

Unit-level environment template (REF5b)

Institution: University of York
Unit of Assessment: 17 - Business and Management Studies
<p>1. Unit context and structure, research and impact strategy</p> <p>Strategic development</p> <p>Since its creation in the mid-2000s, the University of York Management School (UYMS) has grown strategically to become one of the largest departments in the University, although still small compared with other Russell Group business schools. We focus on building distinctive areas of expertise that fit our social values and intellectual culture. Our research vision and strategy emphasise enabling scholars to apply their disciplinary expertise to socially and economically relevant problems, increasingly within interdisciplinary teams.</p> <p>As the School matured in this REF period, we strengthened our research strategy within a shared vision aligned with University values (REF5a:1). Our underlying principle is captured in our Vision statement: “To be a Management School that is globally outstanding in its academic excellence and contribution to the wellbeing of society”. Our strapline of “Creating sustainable business, community and society” stresses our priority of being socially engaged, speaking to the impact of management in all settings.</p> <p>Long-standing areas of expertise have been strengthened to build further critical mass, emphasising shared themes outside traditional disciplinary boundaries:</p> <ul style="list-style-type: none"> • Ethical dimensions of management and the experience of marginalised groups, including ethnographies of front-line responders (McCann); “dirty jobs” (McMurray); fast-food workers (Royle); in-work poverty (Swaffield); and human-animal interactions at work (L.Hamilton). Equality and diversity (EDI) is important including women’s leadership (Trehan); gender inequalities in pay and employment (Mumford and Smith ICS3), LGBT+ employee networks (Einarsdottir); disability (Kumar); migrant labour (Jiang ICS5), as is the philosophy of ethical management (Linsley, Sinnicks). • Development of non-traditional research methods, combining insights from organisational studies, anthropology, sociology and psychology to develop novel approaches to data collection, analysis, presentation and dissemination. Innovative research methodologies include participatory art and video (Jiang ICS5; Einarsdottir); visual methods, drawing and interactions with objects and other species to elicit experiences (Baxter; L.Hamilton); photo elicitation, photo mosaic and film as methodological tools (Jiang; McMurray; Roberts; Powell), and photography, film, animations and poetry as research outputs (Linstead; McMurray). • Evolution of modern businesses and their environment. Members of the Centre for Evolution of Global Business and Institutions (CEGBI) and the Management and Organization History Research Cluster (MOHRC), represent one of the largest groups of business historians in the UK, combining historical research with management (particularly international business and marketing), economics and geography, led by Da Silva Lopes and Cooke. <p>As researchers coalesced around shared interests, new areas in line with our vision for academic excellence and contribution to society’s wellbeing were identified and invested in:</p> <ul style="list-style-type: none"> • Novel ways to calculate risk, wellbeing and social value, combining management studies, finance, actuarial science, and consumer psychology with mathematics, statistics and economics. Distinctive in theoretical focus and application outside traditional finance subfields, research includes models, algorithms and apps to improve decision-making under uncertainty, policy in relation to wellbeing, banking sector risk management and pension funds’ investments (Bregantini; Cornea-Madeira; Dias;

Unit-level environment template (REF5b)

Freeman; Hoque; McNeil; Myrseth; Ramsden; Smith ICS4; Thijssen);

- **Environmental sustainability, food supply chains and circular economy**, particularly food security (Doherty, ICS1) and agricultural supply chains (Jia) within an overall interest in operational efficiency and how organisations contribute to environmental and social wellbeing (Ball; Garnett; Huatuco; Kapetanaki; Linsley; McMurray). Consumer behaviour expertise is applied to sustainability issues, such as Wells examining social marketing that facilitates pro-environmental behaviour in the workplace and Lin on use of electric bicycles in China and electric vehicles in Nordic countries. Ball leads circular economy research, funded by BBSRC, ESRC, THYME and the White Rose consortium.
- **Healthcare management and organization**. Notably, Kirkpatrick on medical management, Suter and Kowalski on impacts of shift patterns, Luca and Kapetanaki on social marketing and health. Angeli leads research on inclusive healthcare delivery and poverty alleviation, especially in India.

Our primary strategic commitment is to “consistently employ UYMS’s disciplinary research expertise for the study of socially and economically relevant problems that require an interdisciplinary approach”. This reflects that there are few economic and societal challenges that are not, in part, caused by underlying organisational dynamics, and that organisational problems rarely focus on a single research discipline.

To deliver this strategy, we foster a lively and supportive environment for researchers at all levels to excel in their area of expertise and actively engage across research communities. We support staff to engage with other disciplines within the Faculty of Social Sciences and beyond to biology, computer science, environment, mathematics, and health sciences, supported by University interdisciplinary research themes (REF5a:4). This approach is exemplified by [IKnowFood](#) (see ICS1); and [York Cross-disciplinary Centre for Systems Analysis](#) (Ball; Garnett; Thijssen); LGBT+ research with Social Policy (Einarsdottir; Mumford); [Interdisciplinary Global Development Centre](#) (Angeli; Banerjee; Cooke; Jia; Kumar; Linsley), and the [Science and Technology Studies Unit](#) (co-director Garnett, also Baxter; L.Hamilton).

Faithful to our interdisciplinary approach, we support our researchers to publish in a wide range of leading academic outlets, beyond management journals. Our REF outputs reflect the focus on interdisciplinarity, with 23 allocated an interdisciplinary research flag. In addition to submitted outputs, we provided management expertise to a variety of interdisciplinary projects. Noteworthy is Kapetanaki in the *Lancet* (Swinburn et al., 2019), contributing marketing expertise to examine child obesity alongside co-authors from nutrition and climate change (over 600 citations since publication in 2019). Further examples include Garnett using complexity theory to understand climate change (*Science of the Total Environment*, 2018) and Garnett, Doherty and Heron, examining vulnerabilities in UK food supply chains exposed by Covid-19 and Brexit, combining complex systems, networks and politics expertise (*Nature Food*, 2020).

Structure

In 2018 we introduced a gridded academic structure to advance interdisciplinary working while maintaining disciplinary expertise. Subject groups were reduced from six to three, significantly increasing critical mass in each, and we introduced four interdisciplinary research themes. Staff and research students are members of one subject group, and align with one or more interdisciplinary themes.

Subject groups provide disciplinary expertise, line management, staff development and research-led teaching. They give junior staff and research students a safe environment within which to develop subject-specific skills and learn from experienced research leaders. They comprise:

- **Accounting and Finance (AF)**, engaging in a diverse range of Accounting and Finance research, including quantitative and qualitative approaches to risk;

Unit-level environment template (REF5b)

- **People, Operations and Marketing (POM)**, researching functional aspects of businesses including Marketing, HRM and Operations for all types of organisations, employees, consumers and citizens;
- **Work, Management and Organization (WMO)** emphasising critical and historical studies of organisations, covering Organizational Behaviour and Theory, Strategy, and Industrial Relations.

Our four research themes are interdisciplinary, tackle societal challenges and generate research with impact. They enable our strategic aims by: (i) increasing collaboration across the School to deliver impactful research that crosses management sub-discipline boundaries; (ii) dovetailing with University research themes to facilitate cross-University teams; and (iii) strengthening institutional links with research funders and non-academic partners to engage with national and international priorities:

- **Equality, Justice and Ethics (EJE)**, focusing on issues relating to people and organisations, particularly “marginalised voices”;
- **Management and the Humanities (M&H)**, deriving methods for management research that straddle creativity, culture, heritage, history and management. MOHRC is supported by this theme;
- **Risk, Innovation and the Economy (RIE)**, examining technological and economic change, including risk modelling, organisational responses, creative disruption and innovation. This theme includes CEGBI and has developed new links with researchers in risk and innovation.
- **Sustainability and Resilience (S&R)**, addressing questions of sustainability, broadly defined, including sustainability of organisations, environments, organisational responsibilities and resilience.

Theme membership is more fluid than group membership, enabling intellectual responsiveness as priorities and interests evolve. The vitality and sustainability of each theme is enabled through professorial leadership, seminars, events and publication support. By working alongside subject group line management, this has substantially enhanced our ability to offer early career researchers effective mentoring and career development.

Figure 1 illustrates how faculty from the three subject groups align with interdisciplinary themes, demonstrating that each captures different elements of our research activity.

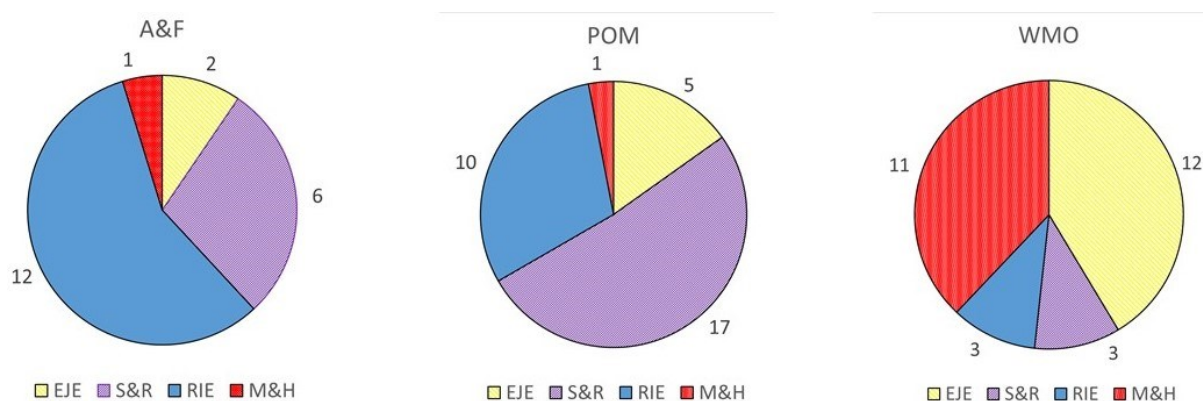


Figure 1. Relationship between subject groups and research themes

There is clear evidence of these structural changes bearing fruit. Our scholars have brought management expertise to collaborate with national and international policymakers, industry bodies, charities, public sector and private organisations, plus employees, especially vulnerable or marginalised voices, as well as academics in other disciplines (Section 4 and ICSs).

