education provision and uses systems thinking and problem structuring methods to enhance organisational (university) performance. It also addresses a concern in business education relating to the preparedness of students to study quantitative subjects and develops ideas for improving mathematical efficacy and reducing anxiety of students without the use of diagnostic testing.

**Cheung's** work focuses on theme 2 developing in students a range of the softer skills of entrepreneurship and employability, and of social and civic awareness. Other staff have

contributed outputs to Management Education research. **Grant** addresses Information Management pedagogic practice within UK higher education and also considers how teaching is influenced by scholarship, research and consultancy. **Burrell** discusses an intelligent web-based training system for SMEs to aid their learning and decision-making while **Snaith** explores the implications of both legislation and funding on Higher Education institutions and considers some of the implications for the future of Higher Education in the UK.

### **International Business (Rigby, Barber)**

This group has developed a strong tradition in international business research and has further consolidated by developing wider and deeper international collaboration and building capacity in terms of research active staff and postgraduate students. Early career researchers and academic staff completing doctorates have been strongly supported.

The research submitted employs a variety of methodologies and approaches clustered around two areas. Firstly, employment relations research. This reflects **Rigby's** long standing interest in this area and the research has a strong comparative element focused on four key contemporary themes within the area: employee voice, conflict management, work life issues, and employment relations in SMEs. Secondly, the Political/Institutional environment of business. **Barber's** work looks at the institutions of global economic relations and political elites.

### **Research Strategy over the next 5 years:**

The specific drivers that underpin our future research policy and allow us to maintain high quality research are: (i) to continue to grow research income particularly through EU funding and KTP programmes but to rebalance the income stream through other commercial, industrial, charitable and Governmental sources to present less future risk; (ii) to continue the strategy of nurturing new research talent and further developing established staff through research supervision and involvement in collaborative work; (iii) to support our successful doctoral programmes by growing our pool of supervisory staff; (iv) to maintain the highest standards of ethical and professional conduct in all research activity; (v) to establish clear academic leadership for each research group so that staff and research students have a clear sense of identity within the faculty; (vi) to maintain the subject focus of our research groups which maps well to our taught curriculum and to the research and developmental requirements of our business and management partners.

Specifically, we have identified the following four objectives to measure the progress of our research activity over the next five years: First, increase the number of doctoral completions per annum by increasing the number of doctoral students primarily through growth in the DBA programme. We will be looking for growth of approximately 20% per annum. Second, increase doctoral supervision capacity by continuing with our supervisor training workshops, encouraging staff to attend and contribute to the annual Research Summer School, encouraging staff to undertake doctoral study and by setting in place a mentoring scheme for inexperienced supervisors. We will also continue to implement a group supervision model to best utilise existing resources and develop new staff. Third, increase research income by 30%. This will be focussed around Industry funded research (contract research), KTPs and EU funding (Horizon 2020). Fourth, embedding ethics and professional practice as a cornerstone of all research activity. The faculty already run ethics workshops and ethical considerations are discussed as part of our curricula for all students – not just doctoral students. In addition we have set up ethics committees at departmental and faculty levels so that we can be sure that no research is conducted without consideration of the possible ethical issues.

### **c. People, including:**

#### **i. Staffing strategy and staff development**

Since the faculty restructuring in 2009 there has been a need to realign our research activity. This has been achieved through three staff-related mechanisms. The first was the policy to recruit research active staff with doctorates and industry experience including the appointment of staff at professorial level to lead research. The second was to identify strong internal candidates from among the existing academic staff and mentor them through the internal promotions process for research appointments. This has worked well within the faculty and since the last submission **Snaith** was promoted to Professor in Higher Education Management and **Barber** was promoted to Reader in Management. The third was to encourage engagement with research and consultancy

as a priority for all newly appointed staff at Lecturer grade so that subsequent career progression is linked to engagement with research (see numbers below). The faculty has also been successful in developing former doctoral students into lecturing roles that may become permanent when posts become available.

The faculty has a staff development policy that allows attendance at conferences, seminars and other research training events that are agreed through the annual appraisal process. The University is committed to the Research Concordat to support the career development of researchers. This is coordinated by the Organisational and Staff Development Team which provides information and training events for research staff and which is facilitated at a local level by the Faculty Concordat Coordinator. In addition there have been a number of initiatives designed to stimulate and support research staff across the University, including the Research Opportunities Fund to encourage new staff into research with financial support and mentoring (five staff from the faculty have won support through this fund and although none are yet REF-ready they have become research active), and the Research Development Fund designed to encourage staff from categories perceived as underrepresented in RAE2008. The University runs an annual Research Summer School which attracts PhD students, other postgraduate students and research staff and provides an important networking opportunity and a showcase for staff and students' research work. Our partner institutions actively engage in the Research Summer School and one senior researcher from the Berlin School of Economics and Law and four senior researchers from Hanze University of Applied Sciences have made keynote presentations in the last two years.

