
This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

How students can combine earning with learning through flexible business process sourcing: a proposition

PLEASE CITE THE PUBLISHED VERSION

PUBLISHER

Loughborough University

VERSION

VoR (Version of Record)

PUBLISHER STATEMENT

This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Herbert, Ian P.. 2019. "How Students Can Combine Earning with Learning Through Flexible Business Process Sourcing: A Proposition". figshare. <https://hdl.handle.net/2134/23729>.

Earn-to-Learn (EtoL)

How students can combine earning with learning through flexible business process sourcing: a proposition

Ian Herbert, Deputy Director
Centre for Global Sourcing and Services
Loughborough University, UK

October, 2016

School of Business and Economics
Loughborough University
Ashby Road
Loughborough
LE11 3TU, UK

E-mail: i.p.herbert@lboro.ac.uk

Tel: +44 (0)1509 228833

Contents

List of figures and tables	3
Foreword	4
Executive Summary	5
Recommendations	6
Introduction	7
Background to the business case	10
Benefits of EtoL	10
How would EtoL work in practice?	11
Continuum of operating models	15
Potential student financial rewards	17
Management and governance	18
Managing the student work experience and evidence of learning	18
Anticipated challenges to the EtoL scheme	19
Summary?	20
References	21
Appendices	
Appendix 1 – Higher & degree apprenticeships	22
Appendix 2 – Summary of EtoL benefits	23
Appendix 3 – Segregation of business support functions and implications for professional business support workers	24
Appendix 4 – Student survey 2016	26
Appendix 5 – Stages of development and progression	28
Appendix 6 – Organisations scenarios – motivations, benefits and tasks	29
Appendix 7 – Student examples – motivations, benefits and tasks	33
Appendix 8 – Work-based learning module	35
Appendix 9 – Framework for capturing and evidencing skills	36

Acknowledgements	38
-------------------------	-----------

List of figures and table

Figure 1	Stakeholder interest in EtoL	8
Figure 2	Moving to an SSC	9
Figure 3	Potential benefits of EtoL	10
Figure 4	Possible task progression for students	12
Figure 5	Framework for cross-over skills development	13
Figure 6	Continuum of operating models for university engagement	15
Figure 7	Potential student rewards	17
Figure 8	Progression of work activities through period of study	19
Figure 9	Potential challenges to EtoL	20
Figure 10	The segregation of finance	27
Table 1	Motivation and tasks – organisation and student	14

Foreword

Professional business support services is a sector in which the UK has traditionally enjoyed a comparative advantage, due in part to the concentration of multinational corporations with headquarters in London. The emergence of new organizational models such as the shared services centre model (SSC) and business process outsourcing (BPO) have been fundamental in facilitating the transformation of the way in which many middle-office roles are undertaken. Yet, the assumption that such work should remain onshore is increasingly challenged by developments in the new global, digital, knowledge-based economy in which the commercial imperative is to simplify, standardise and commoditise professional tasks such that they can be relocated to the cheapest location. Even in the new upcoming locations, robotic process automation is displacing the more routine and repetitive tasks. In high-cost locations such as the UK this presents a serious challenge for a significant section of the working population: not least for young people who depend on the availability of training roles in professional functions such as finance, HR, IT and procurement, to start their life-time career pathway.

This report proposes a flexible business process sourcing solution, called 'Earn-to Learn' (EtoL). The concept is rooted in a relationship between industry, higher education institutions (HEIs) and government. The aims are to enable:

- students to access higher education programmes and engage in good quality, paid, work experience across their degree programmes;
- employers to access a new skilled and flexible labour force, and
- universities to improve social inclusion and create a sustainable supply of 'work-ready' and employable graduates.

Earning-to-Learn through Flexible Business Process Sourcing

Executive Summary

Research by the Centre for Global Sourcing and Services at Loughborough University has highlighted an emerging skills gap between the entry-level of those professional careers that form the bedrock of business support services within organisations and the 'talent pipeline' to senior roles such as business partner.