Unit-level environment template (REF5b)

All UYMS Category A faculty are submitted to UoA17, plus Fredona, a Category A full-time researcher at UYMS for two years from Harvard Business School, holding an H2020-MSCA-IF-2017 Marie Skłodowska-Curie Individual Fellowship. Mumford joined UYMS from the Department of Economics and Related Sciences (DERS) in August 2020 while Thijssen holds a joint appointment with the Department of Mathematics. Smith (RIE theme) and Swaffield (EJE theme) from DERS are also submitted to this UoA; they have long-established research links with UYMS and were submitted to this UoA in REF2014.

The University Pro Vice-Chancellors (PVC) for Research (Ruth, S&R theme) and Partnerships and Engagement (Trehan, EJE theme) are submitted to UoA17. That the University leaders for both Research and Impact fall within this UoA shows the central role that Management as a discipline plays in framing York's institutional academic agenda.

Attainment of REF2014 Objectives

Development over this REF period remained true to the vision articulated in REF2014; to conduct "...methodologically rigorous research of international quality that makes a distinctive and effective contribution to scholarly, policy, business, and societal debates about the role, purpose, and outcomes of management at all levels (individual, group, organisation, society) and in all settings". We have made substantial progress, exceeding many REF2014 objectives:

- Category A staff exceed the growth target of 50FTE (Section 2);
- Research income was increased from £20k in 2012-13 to £493k in 2019-20 (Section 3);
- PhD completions were more than doubled from averaging 4.4 to 9.9 annually, with 82% of vivas requiring no or minor corrections (Section 2);
- Infrastructural support for research was increased, including a full-time Research Facilitator, a Director of Business and Community Engagement, additional research leadership roles and internal funding schemes (Section 3);
- Impact was enhanced by formalising supporting structures, expanding engagement opportunities and increasing financial support for impact activities and relationships with research users (Sections 3 and 4).

Impact Strategy

Generating research with impact is fundamental to our mission of "creating sustainable business, community and society". Our research themes provide key structural mechanisms to deliver impact, alongside formal impact strategies and processes that have been strengthened since 2014. These are driven by our Director of Business & Community Engagement (DBCE, Ball). As PVC, Trehan plays a pivotal role in linking School and University impact agendas (REF5a:12).

Figure 2 provides examples of how our impact strategy and gridded structure have helped contribute to "...business, community and society". Five examples in **bold** represent our ICSs, spanning a variety of contexts affected by management decisions and representing each of the four research themes (ICS1 S&R; ICS2 M&H; ICS3 EJE; ICS4 RIE; ICS5 spans EJE and M&H). ICS5 is led by a BAME female lecturer, demonstrating support for impact across our faculty. We return to other examples in Section 4, included here to highlight impact variety and interdisciplinarity. Some examples represent more traditional knowledge transfer (yellow background), but most reflect our preferred co-creation strategy (white background).

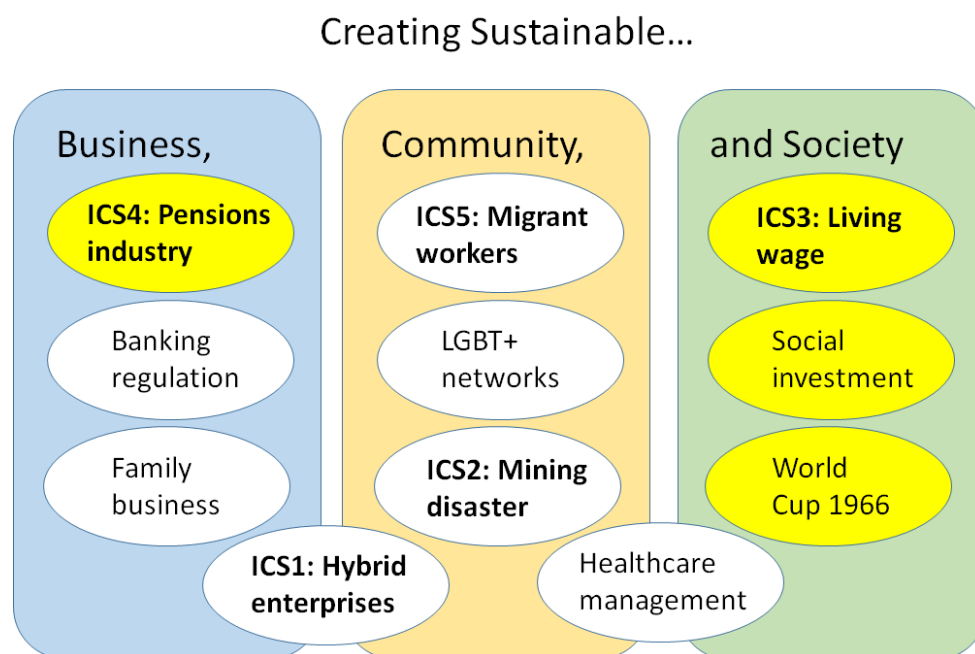


Figure 2. Examples of engagement and impact

The University and UYMS encourage and support scholars at all career stages to develop the impact of research across its life cycle, recognising that impact generation may involve lengthy time periods. Lasting impact often goes beyond traditional knowledge transfer and key to our impact strategy is the co-creation of knowledge, with emphasis on developing long-term relationships with non-academic organisations (REF5a:49). For example, the University's strategic research partnership with Tees Esk and Wear NHS Trust facilitated Suter and Kowalski to study healthcare workers.

All our ICSs provide examples of ongoing long-term relationships generating impact: Doherty (ICS1) with the World Fairtrade Organisation, Coop Group and Oxfam; Linstead (ICS2) with the National Union of Mineworkers and charity People and Mining; Mumford (ICS3) with the Low Pay Commission and Resolution Foundation; Smith (ICS4) with various pensions funds; and Jiang (ICS5) with the Voice of Domestic Workers. (Further examples in Section 4).

Open Research

We are committed to enabling research to be as open as possible, ensuring research findings are shared widely, methodologies are clear and detailed, and data are shared, to facilitate reproducibility. We go beyond funder compliance: all research outputs (except books) are deposited in the University open access repository (White Rose Research Online), consistent with University policies (REF5a:16). Datasets can be lodged with the York Research Database (REF5a:17); examples include the international banking database (Mollan), and data from the first Citizen Food Assembly (Doherty) involving the National Food Strategy, DEFRA, community organisations and the North Yorkshire & East Riding Enterprise Partnership. ICS2 provides an example of lodging a historical dataset for public use.

Staff commitment to open research has increased in this period and eight staff currently edit open access journals, including Angeli, academic editor of interdisciplinary science journal PLOS One. Open research is included in induction and PGR training. Staff access additional learning and support on open research from University training; librarians advise and facilitate open access to publications and datasets, including [Practical Guides](#).

Unit-level environment template (REF5b)

Research Integrity

Researchers comply with University policies on research integrity and ethical governance, benefiting from shared best practice through the Russell Group Research Integrity Forum and the University Research Integrity Forum (REF5a:14).

New projects are required to obtain ethics approval before data collection. The Economics, Law, Management, Politics and Sociology ([ELMPS Ethics panel](#)) (Chair: Royle) includes an additional School representative (Luca). ELMPS meets 6 times per year and produces an annual report to the University Ethics Committee, of which Royle is a member. The ELMPS panel is especially aware that Management research on marginalised voices and increasing work in healthcare raises particular issues around GDPR and protection of participants. Additional sections have been added to ethics applications forms to ensure researchers explicitly consider mitigation of risks to participants, themselves and the University. Health research involving the NHS requires approval through the UK Integrated Research Application System. Training on ethics requirements is provided at staff induction and separately for PGR students and research integrity has formed a dedicated session at the School's annual Research Away Day.

Future Strategy

We will further increase the social legitimacy of our research by: (i) applying and advancing our disciplinary academic excellence, (ii) co-creating knowledge with non-academic partners and, (iii) increasing collaboration with scholars in other disciplines. In order to achieve these goals, we have been working on two major strategic developments since 2019.

In line with our commitment to sustainable business, community and society, we will formalise and deepen collaborations with the University's Social Policy department, a global top 10 department within its discipline ([QS World University Rankings 2020](#)). This radical collaboration is well-advanced, aiming to create a unified School of Business and Society, aligned with the University's heritage and ethos, and the City of York's identity, particularly the Rowntree family's legacy as ground-breaking business leaders and social reformers. Complementary strengths will allow us to address challenging problems aligned with international priorities and our shared purpose around (but not only) policy frameworks and management practices that best enable reductions in poverty, inequality and social harm, and enhance wellbeing, in the context of public services, not-for-profit organisations and business management.

Additionally, we will increase the breadth and depth of our research collaboration with other disciplines, at York and elsewhere, providing a management perspective to joint projects and funding bids. Sustained investment in the School's research themes will enable focused interdisciplinary collaborations around environmental sustainability, food supply chains, mathematical approaches to risk, and historical approaches to management, amongst others.

Second, the School will retain a foothold in the EU and further enhance its international research and impact through the University of York Europe Campus (CITY College, Thessaloniki). This collaboration opens new opportunities for socially and economically relevant management research, increasing understanding of poverty, inequalities and environmental responsibilities in South-Eastern Europe. This complements our existing York-Maastricht partnership (REF 5a:6), which will be developed further.