Our staffing policies have meant that we have been able to submit five staff for assessment the first time. **Chen** is now leading research in the area of intelligent information processing and is starting to undertake doctoral supervision and **Cheung** and **Grant** are newly appointed staff with **Cheung** and **Barber** identified as promising early career researchers. Furthermore, we have been able to sow seeds for further growth by supporting existing staff undertaking doctoral study. During this REF period two staff completed their doctorates, 11 staff are currently undertaking PhDs and six are on the DBA programme. All research operates within the University Equal Opportunities Policy and the Code of Practice for REF staff selection has further emphasised equality of opportunity for all staff who wished to be considered within the research quality parameters we have set. Our resulting submission contains a balance of experienced, mid and early career researchers, with approximately 40% of those submitted being categorised as BAME and 20% women.

Mentoring has been significant in developing research active staff and encouraging them to build upon their recent doctoral work. For example, staff are encouraged to present papers at the CIBS staff research seminars and submit papers for the CIBS research working paper series. The relevant departments of the faculty have funded the participation of these staff in international conferences which have given them the confidence to produce papers. The University's formal staff appraisal system allows the setting and reviewing of specific research targets and effective workload planning giving staff the space in which to develop their research interests.

## ii. Research students

All three research groups have a record of successful PhD completions with 22 students being conferred from the faculty as a whole during this REF period. The strong track record of completions is testament to the supervision and support that the students receive within the faculty and from the University as a whole.

In 2010 we launched the DBA programme to provide another path to doctoral study which has recruited well externally and which our own staff (both academic and non-academic) have found attractive. We are collaborating with the International Academy of Management in Hong Kong who are now running the DBA for their local market and they are currently on their second intake of students. The following table illustrates the breakdown of PhD completions per year and the enrolment pattern of DBA students. The initial cohort of DBA students is due to complete their doctoral research in 2015.

We have a total of 55 students currently enrolled on the PhD programme (21 full-time and 34 part-time) and of these 11 are staff from within the faculty. This represents a significant increase in PhD enrolments and evidences the growing strength of our research activity. This is supplemented

## Environment template (REF5)

by the students on the DBA programme and of the 18 students currently on the DBA programme (UK), 6 are staff from the University.

	2008	2009	2010	2011	2012	2013	Total
PhD Completions	1	3*	7	7	2	2	22
DBA Completions	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DBA Enrolment UK	N/A	N/A	3**	6**	5***	4***	18
DBA Enrolment HK	N/A	N/A	N/A	9*	N/A	11***	20

Note: the data above represents the number of graduating students per calendar year.

\* - actual completions but due to a reporting error at the time the original HESA return shows 1.

\*\* - these students have now completed the taught component of the DBA.

\*\*\* - these students are still undertaking the taught component of the DBA.

Within the faculty the doctoral programme is managed by the Faculty Director of Research who is also the Faculty Director of Postgraduate Research Programmes with support provided by a Senior Research Administrator. All doctoral students are required (since 2009) to attend and satisfy the University's postgraduate key skills development programme which develops key transferable research skills. Completion of the programme is a condition of progression through the doctoral programme and of their final award. This was an area of practice commended by the QAA at our last institutional audit in 2010/11.

The University also operates a centrally funded research scholarship scheme which is competitive across all areas of the University and provides successful students with a bursary (£15kpa), home fees paid (faculties pay the difference if the candidate is an overseas student) and payment for consumables (£500pa). In addition to the annual Research Summer School, each year events are organised within the faculty that doctoral students are encouraged to attend. Within the last three years these have included: Prof Dan Remenyi invited to host a one-day research methodology workshop on 'Making Academic Research Rigorous & Relevant', Prof Remenyi has since engaged many of the students through his blogs. A two days Doctoral Research Event attended by both UK and international doctoral students and supervisors. Prof Joan Curzio presented the opening workshop on Ethics & Governance Clearance – thus embedding further the faculties approach to the importance of ethical considerations in research. Prof Dan Remenyi hosted a further one-day workshop on 'Writing up Your Research'. Research development workshops have also been hosted by **PatelS** on ethics, research supervision and doctoral studies.