The reconfiguration, re-engineering and relocation of many back and middle-office roles through business process outsourcing (BPO) and shared service centres (SSC) is causing a serious career entry problem, because the training 'nurseries', where the skills, knowledge and behaviours of a life-long professional career, are forged.

At present this trend is largely under the media radar because the SSC operates within company boundaries and migration to offshore locations is generally both piecemeal and phased. Economic effects are also masked by a 'honeymoon' effect of lower costs for organisations but little resistance from displaced workers as they retire, receive redundancy compensation or leave through natural wastage when migration is phased.

However, portents of the future are already manifesting: Indeed, typical student debt has now risen to around £50,000, graduate entry jobs are now falling (Association of Graduate Recruiters, 2016) and at the same time there is evidence emerging that the 'talent pipeline' into mid-level career roles such as business partners and data analysis experts is drying up.

More positively, our report suggests that it should be attractive for organisations to employ undergraduates in 'middle-office' work on an Earn-to-Learn basis throughout the course of their degree programmes. The idea is to enable students to access quality work-based learning which will allow them to improve their work-readiness and graduate with lower debt, and perhaps near to debt-free especially where schemes are able to access graduate apprenticeship funding.

There are significant advantages for a range of stakeholders. Universities have an opportunity to widen access by encouraging those potential students who may be put off by high graduation debt and thus, improve employability rates. Organisations will have access to a new, intelligent, flexible workforce, at an attractive cost relative to many offshore destinations, especially with the lower Sterling exchange rate. Moreover, there is the opportunity to rebuild the talent pipeline and contribute to Corporate Social Responsibility by helping young people to get a career start. For government and regional economies there is a chance to stem the outflow of good quality service work and build capability in new knowledge work by designing programmes for data analytics and robotic process automation solutions.

Moving forward will require a partnership between organisations, universities, professional bodies and regional policy makers and each group must be flexible in its demands; there are rewards for all parties but nothing will be achieved without co-operation.

Introduction

This report discusses the idea of bringing together students, organisations and Universities to promote sustainable work-based learning alongside academic education. It explores how a tripartite relationship between industry, higher education and government could help improve the employability of young people and reduce student debt on graduation, whilst providing employers with cost-effective, flexible sourcing solutions and the potential to acquire emerging talent.

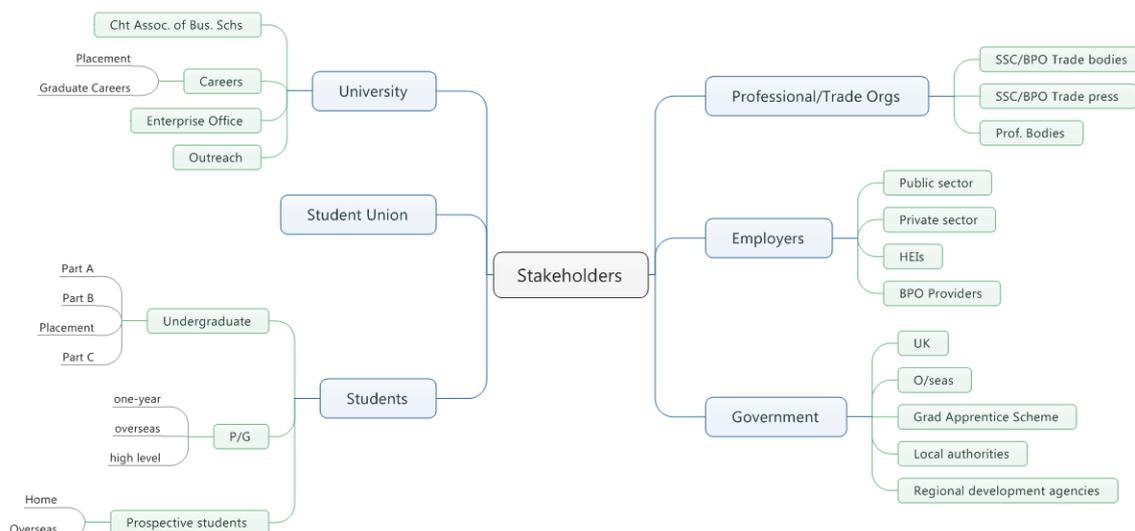
Research by the Centre for Global Sourcing and Services at Loughborough University has established how business support functions such as Finance, HR, IT and Procurement have been progressively challenged by corporate boards to reduce their cost base and justify their contribution to front-line services (Seal and Herbert, 2013). The response of blue-chip organisations to these challenges has resulted in fundamental transformation of the way in which business support services are configured and operate, with implications for organisation systems, resourcing and development (Rothwell, Herbert and Seal, 2011).