These strategic developments alongside progress made during this REF period will ensure that management research continues to thrive at York. We will further increase our community of Category A staff and doctoral students to increase critical mass, while remaining small- to medium-sized to retain our agility and strong research culture. We will continue to increase research income, generated through more joint funding bids enabled by established structures including the University's interdisciplinary research themes, the White Rose consortium, and the N8 network. We will deliver even greater impact through our partnerships with government, third-sector and

Unit-level environment template (REF5b)

community organisations, as well as businesses. And we will continue to produce world-class research, disseminated through a range of outlets including, but not limited to, leading academic management journals.

2. People

Staffing Strategy

A three-fold staffing strategy enabled us to exceed our target of 50FTE Category A staff:

1. Recruit and retain international research leaders;
2. Recruit early career faculty;
3. Build mid-career capacity by retaining, developing, and supporting internal promotion of early career faculty.

Recruitment stressed the School's distinctive strategy, aiming, at all levels, to appoint faculty who wish to be impactful in their research and actively participate in interdisciplinary research themes.

Figure 3 shows appointments (all open contracts; new lecturers serve two years probation) and resignations of UYMS Category A faculty (data from 01/14-07/20). This evidences strong retention alongside significant investment in recruitment. All but five of our REF-submitted outputs are authored by faculty employed by York on the census date.

Consistent with our staffing strategy, appointments have been mostly Lecturers (23) and Professors (20). A strong mid-career presence has been built through promotions, with seventeen Category A Senior Lecturers and one Reader on the census date. Of these, three have been Senior Lecturers throughout this REF period, four were appointed at their current level, eleven were internally promoted including one promoted twice (Hollow).

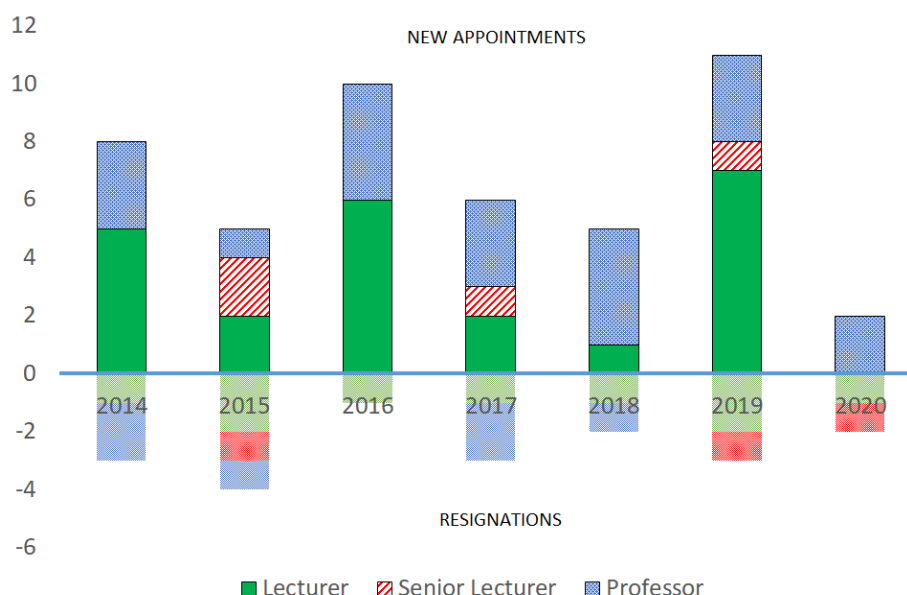


Figure 3. Recruitment and resignations in UYMS

Figure 4 illustrates increased success with internal promotions. Of nine staff who were initially unsuccessful, five achieved promotion in later rounds. Wherever possible, we avoid moving staff to non-research contracts because we are committed to early and mid-career researchers' development - only three faculty (two pre-2017) permanently, and one temporarily, converted from Category A to non-research contracts.

Unit-level environment template (REF5b)

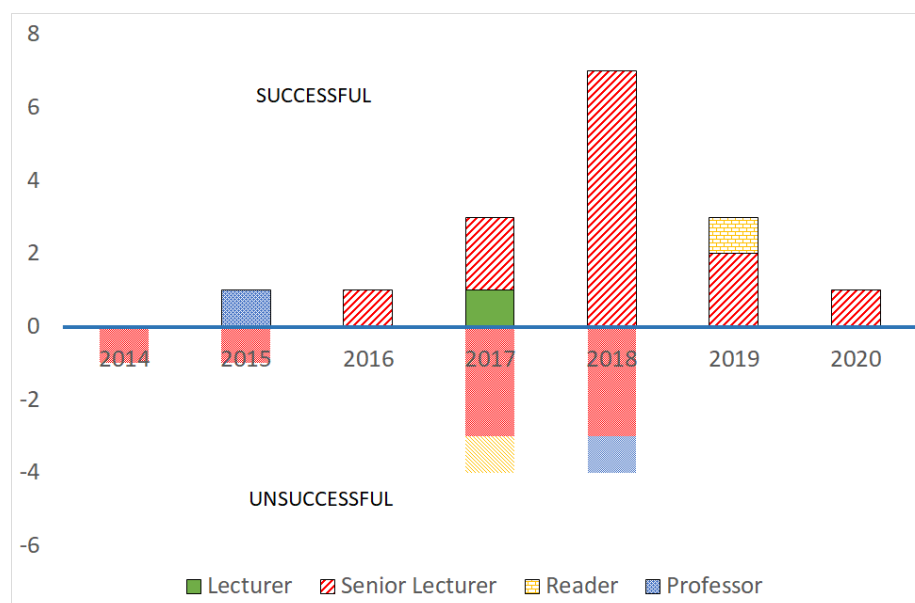


Figure 4. Internal promotions applications from UYMS

Linsley was promoted to Professor, and professors achieved grade promotions including to the highest grade (Band 3) We have identified and are actively supporting a number of mid-career researchers to achieve professorships in the next 1-3 years.

Succession planning includes expected progressions of mid-career faculty, is facilitated by providing deputies for all leadership roles, and is aided by our demographic profile. Over 90% of all UYMS Category A non-Professorial faculty were younger than fifty on the census date. The median age of UYMS Professors was fifty-two.

Grade 6 post-doctoral research assistants (non-Category A) form a small but important part of our research community (2014-2016 = 1FTE; 2017 and 2019 = 4FTEs). These are generally fixed term contracts associated with externally funded projects. Destinations include UYMS Senior Lecturer (Hollow); Surrey, Essex and Northumbria Universities; Senior Research Fellow (NHS).

Staff Development

Our success in recruiting, developing, internally promoting and retaining staff can be attributed to:

Vision and Culture

The vision to create “sustainable business, community and society” through a highly interdisciplinary and impactful approach resonates with existing staff and new hires. A very high proportion of people we offer jobs to accept the offer with anecdotal evidence suggesting it is primarily for this reason. UYMS is also recognised for a strongly supportive research culture where success is celebrated and staff are encouraged to be creative and take considered risks. Feedback from a recent staff survey described UYMS as ‘friendly and open’ and colleagues as ‘supportive’, ‘collegiate’, and ‘good’ people.

Mentoring and Line Management

The gridded structure of groups and themes has enhanced academic mentoring and line management, facilitated by significant expansion of the professoriate. All staff have a performance development review annually with their Head of Group, to reflect on successes, areas for improvement, personal and career development aspirations and priorities. Performance expectations are in line with the University Statement on Research Performance Expectations (REF5a:22). UYMS endorses the UK Concordat to Support the Career Development of

Unit-level environment template (REF5b)

Researchers and the European Charter and Code of Conduct and the University holds a European Commission HR Excellence in Research award (REF5a:27-28).

Probationers are appointed a mentor from within UYMS and other staff may request one. The University Mentoring Scheme (REF5a:22) enables staff to engage with a senior member of faculty outside their department (e.g., McMurray is mentored by the Dean of Faculty). For specific disciplinary or methodological expertise, we have formally engaged mentors from other HEIs to support our staff.

Formal review schemes have been introduced for pre-submission feedback on outputs and grants, and for revise and resubmit advice. The first, led by Theme Leads, provides two reviews, from more and less experienced members of staff, thereby capacity building through improving reviewing skills, as well as providing feedback to authors. Large grant applications benefit from Faculty and University review processes.

Support with promotions

The School has increased support to help staff achieve internal promotions. [Promotions criteria](#) and guidance are openly available. We actively work with faculty to help them achieve these criteria. In 2018, the Deputy Dean role was divided into two with one dedicated to staff development and HR. This Deputy Dean sits on the Faculty promotions panel and works proactively with Heads of Group and the School Dean to help identify and develop promotions cases with individual staff, including identifying mentors from the Professoriate.

Time for research

More than 50% of total contracted workload hours for Category A faculty is allocated to research activity, comprising (i) 40% annual research allowance, (ii) sabbatical leave every ninth term, (iii) supervision hours for research students (iv) allocated hours for impact activities, and (v) buy-out for externally funded research.

Heads of Group manage workload, aiming to block teaching into one term where possible and provide cover for staff with revise and resubmit decisions in high-ranking journals, revisions of eminent monographs and preparation of major funding bids. Heads of Group proactively identify faculty due for sabbatical leave and assist with applications. Figure 5 illustrates sabbaticals that have been approved by the School over this REF period. A 60%:40% male:female balance for sabbatical leave reflects our Category A gender mix.