All PhD students are affiliated with the New London Graduate School (NLGS) formed as a consortium of five universities (LSBU, Greenwich, East London, Middlesex and Anglia Ruskin) to provide the benefits of a larger consortium of research students, specialised research seminars, advanced methods and subject training, and greater support in transferable skills. Four students presented at the Department of Accounting & Finance 'Research Celebration'. This was a presentation, exposition and discussion of research undertaken by some doctoral students and academic staff of the Faculty of Business. Students have also taken the opportunity to attend external workshops, lectures, and seminars. Amongst these have been: the British Academy of Management (BAM) and British Computer Society (BCS) Doctoral Symposia; the Institute of Chartered Accountants (ICA) Research Development Event; UEL Seminar 'Ensuring Postgraduate Research Students Complete on Time'; the Society for Research into Higher Education's one-day event on 'Undertaking a Literature Review and Writing up Research'; the 13th Postgraduate Network Symposium CTNB; the British Academy of Management (BAM) Doctoral Symposia; and the Association of Research Ethics Committees.

### d. Income, infrastructure and facilities

Staff have attracted research income of some £2,930k during the REF period spread across a variety of income sources including KTP activity. Supported by the Enterprise Unit, KTPs have been a key strategic focus for the faculty with a total of 16 KTP projects funded in this UoA during the REF period. Of the staff in this submission the lead academic on five of these was **PatelS**, with **PatelD** and **Warwick** one each. In general the main sources of research income have been Research Councils, Government departments, UK Companies, charity and third sector organisations.

Other research funding has included small grant funding from the Higher Education Academy for

work relating to pedagogic development, the British Academy and the Certified Accountants Educational Trust (ACCA). A further £805k has been garnered through collaboration with UK industry and commerce with specific projects associated with Rockwell Collins Ltd (safety critical systems), South Bank Mosaics (work on social enterprise community services and young offenders), and £358k gained by the faculty's Ehrenberg Centre for Research in Marketing (the Centre is funded partly by corporate sponsorship and works with a large number of companies to address critical issues in marketing). Other collaborative research with specific UK companies contributed a further £433k and examples here included iBeads Ltd (**Warwick**) for developing an e-business platform for expanding international business opportunities, Key20 Media (**PatelS**) for developing and embedding a CRM solution for digital content, Faber Music Ltd (**PatelS**) for creating an e-partners solution to enable legal download of digital sheet music, and ASP Packaging Ltd (**PatelD**) for enterprise resource planning for streamlining processes in the food packing industry.

Other notable income generation was by Culwin (now retired) with £173k from the European Commission 7th Framework Programme for development of a collaboration awareness tool for CSCS users and Murdock (not submitted) who has engaged with a range of third sector collaborative projects with ESRC funding under the Social Enterprise Capacity Building Cluster, income from charitable organisations (e.g. Emmaus International), and there has been £328k awarded through KTP relating to projects with charitable organisations (Murdock and **PatelS**). The Faculty was awarded approximately £230k funding under RCIF which was partitioned between funding for the development of advanced multi-media IT laboratories and green computing infrastructure development (**PatelD**).

Research within the faculty is governed by policies and procedures defined by the University. Governance of research activity operates through three groups of committees. The University Research Committee oversees all research activity and sets University research strategy and each faculty also operates a Research Committee that oversees local research activity and policy under delegated authority from the University committee. In addition there is a University Research Ethics Committee which sets ethical standards and policy and considers ethics applications from all doctoral students, while Faculty Ethics Committees consider other student related projects and reports to the Research Ethics Committee. Finally, the Research Degrees Committee oversees the operational processes of postgraduate research, considers research applications, MPhil/PhD transfers and other reports.

UoA staff are all involved in all of these committees, with **PatelS** being the current Chair of the University Research Ethics Committee.

#### **e. Collaboration and contribution to the discipline or research base**

##### ***Research collaboration with industry, government, commerce and third sector***

(**Chen**): Donor segmentation for not-for-profit organizations (The Muscular Dystrophy Campaign), Consumer-centric business intelligence for online retailers (Rex International, Ltd); (**Barber**): Oral evidence to the House of Commons Political and Constitutional Reform Select Committee; Expert commentary on global governance for leading organisations including the Post Crisis Institute in Moscow, Tax Notes International in Washington DC, BBC Brazil, International Financial Centre Review in London; Senior Research Fellowship at the Global Policy Institute, Chair of a seminar at the House of Commons 'Does Greed Still Have a Place in the Post Credit Crunch World?'; (**Rigby**): Role of accountants in HR support to SMEs for ACCA; Member of Expert Forum on Equal Distribution of Working Hours, Province and Town Hall of Barcelona; (**Grant**): NHS IT Professionalisation – consortium of eHealth Directorate (Scotland), ISD Corporate Services (NHS Scotland), Jackie Caldwell (Scottish Government) and Deloitte Professional Advisory/Consulting Services; (**Burrell**): Offender profiling in stranger rape/linking serious sexual offences; Bramshill Fellowship NPIA Serious Crimes Analysis Section and the Metropolitan Police; (**PatelS, PatelD**): Collaboration with Prof. Yingxu Wang (University of Calgary) in Cognitive Informatics, TEMPUS projects (over the last 15 years) in IS development and information management.