At the same time as this research has been taking place there have also been significant changes in how higher education in the UK is funded. This has meant a shift from central government funds to universities who in turn, have transferred some of that burden to students by increasing annual tuition fees up to £9,000, which some suggest is leaving English graduates with the largest average debt in the world at £44,500 (Kirby, 2016). The impact of these changes is acknowledged as having far reaching effects on the confidence of students and their families in the decision to pursue higher education. Furthermore, a survey of more than 200 top employers by the Association of Graduate Recruiters found that the number of jobs for new graduates decreased by 8% in 2015-16 as employers focus on school leaver programmes and apprenticeships (Burns, 2016). This suggests that in a shrinking market, gaining relevant skills as well as academic learning is going to be increasingly important for graduate employability.

Given these developments, this report discusses emerging concerns about job commoditization and offshoring in professional business support services following longitudinal research between 2003 and 2016, together with more recent consultation (2013 –2016) with a wide range of stakeholders in organisations, universities, student groups and government. Our research and consultations have culminated in a framework of options designed to create sustainable sourcing solutions for organisations and relevant work-based learning opportunities for students on, or near, a university campus as an alternative to relocating that work to cheaper, usually overseas locations. We call this concept Earn-to-Learn (EtoL).

Those stakeholders who expressed an interest in EtoL are highlighted in Figure 1 below, whilst a survey conducted amongst Loughborough students indicated support for the scheme (see Appendix 4):

Figure 1: Stakeholder interest in EtoL

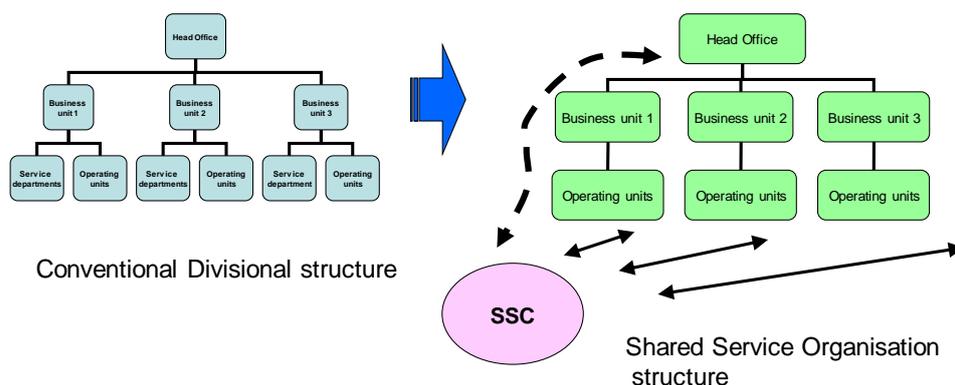


The remainder of this document is structured as follows: first, we consider the background and context for the business case. Second, we describe the potential benefits of EtoL for organisations, students and universities. Third, we outline how an EtoL might work in practice between organisation, student and university and describe the potential for different types of work experience and cross-over skills development. We then propose a continuum of operating models for how the relationship between an employer operating a business process centre (BPC) and a university might be organised. Next, the financial benefits and management and governance of the scheme are explained before discussing how evidence of work-based learning by students over the course of their education programme might be captured and recorded. Finally, we reflect briefly on some of the potential challenges for the EtoL scheme.