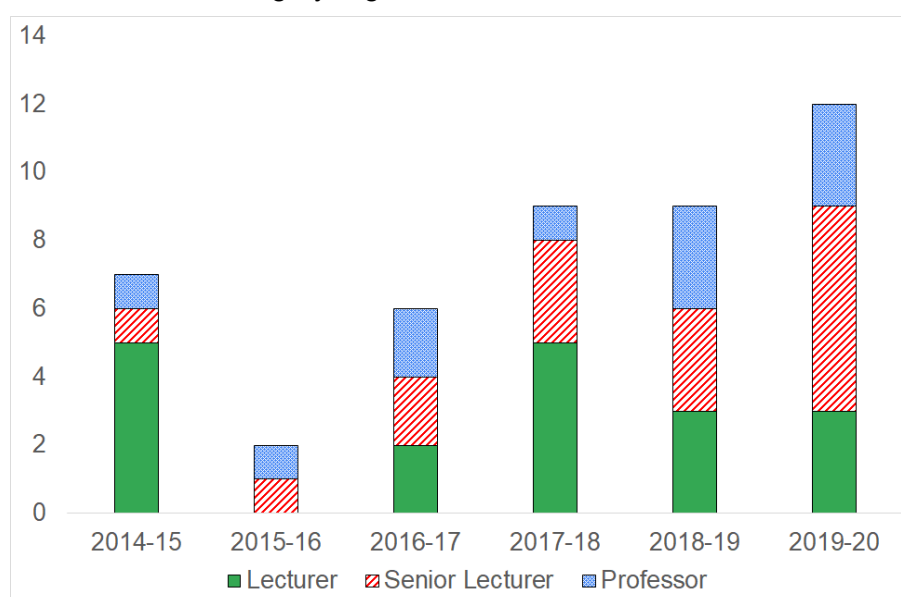


Figure 5. Sabbaticals approved by UYMS.

Unit-level environment template (REF5b)

Research and Impact Training and Support

Career development and non-discipline specific research and impact training are provided by the University Research Excellence Training Team's extensive programme (REF5a:32). Within UYMS, staff share their expertise in workshops examining effective doctoral supervision, publishing in top tier journals, writing research grants, leading research teams, engaging policy-makers, developing research impact, and career development. Leading journal editors have provided seminars and workshops including UYMS professor Muzio (Editor, Journal of Management Studies), visiting professor Suddaby (former Editor, Academy of Management Review) and Barczak (Editor, Journal of Product Innovation Management).

Regular writing retreats provide staff with space to develop written work, encourage reviews and facilitate interaction and mentoring relationships between senior and junior staff. The 'writing for publication' on-site activities continued from REF2014 through this REF period, including virtually during Covid-19. In 2019, writing retreats were held at Ampleforth Abbey and in conjunction with the EGOS conference in Edinburgh. Writing retreats are frequented more by women faculty, contributing to women's career development.

Early Career Training and Support

In addition to all the above, ECRs receive specific support to develop their careers. All new appointees have 100 hours 'new start' reduction in workload. We have formalised an [ECR Forum](#), with thirteen staff regularly engaged in 2020. Chaired by a different ECR each year (Kowalski, 2020), who sits on the School's Research Committee, the Forum organises workshops and training by senior researchers from York and externally, including 'Meet the Professor' and 'Insights Into...' series. It also helps ECRs build professional relationships and access training and development specific to their needs.

A sub-group of the Forum successfully bid (2020) for funding from the National Productivity Investment Fund - Accelerating Business Collaboration scheme, to help them create an ECR Manifesto and undertake training on making their research more visible to businesses.

ECRs are actively encouraged to access additional advanced research training and networking opportunities through the [Northern Advanced Research Training Initiative](#) (NARTI). Postdoctoral researchers have the same support as other ECRs, with their specific training needs being overseen by Principal Investigators.

Postgraduate Research Students

PGR students (all PhD, we do not offer professional doctorates) form a core part of our research community, often attracted to York by our distinctive academic vision. They benefit from being in a relatively small Management School that can provide individualised training and close engagement with senior faculty. This is enabled through our gridded structure (Section 1), two supervisors, and an assigned Thesis Advisory Panel member providing additional expertise and oversight of the supervision relationship (REF5a:31).

Up to 2018-19, PGR recruitment was below target, averaging 10 students per year. To address this, we created three fully funded School PhD scholarships from 2019-20, which increased the number of high quality applicants and recruitment rose to 18 students. PhD applicants can compete for scholarships from the [White Rose Doctoral Training Partnership](#) (WRDTP; REF5a:34), with four funded in this REF period. We also contribute to funding for Chinese PhD students via the [Chinese Scholarship Council Scheme](#).

Approximately 55% of PGR students are female and 70% are non-Home/EU, with a broad geographical and ethnic mix. Future development of the PhD programme aims to increase cohort size whilst maintaining high quality, supported by an increasing range of internally and externally funded scholarships.

Unit-level environment template (REF5b)

PGR training and support is extensive and comprehensive:

- Students must successfully complete two compulsory modules on philosophy and methods. Additional training is individually tailored. Training needs analysis identifies whether recommended modules from our Masters suite are compulsory or elective. Students access modules in other departments where relevant;
- Students gain support and specialist expertise through membership of a research theme and subject group and can extend their networks and knowledge by joining staff in a wide range of open events (seminars, Masterclasses, skills training, etc.);
- The Research Centre for Social Sciences ([ReCSS](#), REF5a:48) and [York Graduate Research School](#) (REF5a:30) provide research and impact training and career support, which students are encouraged to take up;
- Substantial PGR training opportunities and wider networks of peers and research leaders are provided through our memberships of WRDTP, NARTI and N8 Universities (REF5a:6). In 2017, we hosted the WRDTP Conference and organised the White Rose conference on alternative postdoctoral careers;
- Our annual PGR Summer Conference and internal seminar series help students develop presentation skills, as well as providing valuable staff and peer feedback;
- International experience, conferences, training and network development are encouraged and financially supported. In this REF period, PGR students presented papers regularly at AoM, EGOS, BAM, IPDMC, Euroma, EDAMBA and EIASM conferences;
- Students are encouraged (but not required) to consider part-time opportunities to enhance employability. Part-time opportunities to teach, or to provide short-term research assistance, are advertised internally. PGRs who teach undertake the University's Introduction to Teaching and Learning programme. Twelve (nine) students undertook part-time teaching in 2019-20 (2018-2019);
- Student health and wellbeing is paramount to their progress and is supported by a full-time dedicated professional counsellor in UYMS, and a mental-health first aider (Glaister). We provide events to raise awareness of mental health and available support with a particular focus on how to cope with the emotional demands of doing a PhD.

Since REF2014, our PhD completions have risen to average 9.9 per year from 4.4. The average period to submission is just under four years, and since 2016, 82% of vivas resulted in no, or minor, corrections. Of 71 graduates since 2013 (tracked February 2020), approximately half were in academic jobs in UK universities, a quarter in overseas universities and a quarter in non-academic positive destinations. Academic destinations included the LSE; King's College London; Bristol; Sheffield; York; Fudan; Thammasat; Jordan; Airlangga; Ca' Foscari University of Venice. Non-academic destinations include the OECD; National Assembly of Nigeria; Indonesia Audit Board; Abu Dhabi government; Thyssen Krupp.

87% of submitted staff supervise PhD students (exceptions are mostly new starters). ECRs are paired with experienced colleagues and undertake University training on supervision. In line with our interdisciplinary focus, PhD supervision may be across departments at York.

Equality, Diversity and Inclusion (EDI)

Ensuring that our research culture supports, values, and encourages contributions from all groups including ECRs, female faculty and BAME staff is an absolute priority for UYMS. Our approach is informed by a number of faculty who actively research EDI (Einarsdottir; Kowalski; McMurray; Mumford; Suter; Trehan). The Deputy Dean for Academic HR (McMurray) and PVC (Trehan) are both active in this research area which lends senior management support to initiatives. The University holds an Athena Swan Bronze Award (REF5a:37) and the School is working towards a departmental Bronze award (submitted 12/20).

Figures 6 and 7 summarise Category A faculty by gender (all staff identify as binary) and whether

Unit-level environment template (REF5b)

they are white British, BAME or from another background. 59% are male and 51% white British, with 13% BAME. Women and non-white-British are under-represented at Professorial level. The School has been led by both female (Schofield) and male (Freeman) permanent Deans in this REF period.