##### ***Academic Collaborations***

(**Chen**): Visiting Professor North Western Polytechnic University, China; International partner of the School of Electronics and Informatics, Northwestern Polytechnic University China; (**Rigby**): Visiting

## Environment template (REF5)

Fellow at the Autonomous University of Barcelona funded by Catalan Ministry; European Research Network member co-ordinated by University of Pais Vasco-Euskal, Spain; Member of Accounting and Auditing Research Centre, Brunel University; **(Burrell)**: EU FP7 Erasmus IP, Developing Open Source Systems in Europe, Finland Austria Spain Italy Slovak Rep. Turkey; **(Grant)**: Member of the National Committee (Scotland) for the Professionalisation of E-health (working with The Scottish Government, The Cabinet Office and Deloitte Touche Tohmatsu); **(Warwick)**: Edited book Higher Education and Operational Research with Peter Galbraith University of Queensland; **(Grant)**: Strategic IS Management with authors from Groningen University, Bentley University, Glasgow Caledonian, Kingston, Birkbeck, Brunel, West of Scotland, Cranfield, Directors from Delotties and NHS Ayrshire and Arran; **(PatelS, PatelD)**: Fellowship of the International Institute of Cognitive Informatics and Cognitive Computing (for promoting collaborative research).

**Invited seminars, journal editorships, conference organisation**

**Invited seminars at:** **(Barber)**: University of St. Gallen/Sino-Swiss Chinese Government Delegation, Rotterdam University, Konrad Adenauer Foundation/Federal Trust, NIBS, CIPD, CMI, University of Buckingham, Global Policy Institute, Dialogue Society; **(Rigby)**: University of Glasgow/Goethe Institute/Alliance Francais/Swiss Embassy, University Carlos III, Madrid, University of Valencia, University of Sydney, Universitat Autònoma de Barcelona, CEDEFOP Thessaloniki, Spanish Sociological Association, Valencia; **(Grant)**: Bellaby's College, Study Group Brighton, Glasgow4Business Sessions to local SMEs and regional based multinationals, the Graduate Centre of GCU in partnership with Strathclyde, Heriot Watt, Stirling and Dundee Universities, Future of Applied Research - Triple Helix Conference ; **(PatelS)**: ICT innovations series, IEEE International Conference Series on Cognitive Informatics series.

**Conference organisation:** **(Chen)**: Program committee of the International Conference on Computational Intelligence and Security 2008-2013; **(Burrell)**: Conference committees for MICAI Mexico, UCall 10 Greece, ANNIE Missouri USA; **(PatelD)**: Steering Committee of the IEEE International Conference Series on Cognitive Informatics.

**Journal editorships/editorial boards/reviewers:** **(PatelS)**: Reviewer for ESRC and Natural Sciences and Engineering Research Council of Canada grant applications. Journal reviewers: **(Cheung)**: *Journal of General Management*; **(Warwick)**: *Teaching Mathematics and its Applications*, *The International Journal of Educational Development*; **(Rigby)**: *International Small Business Journal*, *Employee Relations*, *Labour Studies*, *ACCA Research Papers*, *British Journal of Industrial Relations*. International Editorial Board **(Grant)**: *International Journal of Information Management*; **(PatelS)**: *Macedonian Academy of Sciences and Arts Journal Contributions*. Journal panels: **(Burrell)**: *Decision Engineering Report Series*: Cranfield University, *British Journal of Medicine and Medical Research*, *International Journal of Violence against Women*.

**Contributions to professional associations, learned societies and disciplinary development**

**(Rigby)**: Advisor to ACCA Small Business Group on SME, HR issues and represented ACCA on these issues to Business Europe, UEAPME, EU DG Employment and DG Enterprise, Preparation of ACCA evidence to HMG on changes to dismissal legislation, CIPD discussion of role of professional bodies in relation to SMES – (with R Jarvis) award for best research paper at CIPD Annual Conference.

**External research supervision and doctoral examinations**

**Supervision:** **(Chen)**: PhD student exchange with Northwestern Polytechnic University, China, **(Burrell)**: University of Bedfordshire; **(PatelS)**: Hochschule für Wirtschaft und Recht Berlin; **(PatelD)**: University of Technology Mauritius; **(Rigby)**: Collaborative doctoral supervision, UAB, Barcelona.

**Doctoral Examinations:** **(Burrell)**: UPC Barcelona and University of Bedfordshire; **(PatelS)**: Brunel University (UK), University of St Cyrilius and Methodious (FYR); **(Warwick)**: University of Manchester; **(PatelD)**: University of Middlesex, Loughborough University, Brunel University, University of Graz, Jomo Kenyatta University; **(Grant)**: Brunel University.