Background to the business case

Since 2003, our research with a range of blue-chip organisations has established how they are responding to the fiscal and operational demands of corporate boards. Specifically, we note the transformation of professional work with significant consequences for the interface between technology and human resources. The transformation of professional work happens in two ways. First, by aggregating disparate divisional support activities into central units which re-engineer and reconfigure the work before moving it to cheaper locations, increasingly overseas. Second, by changing the outlook of the service to a more commercial mind-set, either by contracting out to a third-party business process outsourcer (BPO), or through the quasi-commercial form of a shared service centre (SSC). For example, figure 2 below shows how an SSC aggregates activities from within multiple business units into a new quasi-autonomous organisational form with new reporting lines to both the business units and top management:

Figure 2: Moving to an SSC



Key: — Service Level Agreements (responsibilities going both ways)
 - - - Reporting Line to Corporate Board

Source: adapted from Herbert and Seal, 2012

Our research highlights several important and specific outcomes from the application and growth of these internal (captive) SSCs. First, the significant commoditisation and relocation of ‘white-collar’ or middle-level professional jobs is happening in a piecemeal yet progressive fashion across all commercial sectors in the more economically developed economies (Couto, Mani, Lewin and Peeters, 2006; Hutzschenreuter, Lewin and Ressler, 2011). Consequently, more traditional, pyramid organisation structures are being ‘hollowed out’ such that they now resemble an hourglass. This means that there are significantly fewer opportunities for workers in ‘middle-office’ roles to progress through en-route to more senior management positions. For example, Appendix 3 describes how the finance function is being segregated between transactional and cognitive activities across time and space. Furthermore, the disappearance of professional, middle-office, jobs reflects a wider trend of work becoming polarised into either ‘lovely or lousy’ jobs (Goos and Manning, 2007) meaning that whilst some graduates will be lucky, many more will be trapped in non-graduate level occupations, such as customer service roles

Second, as entry lower-level transactional jobs are moved offshore, the traditional ‘training nurseries’ where young people typically acquire the necessary skills, knowledge and behaviours at the start of their careers, are no longer available onshore. Third, we also note how robotic process automation (RPA) is now poised to accelerate the process of rationalising and eliminating many white-collar roles (Herbert and Dhayalan, 2016). Contrary to much of the popular debate about robotics we believe that RPA will affect middle-level as well as transactional activities, exacerbating the polarisation of work into the skilled, well-paid jobs and less skilled, poorly paid jobs described by Goos and Manning (2007). Indeed, whilst transactional jobs in the destination countries might seem ripe for automation, if labour costs are sufficiently low then paradoxically it could be the middle-level onshore jobs which become the chief target for RPA further exacerbating the hourglass structure of careers and making it harder for young professionals to enter the middle tiers.

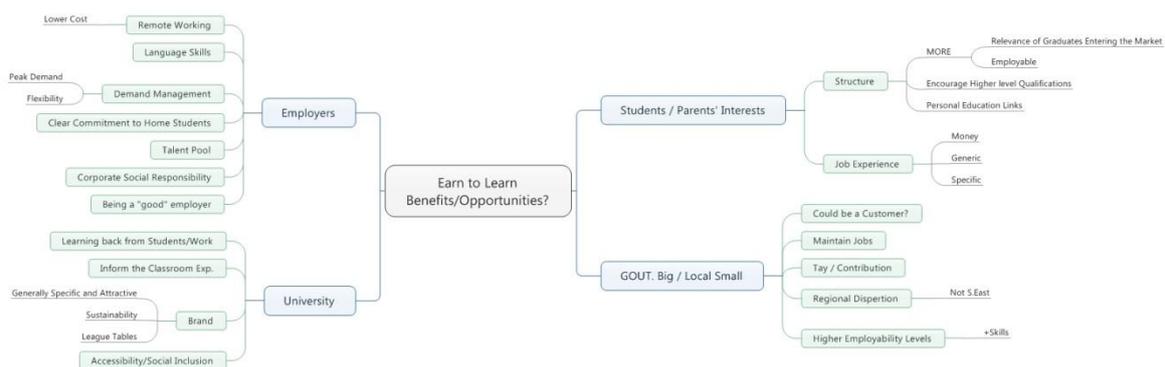
These trends towards delayering, rationalisation and the migration phenomena have been evolving steadily over the past 20 years or so, yet in more economically developed countries