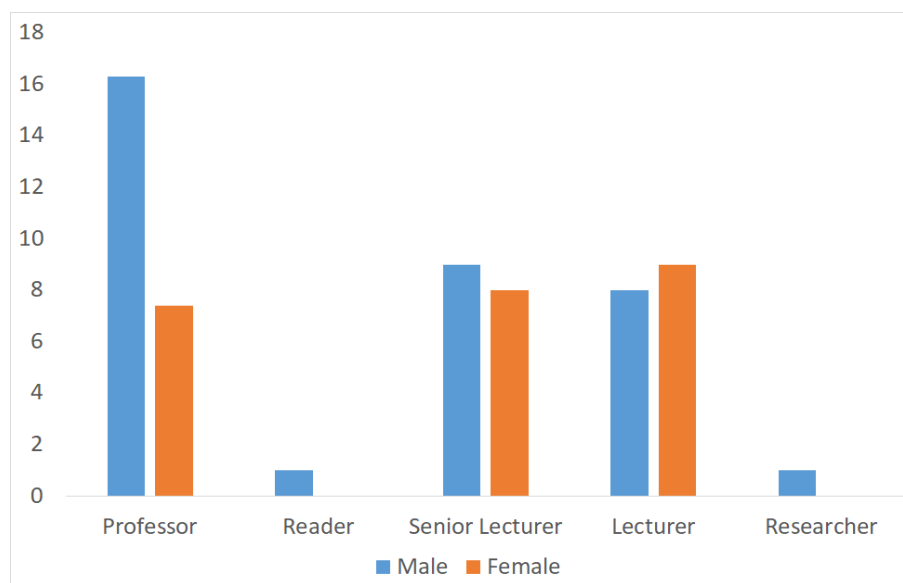


Figure 6. Gender mix

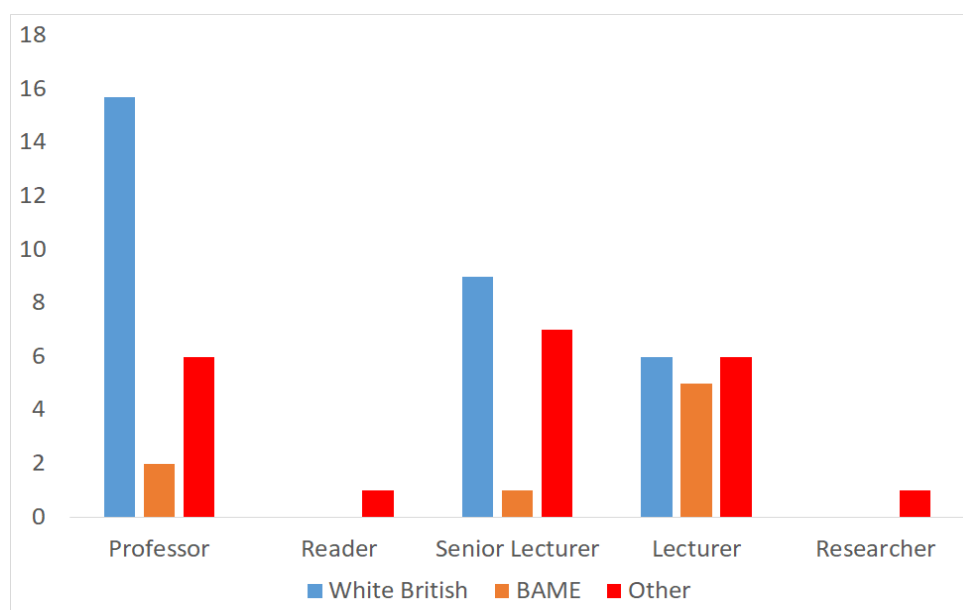


Figure 7. Ethnicity

Early in this REF period, promotions and retention rates suggested potential gender equality issues. All five successful promotion cases from 2014-2017 were men, and women were more likely to leave the School. There has been some improvement with four women and seven men promoted since 2018, but women are still under-represented. The School has successfully increased its female retention rate, with only two women resigning since 2016.

Equality, diversity and unconscious bias training are provided by the University and required for members of recruitment and selection panels. Appointments made during this REF period were 60% male, 42% white-British and 17% BAME, with no overall clear distinction before and after 2017. However, professorial appointments were 88% male and 88% white-British before 2017, compared to 58% male and 50% white-British thereafter. Again, this suggests that equality issues

Unit-level environment template (REF5b)

are improving but not fully resolved, motivating our Athena Swan application which provides a comprehensive action plan for our next stage of development.

UYMS Cultural Survey shows that female and male faculty are equally likely to report that they are 'actively encouraged to take up career development opportunities' which are widely advertised to all, through the UoY website, emails and posters. Equality and inclusion in accessing training is facilitated by requiring training needs to be discussed at annual performance reviews. Heads of Group consider staff's individual circumstances when allocating workload, for example providing a teaching free term for staff returning from extended leave or ill health and fitting timetabled commitments around caring responsibilities.

Regular events are held to raise staff awareness and improve understanding of issues, including Equality Matters monthly Masterclasses (Section 3). We have improved the visibility of role models for minority staff and women, responding to analysis showing that a surprisingly disproportionate number of external seminar speakers were male. A 'Women Leaders' initiative (lead: Angeli) was launched to provide support to female faculty, run a seminar series, identify potential visiting fellows, and organise events specifically targeted at the needs of female faculty. The School Advisory Board has members with expertise in EDI, including the Director of Future Inclusion and former Chair of Scope.

We actively support flexible working arrangements, both for equality purposes and to ensure staff have an appropriate work-life balance. Staff can apply for flexible working arrangements including job share and job splitting, term-time only working, unpaid leave, career breaks, flexitime and flexible retirement. In 2020, we had one flexible retirement (male) and two professors working part-time (female).

Our REF submission evidences the School's commitment to equality, diversity and inclusion. An **Equality Impact Assessment** was undertaken on outputs selection. Analysis of gender and ethnicity variables identified no significant differences in number of outputs submitted or predicted grades (multivariate analysis, $p > 0.1$). Our five impact cases include two led by women, three led by men, and one from a BAME member of faculty.

3. Income, infrastructure and facilities

Research funding

Our strategy for growing research income has been to increase the number and value of external bids as Principal Investigator (PI), and to facilitate staff involvement as Co-Investigators (CI) in inter-institutional bids, consistent with our aim to apply disciplinary expertise within interdisciplinary teams. Figure 8 shows the significant upward trend in income since REF2014 (REF4b). Comparing 2013-14 with 2019-20, shows a 43% increase in number of PI bids, 300% increase in CI bids and 373% increase in value of PI bids. This was facilitated by cultural and organisational changes (Section 1), better promotion of opportunities and successes, training, mentoring and role modelling (Section 2), and pump-priming and dedicated bid support (detailed below).

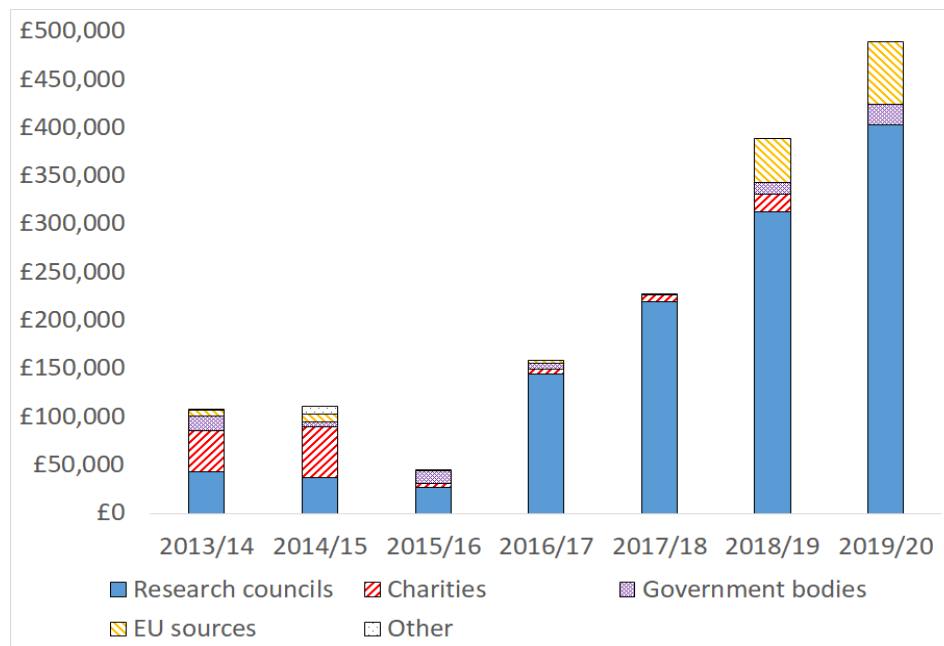


Figure 8. Research income

We successfully bid for research income from a wide range of funders, including the EU, international research councils, charities, learned societies and professional bodies. Funding supported researchers at all career stages:

- Senior academics are PIs on strategically important, large and medium grants, expanding our interdisciplinarity and international collaborations: e.g. Doherty (IKnow Food; £3.3m, BBSRC); Einarsdottir and Mumford (LGBT+ Employee Networks £822k, ESRC); and da Silva Lopes (£167k combined Marie Curie and British Academy). The Doherty and da Silva Lopes grants have significant international dimensions across developed and developing countries. Following a bid in June 2020, Doherty (PI) and Ball were awarded a UKRI 5-year research programme "[Transformations to Regenerative Food Systems](#)" worth £5.88m, commencing January 2021.
- Faculty were Co-Is on large interdisciplinary projects across departments and institutions. Ball received two (internal) BBSRC innovation grants with BioVale/BDC on business waste, a THYME grant, with Biology, on anaerobic digestion, an ESRC PIN grant with Strathclyde on productivity and a White Rose collaboration award combining design, engineering, digital and management in the circular economy. Suter, Ball and Howorth collaborate with Aston University on an ESRC grant examining mental health management in SMEs. Further examples include Thijssen (NERC), Garnett (MRC, RAE), McBryde (HEFCE), Wells (EPSRC).
- Senior academics encourage and mentor early- and mid-career faculty to enhance skills in generating income. For example, Doherty mentored Gonzalez-Jimenez and Fastoso as co-investigators on a large interdisciplinary ESRC grant, and Luca and S.Hamilton to develop sustainability/resilience research. Luca has since independently applied as co-investigator for two external health-related interdisciplinary grants (MRC; NIHR).
- Faculty gained funding experience with applications to smaller, independent, external funders. Successes include: Hunter (Academy of Finland); Kumar (Rockefeller Foundation, Economic History Society); Mollan (Economic History Society, Wellcome Trust); Ha (British Academy); Huatuco (Newton Fund); Tse (British Academy); Garnett (BAM); Ramsden (London Mathematical Society).

Unit-level environment template (REF5b)

- Competitive internal grant funding provides bidding experience as well as resources. Examples of success by earlier career faculty include Suter and Kowalski (Wellcome Trust), Pecot and Matilal (Morrell Trust).
- Generating income from professional bodies, including the North Yorkshire Moors National Park (Linsley and McMurray), FIFA (Gillett and Tennent) and the Brewers' Research Education Fund (Ball).

Organisational Infrastructure**Investing in Research Leadership**

UYMS invested heavily in building critical mass in areas aligned with our distinctive intellectual vision (Section 2). Chair appointments have emphasised engagement with research users and provided increased leadership of research impact. For example, Howorth guided Suter researching mental health in SMEs leading to increased outputs and successful funding bids. Impact within EJE has been strengthened through appointing Muzio (accounting and legal professions) and McMurray (marginalized industries), and within S&R by appointing Jia (supply chains) and Wells (sustainability). Impact in RIE has been strengthened by the appointment of Roberts (innovation), Freeman (social investment) and McNeil (banking; insurance). Two Chair appointments were made in 2019 (Kirkpatrick; Angeli) to enhance impact specifically in healthcare.