such as the UK these are now being accelerated through the twin pressures of globalised competition and domestic austerity programmes. The research has found that the pace of change is both rapid and essentially hidden from the attention of media and national labour statistics; there is a very real danger of being too late to secure the attention of potential stakeholders in EtoL. Indeed, some of the 25 case organisations in our research report are committed to these new models, having already offshored significant parts of their transactional support work. Others, many in the public services, plan to stay onshore and are committed to continuing to provide employment for existing staff. However, despite good intentions some organisations are finding that they can no longer influence where the work is done because they have outsourced services to third-party vendors who then offshore to reduce cost (Roza, Van den Bosch and Volberda, 2011).

Benefits of EtoL

So far we have described a rapidly changing work context for graduates who face increasing competition for professional and vocational training as they compete with a more diverse workforce. At the same time, a growing number of young people are deterred from pursuing higher education opportunities due to fears about debt and other financial concerns. We therefore believe that new options for improving employability and starting work need to be developed and that Earn-to-Learn offers an important and exciting opportunity for students to combine working in BPCs with their academic studies. During this process, they gain valuable work experience and, depending on the extent of their commitment, will graduate from University with lower student debt and with an employment skills and experience. EtoL offers wide-ranging benefits to numerous stakeholders as identified by one of our research Focus Groups, figure 3 below:

Figure 3: Potential benefits of EtoL



The stakeholders identified include students, organisations or employers, universities, the UK economy, regional or local populations and wider society. We now discuss the first three of these in brief (for a more comprehensive description of the benefits to students, organisations and universities, see Appendix 2).

Students have traditionally worked part-time to supplement their studies and an increasing number now work on campus as paid staff and volunteers in shops, social venues and as

part of more commercial ventures, such as marketing teams (Loughborough University, 2014). EtoL in business support services offers further opportunities to those students who want to undertake structured, progressive, work-based learning linked to their academic studies and graduate with substantially reduced debt and enhanced job prospects. The cumulative benefits of 'work readiness' through such work orientation and involvement in business practice is likely to appeal strongly to students required to demonstrate commercial awareness, high levels of interpersonal skills, personal resilience and effective career management skills in order to maximise their employability (Hirsh, Pollard and Artess, 2015). According to Loughborough Students Union, students rank "personal development as second only to academic success as an ingredient for their student experience" (Loughborough Student Union, 2014). For some students, participation in EtoL as part of the Higher and Degree Apprenticeship scheme (GOV.UK, 2016) see also Appendix 1, might be a further option as a flexible study/work pathway into employment, EtoL makes it possible for students to graduate debt-free and with a range of cross-over capabilities and a portfolio of experience evidenced by both their employer(s) and university (Wallis, 2016).

Organisations would benefit from access to a new, flexible workforce with the knowledge, skills and time to complement non-time critical onshore business operations in emerging areas of talent shortages. By locating the work on or near a University campus organisations should see cost advantages that could largely negate the main attraction of cost arbitrage in offshoring. It may be possible for individual organisations to access government funding via schemes such as the Higher and Degree Apprenticeship Scheme where the employer pays 1/3 of the cost of the apprenticeship and the government 2/3 (see Appendix 1 for more details). Participation in EtoL also enables organisations to demonstrate Corporate Social Responsibility (CSR) by creating pathways into sustainable employment for young people. In the longer term we envisage opportunities for organisations to develop skills academies and thus a 'talent-pipeline' to senior professional roles.