Newly-created roles formalised responsibility for research leadership, including Director of Business and Community Engagement (DBCE), four research theme leads, Impact Lead and REF Lead.

Financial Support for Research and Impact

The School's research budget is the largest component (>35%) of the operating budget. Internal financial support is provided for all Category A faculty, post-doctoral researchers and PGR students. Category A faculty have financial autonomy over an annual allocated personal research allowance (£2,000). In addition, they can apply for funding to support research and impact activities from the School's Strategic Research Fund, Senior Management Team and other budget lines.

In 2019-20, to better align research resources with strategy, the Research Director was given responsibility for allocating and managing the total research budget (later disrupted by Covid-19). Major budgeting lines included:

- Research dissemination, including conference attendance;
- Enhancing research infrastructure, pump priming, funding research databases, event and conference hosting;
- Postgraduate research support;
- Staff research training, in-house and external, including the ECR Forum and funding external staff training such as Chartered ABS and BAM programmes.

Decisions on internal funding allocations aim to align resources with our vision and values, funding strategically important conferences, research theme activities and providing pump priming of research and impact. We recognise the importance of enabling ECRs to build their networks and prioritise them in internal funding decisions; for example, Pecot was supported to develop a relationship with Dom Pérignon/LVMH Group, enhancing his research on heritage brands.

Each PGR student has a budget of £750 and can obtain additional support from the PGR conference fund. Postdoctoral researchers' needs (such as personal development) that fall outside their external grant funding are supported. The School Management Team has discretion to support funding requests outside research budget constraints.

York hosts a series of Impact Accelerator Accounts (IAAs) (REF5a:50), with the Faculty Impact Manager providing proactive advice and support for applicants, as well as more general advice on

Unit-level environment template (REF5b)

pathways to impact and applications for funding. Eleven projects have successfully achieved funding from ESRC and GCRF IAAs and some interdisciplinary research has also accessed BBSRC IAAs and an AHRC aligned internal fund (YIAF) (total over £85k). IAAs have enabled the development of research impact across a wide range of interdisciplinary topics including volunteering (Suter); diversity (Einarsdottir); NHS workers (Kowalski); food security (Doherty); migrant workers (Jiang). The School has also promoted KTPs, with Jia successfully applying in July 2020 (£220k, Innovate UK), sharing expertise on agri-food supply chains in Ghana.

Infrastructure, Facilities and Expertise Utilised in Impact Activities

We invest in regular events to build relationships and develop research agendas between faculty and potential research users. An extensive series of regular Masterclasses (8-10 a year pre-Covid; weekly post-Covid) led by practitioners has included CEO Nestle; CTO Siemens; ex-Deputy Governor of the Central Bank of Turkey; Head of Sustainability, Adnams; CFO Silicon Valley; Equality and Diversity Manager Staffs Fire and Rescue, and the Institute of Management Consultants. Particular emphasis is placed on EDI and Circular Economy talks, the latter in partnership with Circular Yorkshire/York & North Yorkshire LEP. Speakers come from Europe, South America, South East Asia and North America, and half of the talks are given by young 'rising stars'.

The School offered a free, confidential Business Advisory Service as a direct response to the Covid outbreak. This was used by a range of local organisations including start-ups, community organisations, consultancies, food brands and retail. Many of the enquiries related to protecting or growing income and drew on research expertise in innovation, finance, business models and strategy.

We ensure that we publicise our research in formats relevant to potential research users. As well as contributing to University events (REF5a:13), we invest in a variety of media, in keeping with our research focus. A [series of short animations](#) presents our research in layman's terms, specific projects featured in the ITN / Chartered ABS film "[The Impact Factor](#)", and our work was exhibited at the inaugural Chartered ABS [Research Exhibition](#) in 2019 (2020, invited contribution cancelled by Covid). In addition to support from the University's Marketing and Media Relations Department, the School resources dedicated website and social media content development. Researchers are supported financially and with training to build communications skills and engagement with non-academic audiences.

Research and Impact Governance

UYMS invests heavily in governance of its research activity. The Departmental Research Committee (DRC) is a lively forum that reviews and implements research policies. DRC oversees research in themes and groups, ensures robust ECR representation in shaping research policies and processes, and monitors sources of research income. Sustainability of research leadership is assured through diverse membership including Research Director, Deputy Director, PGR Director, two Early Career Researchers, plus Theme Leads, Heads of Subject Groups, Head of Ethics Committee, REF Lead and DBCE, supported by the School Research Facilitator. The Director of Research serves on the Faculty Research Group and, ex-officio, University Research Committee.

Formal mechanisms to support impact are overseen by the DBCE and supported by the Research Director, Research Theme Leads and Research Facilitator. The Research Director, DBCE and REF Lead sit on the School Management Team, ensuring strong representation in School strategy and resourcing.

PGR is governed through the School's Board of Postgraduate Research, comprising: Director and Deputy Director of Research, Director and Deputy Director of PGR, Heads of Group, ESRC Pathway Lead, two student representatives and the Research Facilitator, supported by a PGR administrator. This Board reports to DRC. University oversight is through the York Graduate Research School. Town Hall meetings and Staff Student Liaison Committees each term enable PGRs to share ideas and issues and help shape the development of the PGR programme.

Unit-level environment template (REF5b)

The School [Advisory Board](#), chaired by Professor Sue Cox (Emeritus Dean, Lancaster), provides advice and support on strategy, engagement with research users, and extends industry and stakeholder networks. Members are from a range of for-profit business and not-for-profit organisations (including the Foreign Office and charities), with a shared interest in management with social purpose. The Board has a wide diversity of representation and strong focus on EDI matters.

Operational Infrastructure

In 2010, UYMS moved to the newly opened Campus East that provided modern and excellent facilities for research faculty and PGR students. However, successful growth and ambitious plans (Section 1) underpinned major investment in [new accommodation](#) during this REF period (ready Easter 2021), re-purposing a building acquired by the University in 2016. UYMS led the architectural design of this building, which substantially increases available space and facilitates our interdisciplinary strategy by being situated near the centre of campus. It incorporates individual offices and outstanding shared spaces for interdisciplinary working, plus excellent spaces for external engagement, including a high-specification lecture theatre, boardroom, seminar rooms and a large flexible events space. Dedicated PhD space, at the heart of the new building, is double the existing space. Increased office space is available for academic visitors, and for research, professional and support services. The new building is adjacent to ReCSS, which provides additional facilities for PhD students, research groups, research meetings, workshops and conferences, a training suite, interview and focus group rooms.

UYMS acquires non-standard and higher specification IT solutions for individual health-related reasons and specific research needs. These include staff requiring video and film editing capabilities particularly for humanities-based research methods, and mathematical modellers and actuarial scientists needing increased computational power. Those requiring the most advanced solutions can access University IT facilities (REF5a:41) including the £2.5m Viking Cluster, the Advanced Research Computing Cluster and the N8 Centre of Excellence in Computationally Intensive Research. Staff using film, photography and visual media in their research benefit from the resources and expertise of the Department of Theatre, Film and Television. A full suite of relevant software includes Scientific Workplace; TeXworks; Mathematica; Maple; Matlab; SAS; Stata; SPSS; NVivo; Qualtrics. The School has funded purchase of specific software for individual researchers where needed. The School also purchased strategically important research databases, including CRSP; Compustat; Datastream; Binleys NHS Management; IBIS World; 2iQ. All IT services can be accessed remotely off-campus.

Researchers in the School are well served through remote and 24 hour access to the University Library (REF5a:39), including over 21,000 journals. The Library's Research Support Team provides wide-ranging support, including a dedicated subject librarian and facilitating our open access strategy. Business and management historians in UYMS benefit from the University's Borthwick Archive, whose business archives include Rowntree Mackintosh; Terry's; Vickers Scientific Instruments; NHS York.

Professional support for research is provided by dedicated staff at Faculty and School level, which has grown significantly since 2014, as well as by a substantial team within University Research and Enterprise Services (REF5a, 49). Faculty support includes additional pump priming funds and specialist development groups (e.g. Faculty Impact Group). Professional research support officers within the Faculty and School provide guidance on external and internal funding bids, impact development and data management. Within UYMS, the team of professional research support staff includes: (i) a full-time Research Facilitator, a position created during this REF period, who assists with grant funding applications, data management and research events and (ii) two full-time administrators supporting researchers' travel, conferences and events needs. Increases in support have strengthened the School's interdisciplinary mission and underpin increased grant successes, especially large interdisciplinary grants and other collaborative activity.

Unit-level environment template (REF5b)

4. Collaboration and contribution to the research base, economy and society

Consistent with our strapline of “creating sustainable business, community and society” UYMS makes substantial contributions to the research base, economy and society.

Collaboration with Research Networks and Partnerships

In earlier sections, we describe key features of how we collaborate with external research networks. These include a variety of strategic partnerships and relationships established through the White Rose Consortium, N8, NARTI and Chartered ABS, and plans to further extend international networks through the University of York Europe Campus and the York-Maastricht partnership. We also actively support researchers at all career stages to develop their research networks via our sabbatical policy, financial support and other mechanisms. We additionally support collaboration through:

Visiting Positions

Inward and outward visiting positions facilitate research collaborations and extend influence. For example, Da Silva Lopes held a McCraw Fellowship at Harvard Business School, leading to Harvard Professor Fredona's Marie Skłodowska-Curie Individual Fellowship at York. Freeman visited the Harvard University Center for the Environment, alongside being an invited speaker at a Bill and Melinda Gates Foundation workshop on cost-benefit analysis of healthcare provision in LMICs. Mollan undertook an extended sabbatical as Visiting Fellow at the Centre for International and Global Studies at Duke University. Howorth (Babson), McNeil (Le Centre de Recherches Mathématiques, Montreal) and Ruth (Northeastern) have also established notable networks in North America. UYMS has built a strong network in Japan through da Silva Lopes (Keio, Kyoto); Gonzalez-Jimenez (Rikkyo); Ha (Rikkyo, Keio); Mollan (Tohoku). Additional visiting positions held by faculty include:

- Europe: D'Ippolito (Bari); Dias (ETH Zurich); Garnett (Centro de Estudos Sociais); Howorth (Jonkoping); Linsley (Roma Tre); Luca (Lugano); Muzio (Leeds, Oxford, Luiss Guido Carli); Papadas (Athens); Pecot (Lorraine); Ruth (Bremen).
- Asia: Doherty (Thammasat); Hoque (North South); Jia (Zhejiang); Kirkpatrick (Huazhong University of Science and Technology, Wuhan).
- South America: Cooke (FGV-EASP, Brazil), Da Silva Lopes (University of Los Andes); Fastoso (ORT, Uruguay, working with Unilever); Pecot (ESPM, Brazil)
- Australasia: Kirkpatrick (Monash).