Universities who participate in EtoL would attract students who might otherwise be deterred from entering higher education due to fears about funding their studies and the accumulation of high levels of debt. In addition to growing the student population, involvement in the scheme would help improve key measures of institutional performance such as retention rates, social inclusion, higher learning outcomes and graduate employability ratings all of which are likely to have a recursive effect on league table performance and consequently applications for places. There may be additional economic benefits if by 'earning whilst learning', students feel more confident about funding their studies and the demand for bursary support is reduced. Furthermore, there may also be opportunities for universities to connect with campus- or near-campus business processing centres (BPCs) to develop world-leading business support systems in the same way that collaborations with manufacturers often produce leading-edge intellectual property, often primed with research income support and/or regional enterprise programmes.

Building upon these views and outcomes we now describe how an EtoL scheme might work in practice and discuss the likely interaction between organisations, students and universities.

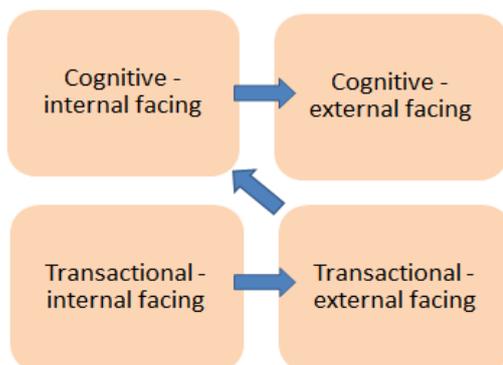
How would EtoL work in practice?

The basic concept of EtoL is a simple one. Organisations employ students on a range of business support activities located on, or near to, campus. Students are engaged on a

freelance basis or recruited into larger, more structured programmes employing significant numbers of students. The work experience can take two forms, lower level/routine activities in the evenings/weekends/holidays during the study years (1, 2 and 4) and a 12-month placement doing higher-level work in year 3, see Appendix 5. We examine how student and task might interact below.

Work activities or tasks might involve existing and potential business support services. Existing tasks might include accounting, HR, Procurement and IT. Initial thinking is that the scheme would mainly involve activities that are not time-critical, are transactional and more inward facing across the organisation. Alternatively, organisations may identify new tasks which might not have been cost effective to undertake previously. For example, cleaning historical master data, digitising manual records and working with social media communication channels (Twitter, Facebook, vis-à-vis telephone communication). Following the success of many BPCs in applying new working practices to back-office operations, some organisations are now looking to their BPC to take the lead in applying the BPC model to front-line services and other back-office functions, e.g. customer services estates management. There are also emerging opportunities to implement new 'disruptive' technologies (e.g. new financial technology - FINTECH) which require intelligent (if not time experienced) labour to be implemented. Students could also be very good at performing a range of higher level activities that require an objective and critical approach, such as Quality Assurance (QA) and Quality Control (QC) procedures such as testing spreadsheets and converting existing manual routines into robotic software macros routines and then testing them. These more advanced roles, requiring greater cognition or which involve contact with external customers or divisional personnel, constitute a form of 'task progression' for students, see Figure 4 below:

Figure 4: Possible task progression for students

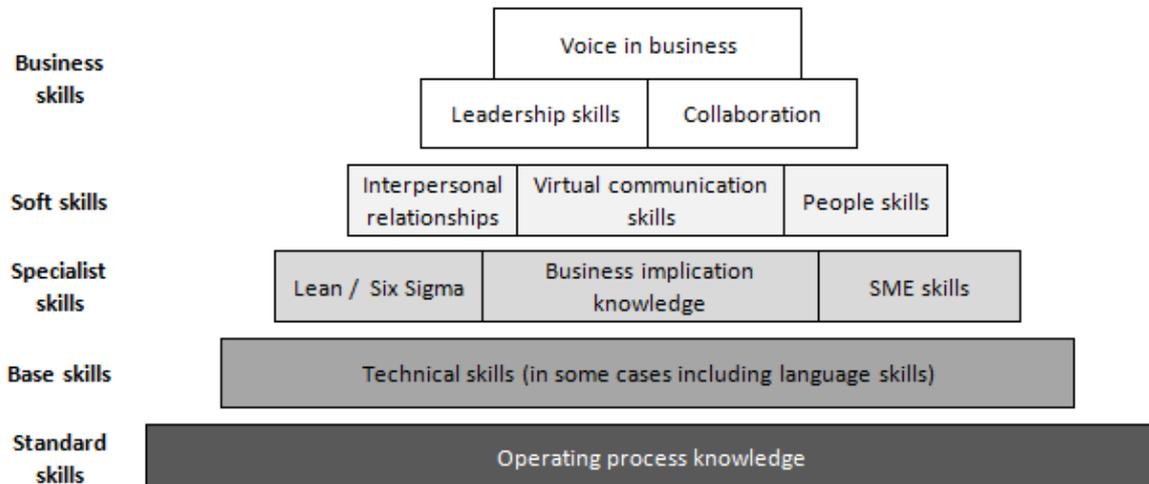


Source: adapted from Youngdahl and Ramaswamy (2008)

This model resonates with recent research on the nature of de-professionalization in BPCs which found that there was a wide range of skills required by individuals within the BPC environment (Lambert, 2016, figure 5 below). It also reflects research (Rothwell, Herbert and Seal, 2011) and feedback from a 'Big 4' firm of accountants during our conversations which highlight the need for cross-over capabilities amongst graduates between technical degrees and business. Furthermore, we suggest that the structured acquisition of such skills might be

further underpinned by formal accreditation of EtoL schemes, either by a University and/or professional bodies, e.g. the CIMA Certificate in Global Business Services (CIMA, 2016).

Figure 5: Framework for cross-over skills development



Source: Lambert, 2016

SME = Subject Matter Expert

To illustrate how the interface between organisation, student and their course of study might work, we present five brief, 'real-life' organisation scenarios accompanied by five typical student profiles (Table 1 below). More comprehensive descriptions of motivations, benefits and tasks for each organisation and student can be found on the project website www.shared-services-research.com Two examples, *Digitalco organisation* and *Home and Local BSc student* are show as Appendices 6 and 7.

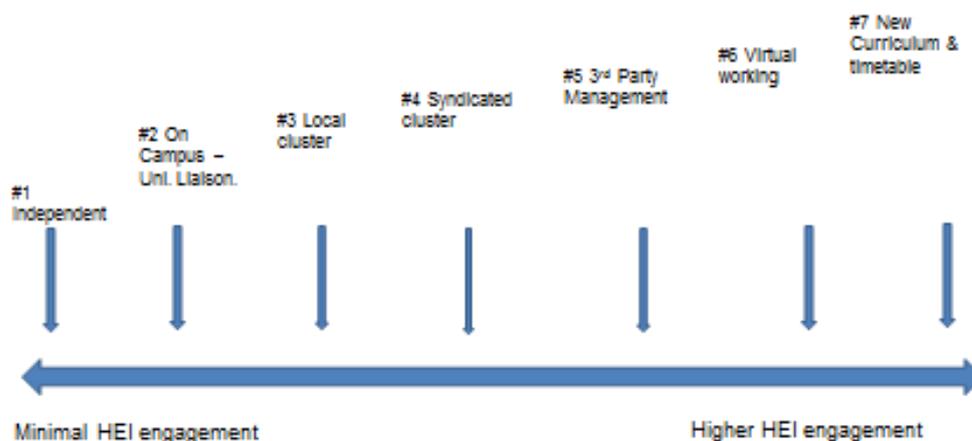
Table 1: Motivations and tasks – organisation and student