Academic networks have formed the basis for significant international collaborations. For example, Thijssen is a partner of InvestExL, a collaboration between six universities (including Tilburg; Northwestern) and an industry partner (Hydro), led by Norwegian University of Science and Technology. Einarsdottir is Chair of the European Cooperation in Science and Technology (COST) Action on LGBTI+ social and economic (in)equalities involving 30 members representing 14 European countries. Howorth chaired the STEP Global Family Enterprising Project until 2018, involving 36 universities from five continents.

Since 2014, UYMS has hosted over 20 visiting international scholars from Japan; China; North America; Europe; South America. In addition to funding through the University visiting scholar scheme, the School provides funding for two distinguished visiting professors per annum. Visiting PhD students must be approved by DRC and we have hosted students from Brazil; China; Germany; Netherlands; Italy. Huberts visited UYMS as a PhD student from Tilburg before joining the School as a Category A member of faculty.

Engaging with Learned Societies

Faculty make significant contributions within learned societies. For example: Mumford is an elected member of the Council of the Royal Economic Society; da Silva Lopes strengthened her leadership of business history as President of the Association of Business Historians, President

Unit-level environment template (REF5b)

of the American Business History Conference and President Elect of the European Association of Business History. Examples of early and mid-career faculty developing their networks through learned societies include: Luca (Chair of the European Social Marketing Association); Ha (Advisory Committee Member, Euro-Asia Management Studies Association); Powell (Board Member, International Research Society for Public Management); S.Hamilton (Distinguished Lecturer, Organization of American Historians).

Faculty are also Fellows of the Academy of Social Sciences (Cooke; Linstead), the Royal Society of Arts (Garnett; Linstead; Mumford) and the Royal Geographical Society (Linstead). Trehan is President of the Institute for Small Business and Entrepreneurship. Faculty are supported to undertake leadership positions, including division leadership in the Academy of Management (Cooke; D'Ippolito), and active roles within the British Academy of Management, including BAM Fellow Cooke (elected September 2020), council member Glaister and three SIG Chairs (Glaister; Huatuco; Tennent). 23 faculty held formal roles on boards or committees of learned societies since 2014.

Engaging with EDI Networks

We are committed to collaborating in networks that support EDI in research. Trehan served as an Advisory Member on the Diversity and Inclusion Council for the British Bankers' Association, and Equality and Human Rights Commission. She also leads the Centre for Women's Enterprise Leadership Economy and Diversity and was awarded the Diversity and Inclusion Leadership Award for championing leadership inclusivity by Business Desk. Mumford was Chair of the Royal Economic Society Women's Committee (RES WC) and a member of the European Economic Association Standing Committee of Women in Economics. She also established the UK economics mentoring system to encourage and motivate young women in the profession. Other examples include Swaffield, a member of RES WC, and Einarsdottir, a member of the Diversity Committee of the Chartered ABS. UYMS hosted the Chartered ABS 2018 workshop on Athena Swan and gender inclusivity in business schools.

Organising Research Events

Research events further support network and partnership building. Since 2013, UYMS has hosted over 100 guest speakers. Recent examples include Suddaby (Alberta); Hansen (Copenhagen); Friedman (Harvard); Leicht (Illinois). We have hosted prestigious national and international events including: BAM SIG Chairs 2019 (Tennent); SCOS 2019 (Baxter); N8 Food Summit 2019 (Doherty); IFB 2017 (Howorth); ERRN 2016 (Linsley). We also run international two-day Open Innovation workshops (Roberts; D'Ippolito).

We lead developmental events with other universities and learned societies (e.g. Academy of Management; EGOS; BAM), and events that build scholarship and professional skills, such as the Interdisciplinary Approaches to the Study of Brand Heritage (CEGBI). Through these activities, our researchers maintain an active dialogue with the wider academy, which develops their disciplinary expertise and fosters the exchange of new ideas and innovative research.

Collaboration with Research Users and Contributions to Economy and Society

Collaborations with research users and contributions to the economy and society go hand-in-hand through the co-creation of knowledge and end user commitment to research findings (Section 1). We proactively develop long-term relationships with a range of organisations, including corporates, third sector organisations, trade unions, central banks, public organisations and social movements. Our ICSs provide five detailed examples, but we have many other strands of collaboration and contribution, some noted in Section 1 (Figure 2) and summarised below.

Business

UYMS staff have made significant contributions to the field of banking regulation. The Board of Governors of the Federal Reserve System applies McNeil's research as part of its monitoring of the trading risk management models of banks. In correspondence with the School, the Federal Reserve stated: "We have noticed a substantial increase in the quality of data submitted by banks

Unit-level environment template (REF5b)

since we began applying the tools and informing banks of the issues found. Without this data quality step, the data would have been uninformative, and it forms an important part of the data collection process we use to supervise banks trading activities in the United States". McNeil continues to work actively with the Federal Reserve on potential new impact applications of spectral backtesting models and other matters. He is also a member of the Validation Advisory Committee of the global reinsurer SCOR. Myrseth works with the Federal Reserve Bank of Cleveland. He helped develop and launch a daily tracking survey of consumer expectations and behaviour, focused on the Covid-19 pandemic. Survey data is published weekly.

Howorth has been collaborating with the Institute for Family Business (IFB) for over 10 years, co-producing research around governance and next generations in family business. This work has fed into IFB policy and education and led to advisory roles with Family Business Network - Europe, whose members include some of the largest family businesses in Europe, as well as UK-based Family Business Network. Executive training for programmes such as 'Quolux LEAD', 'Productivity Through People', and IFB have helped family businesses improve their governance and increase understanding of next generation and succession issues. Trehan also researches leadership in family businesses and reported to the IFB Research Foundation on family businesses' roles in the community, feeding into IFB education and advocacy. Understanding of family business philanthropy contributes to the Interdisciplinary Global Development Centre (Kumar).

Our research also impacts on business from an industrial relations perspective. Royle has advised the European Federation of Food, Agriculture and Tourism Trade Unions, and the International Union of Food Agricultural Hotel, Restaurant, Catering, Tobacco and Allied Workers Associations. His research on employment practices in 28 EU member states has been used to advise the EU Economic and Social Committee and raise public awareness of the plight of marginalised groups.

Community

At the community level, our research on the management of healthcare organisations is noteworthy. Findings from their research collaboration with Suter and Kowalski on impacts of 12 hour shift patterns led Tees, Esk and Wear Valleys NHS Foundation Trust to invest £1 million into trialling flexible working. Einarsdottir and Mumford's ESRC funded research on LGBT+ networks was in partnership with Swansea Bay University Health Board, NHS Employers, Stonewall, and Employers Networks for Equality and Inclusion, and led improvements in the governance and impact of LGBT networks. This work exemplifies our commitment to the co-creation of research knowledge, involving nine case studies and over 4000 NHS staff. McCann works with emergency services workers, providing insights into the tensions between control and professionalism, including evidence for the UK Parliamentary Public Accounts Committee inquiry into ambulance services (2017) and the Australian Parliament Senate Standing Committee inquiry into mental health of first responders (2019).

Society

Much of our work at societal level involves influencing government policy and practice. Freeman co-authored detailed reports for HM Treasury, the Office for National Statistics, and the International Seabed Authority on long-term social discount rates and the valuation of intergenerational projects including climate change mitigation investment. His work is regularly cited in international policy guidance and underpins discounting guidance in the Treasury's 'Green Book' on cost-benefit analysis in the public sector and on consistent discounting treatment within the National Accounts. Banerjee's examination of community question-answering sites (e.g. Yahoo Answers) in relation to terrorism was discussed by the All Party Parliamentary Group on Bullying and circulated to the Military Intelligence Unit (counter-terrorism) at Catterick Garrison. Faculty work directly with governmental departments: Doherty is seconded on a 0.5FTE basis to DEFRA as a Senior Research Policy Fellow on Food Systems; Swaffield is a Member of the Home Office Migration Advisory Committee; ICS3 highlights Mumford's collaboration with the Low Pay Commission.

Unit-level environment template (REF5b)

We also inform and raise public awareness of social and business history. One example is Gillett and Tennent on the management of sporting events. Whilst early career lecturers, they were awarded a João Havelange Scholarship by FIFA and the Centre International d'Etude du Sport in Switzerland to undertake a pioneering management history of the 1966 FIFA World Cup. Their research featured in an exhibition at Wembley stadium and the National Football Museum, attracting 225,000 unique visitors. An invited webinar presentation to Stanford University's Center for Global Projects examined the 1966 and 1994 World Cups. Their blog, [Soccer-Mad Boffins](#), has over 70,000 views, globally.

Engagement with communities and publics

We adopt a wide range of approaches to engage diverse communities and publics. Faculty feature regularly on traditional mass media platforms, including *The New York Times*, *The Conversation*, *Guardian*, *Reuters* and *Huffington Post*. Topical subjects have featured on national TV and radio (Royle; Thijssen in the UK and regular contributions on Dutch national radio). Research may be aimed at particular audiences through specialist outlets such as *Farming Today* (Doherty; McMurray). Our faculty regularly disseminate their research to non-academic audiences through the University's suite of public engagement activities (REF5a:13), including York Talks, YorNights, the Festival of Ideas and events organised by the University's Research Champions (REF 5a:4). Our Masterclasses are advertised widely and attract members of the public, as well as business and policy audience members.

In addition, UYMS is distinctive in using non-traditional methods for gathering data, and co-creating and disseminating knowledge. This is evidenced in our ICSs (notably ICS2; ICS5) but features in the work of other colleagues. A prime example is Wells' collaboration with the charity Global Action Plan. Working closely with the public on pro- and anti-social behaviour of consumers in relation to the environment, Wells used social marketing techniques to engage consumers and facilitate pro-environmental behaviour. Linstead leads the use of film and other media to disseminate research. During the Covid crisis, Linstead compiled an illustrated book of poetry, (*Viral Verses*) on public perceptions of the pandemic, with a forward by Margaret Drabble and contributions from 30 artists and 50 writers including Ian McMillan and Mike Harding.

Contributions to the Research Base

Our commitment to creating distinctive world-leading research that delivers "sustainable business, community and society" has translated into our contribution to the research base.

Publication Leadership and Refereeing

Faculty engaged heavily in journal editorships and on editorial boards during this REF period (Figure 9, current faculty), including senior editorial roles on a number of journals, such as general editor of the *Journal of Management Studies* (Muzio); senior editor of the *Journal of Risk and Insurance* (McNeil); joint Editor-in-Chief of *The International Journal of Productivity and Performance Management* (Huatuco); co-Editor in Chief of *Competition and Change* (McCann). Faculty have also been instrumental in the creation of new journals; for example, *Urban Climate* (Ruth); *Journal of Professions and Organization* (Muzio); *Social Enterprise Journal* (Doherty). Ruth served as a Review Editor to the Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report, (Working Group III).



Figure 9. Number of journal editorships and board memberships (not Special Issues)

A majority of our lecturers held editorial board positions in this period, including Kumar (AMLE, Organization); Jiang (Work Employment and Society); and ECRs Powell (Public Management Review); Pecot (Journal of Advertising Research). Lin (ECR) is an Associate Editor of Frontiers in Sustainability.

In addition, faculty provide leadership of specific topics, and gain editing experience, through editing special issues of journals. Since 2013, 22 staff (37%) have edited 38 special issues. For example, Kowalski edited the special issue on wellbeing in the workplace in the International Journal of HRM. All our Category A staff are actively engaged in refereeing for journals, academic conferences and/or grant bodies (e.g. UKRI; British Academy; Australian Research Council). A number of colleagues have won “Best Reviewer” awards, including lecturers Banerjee; Ha; Kumar.

Book series editors demonstrate leadership of research agenda, often reflecting our focus on sustainability, equality and contribution to society, including da Silva Lopes 'The Routledge Companion to the Makers of Global Business' (Routledge); McMurray 'Focus on Women Writers' (Routledge); Hamilton 'American Business, Politics & Society' (University of Pennsylvania Press).

Prizes and awards

Our faculty's contribution to the research base is also recognised through a number of prestigious awards. Mumford was appointed a Commander of the British Empire in 2016 for services to Economics and Labour Market Diversity. Linstead's multiple awards for his film *Black Snow* are documented in ICS2, including winner of the AHRC Research Film of the Year 2018 and “Best Short” at the Hollywood International Independent Documentary Awards. Examples of journal awards include: (i) Myrseth, awarded a Journal of Finance 2020 Dimensional Fund Advisors Distinguished Paper Prize for his 2019 paper ‘YOLO: Mortality beliefs and household finance puzzles’; (ii) Jia, Jack Meredith Best Paper Award “Honorable Mention” 2019, Journal of Operations Management; (iii) Mollan, Best Paper Award 2019, Journal of Management History; (iv) Manahov, Financial Review Readers' Choice Best Paper Award 2016. Three UYMS authors, Powell, Gillett and Doherty won the Kooiman Prize 2019 for best paper of the year in Public Management Review.

Kumar was a finalist in the William H Newman All Academy Award at the Academy of Management conference 2016 having won the Best Critical Management Education Paper. Also at AoM 2016, Angeli won the Best International Healthcare Management paper and was nominated for the Carolyn Dexter Award. Faculty have received a number of other prizes and awards at academic conferences. Trehan won an ESRC Outstanding Impact in Business and Enterprise Prize and

Unit-level environment template (REF5b)

College of Social Science Impact Prize on Society. Kirkpatrick won the best paper award at the last two Organisational Behaviour in Healthcare conferences (2018, 2020). Doctoral students awarded prizes include Marzouk, top 10, EDAMBA Thesis Competition 2019.

Keynotes

Faculty are in demand as keynote speakers: 34 staff were invited keynote speakers at academic conferences, delivering 83 keynote speeches, across six continents, including multiple EIASM and learned society conferences such as European Risk Research (Linsley) Belgian Statistical Society (McNeil) and Presidential Address at the Business History conference (Da Silva Lopes, Colombia). Topics ranged from 'systems thinking for sustainability' (Huatuco, Brazil) through 'mathematics in finance' (McNeil, South Africa) to 'animals in business schools' (L.Hamilton, USA and Finland). 22 staff were keynote speakers at 'research user' conferences, delivering 72 keynote speeches to a broad range of audiences from UNCTAD, MEPs, EU Commission, UK Government, NHS, professional bodies, charities and businesses.

Collaboration for PGR Training

We engage with NARTI and WRDTP on PGR and ECR training (Section 2). Faculty regularly provide specialised training within the NARTI partnership: for example, in 2019-20 Linstead on researching timing and spacing in organisations, and L.Hamilton on ethnography. Our faculty are actively engaged in wider leadership of PGR partnerships. For example, Mollan is Director of the WRDTP Sustainable Growth, Management, and Economic Productivity pathway. Glaister is a board member of [EDAMBA](#), the NARTI committee, and a Council Member of the British Academy of Management.

Contribution to the Sustainability of the Discipline

In Section 1, we highlighted that organisational problems rarely focus on a single discipline and there are few economic and societal challenges that are not in part caused by underlying organisational dynamics. Interdisciplinarity is thus key to how we contribute to sustainability of the disciplines within business and management. Section 1 identified areas of expertise. Here, we elaborate on how we contribute to discipline sustainability by stretching the boundaries of traditional disciplines and frequently applying management expertise outside a business context.

- UYMS staff contribute to the theorisation of complex organisations such as social enterprises, public bodies and professional firms and how they manage competing demands from social and commercial pressures, particularly when related to sustainability. This is central to Doherty's highly-cited work theorising social enterprises in fair trade as hybrid organisations (ICS1), which is extended through collaborations with Gillett, Loader and Powell. Hybridity and its implications has also been central to Muzio's work on global professional service firms and 'wrongdoing', and examinations of professionalisation and control (Howorth; McCann), including D'Ippolito's research on the BBC's handling of disruptive effects of digitalisation and competition from new entrants.
- We continue to develop distinctive expertise in research methods; for example as a means of engaging with marginalised communities using participatory art. Linstead's theoretical work on Organisational Aesthetics (ICS2) underpins this significant body of research, which includes video booths and theatre performances employed by Einarsdottir and Mumford in their LGBT+ networks project and contributions by Jiang (ICS5), McMurray, L.Hamilton and others on the interaction of art, film and management. We are committed to history research, providing insights for international business and strategy (Da Silva Lopes; Mollan) but also extending history's scale and scope, such as S.Hamilton contributing his understanding of the history of food and agriculture to food security research in the N8 Agrifood project, and Cooke examining the history of management thought.
- A substantial body of research on novel ways to calculate risk, wellbeing and social value employs mathematical and theoretical approaches led by three professors with strong external relationships: McNeil (Federal Reserve; SCOR); Freeman (HM Treasury; ONS);

Unit-level environment template (REF5b)

Thijssen (InvestExL). With additional expertise in actuarial science (Dias; Ramsden), mathematical approaches to investment under uncertainty (Bregantini; Huberts), theoretical econometrics (Cornea-Madeira) and the psychology (Myrseth) and philosophy (Linsley) of risk management, our work in this field is distinct from more traditional empirical finance. For example, Linsley and McMurray, [in partnership with the North York Moors National Parks Authority](#), provided an important first step in theorising how National Parks can measure their impact on society.

- Empirical studies of the societal impact of organisations examine positive and negative impacts on sustainability, employees, communities and innovation. Led by Roberts, Wells and Jia, researchers often work at the intersection of marketing, innovation and operations, combining expertise in supply chains (Huatuco; Jia) circular economy (Ball), open and user innovation (D'Ippolito; Lin; Roberts) and consumer behaviour (Banerjee; Kapetanaki; Wells). For example, Huatuco contributes understanding of disruptions to supply chains and how decision-support models might help to create more sustainable societies. Ball has applied his expertise in improving systems performance to diverse topics from environmental footprints to employee mental health.
- Faculty bring alternative perspectives to healthcare management and organisation. Drawing on under-utilised, longitudinal, administrative data, Kirkpatrick mapped the nature, antecedents and impact of management in healthcare organisations, including the role of clinicians and external consultants. Angeli has pioneered the use of administrative data in the Dutch and Italian healthcare systems to theorise and evaluate networks and the dynamics of 'coopetition' between hospitals and other organisations. Emphasis on interdisciplinarity in our re-structure enabled us to align this work with that of Luca and Kapetanaki in the field of social marketing and healthcare, and Suter and Kowalski in healthcare HRM.

We will continue to build on our strengths in the coming years. Our commitment to deeper collaboration with colleagues in Social Policy and formalisation of international partnerships makes York an exciting research environment for Business and Management scholars, with opportunities and support at all stages of their careers. Combining academic rigour with problem focus will ensure that our research continues to contribute to "creating sustainable business, community and society".