ORGANISATION
<p>DIGITALCO Overseas conglomerate, originally specialising in internet access but has diversified into media, content-led activities. Its latest strategy sees a return to disruptive technology as it eyes opportunities to take on incumbent banking services through emerging 'FINTECH' opportunities.</p>
<p>GOVORG Requires its prospective BPO vendor to further reduce costs but sympathetically by keeping jobs onshore and providing opportunities for social inclusion.</p>
<p>PHARMCO Backfill capacity for work volume fluctuations and special projects. Long term aim is to develop business cross-over skills in the science graduates that the company recruits in some volume.</p>
<p>POWERCO Additional support for a corporate digitalisation strategy involving the conversion of manual records, data cleansing + data analytics.</p>
<p>PROFCO Start-up company acquiring accounting firms and offshoring the routine work to third-tier city in India. Needs additional capacity on-shore close to business partners.</p>
STUDENTS
<p>HOME and LOCAL BSc Mature (>25 years) home student with a young child, just starting a four-year degree and is otherwise put off by prospective of lifetime debt.</p>
<p>EUROPEAN BSc Management Science student attracted by prospect of study with practical experience and financial support. Interested in EtoL during a four-year course but would prefer to get international experience by working in a UK business processing centre.</p>
<p>INTERNATIONAL MBA On a one-year full-time MBA course with mandatory nine month placement wishing to get managerial experience to further existing BPC experience in India.</p>
<p>INTERNATIONAL MSc International student studying for a one-year conversion Masters programme. Wants to experience working in large multinational organisations based in UK. Speaks 5 languages.</p>
<p>HOME Ph.D. Graduated with a First from undergraduate degree in mathematics and accountancy. Now wishes to undertake a Ph.D. in business systems and analytics but already has debts of £45,000 and three more years could double this.</p>

Continuum of operating models – the organisation and HEI interface

We believe there is a range of ways of setting up an EtoL scheme with higher education institutions. Seven possible options are now discussed and are reflected in a continuum of operating models (Figure 6 below), any combination of which might be adopted:

Figure 6: Continuum of operating models for university engagement



Option 1: Independent

Individual BPCs set up adjacent to campus and recruit students directly. The EtoL scheme is structured so that students record skills and experience in conjunction with employers. In areas that already have clusters of BPCs located alongside Universities e.g., Manchester, UK, anecdotal evidence suggests that students already engage in term-time/holiday office work. The local university provides a toolkit to signpost and evidence the development of graduate aptitudes.

Option 2: On campus – university liaison

Organisation rents office space on a campus Enterprise Park and works closely with the HEI to gain access to students through the careers/placement office. The University facilitates the evidencing of skills in conjunction with the employer. Depending on the level engagement required this could involve the University charging a supervision fee to the employer. It is usual to charge students fees for supervision and accreditation of placements. A further possibility is the incorporation of into the existing syllabus of a Work-based learning module which would enable students to appreciate the linkages between academic theory and work practices as a framework to seek, capture and evidence skills. Appendix 8 shows

the Work-based Learning module presently used on the Loughborough University part-time business undergraduate programmes in Singapore.

Option 3: Local cluster

A variation of #2 is for a cluster of BPCs to employ students in rotation over the degree programme. This provides wider experience for students and company/organisation 'names' on their CVs. For employers this could be particularly attractive if the profile of work between different employers could be progressive over the four years. For example, students start with transactional work in one organisation before moving on to higher level activities with another employer. Such a cluster could be set up around a campus enterprise park or be an existing SSC/BPO cluster as in the Manchester conurbation.

Option 4: Syndicated cluster

A university provides syndicated 'white space' managed by a local third-party specialist (TPC) or a lead BPC. Each participating BPC would then rent computer desks according to demand but with a base-level commitment. The BPC provides worker supervision.

Option 5: Third-party management

As option 3 above, but a third-party specialist (TPS) leads the syndicate as follows:

- TPS recruits and selects students from campus for a single or multiple BPCs.
- TPS supervises a pool of student workers and allocates them to individual organisations. Under this option the TPS might also administer a graduate apprenticeship scheme.
- TPS acts as recruiter and work 'orientation' trainer and administers the GPA across a number of BPCs so as to give continuity across a 4-year degree programme, perhaps where such a commitment may be too long for one organisation.

Option 6: Virtual working

Once trained and able to work with minimum supervision, students could work in their halls of residence using their own devices. Note: whilst this option brings into play a number of additional management and data security issues, it has tremendous cost and flexibility advantages and could be a real 'game changer' for some organisations. Workflow monitoring and control systems would allocate work remotely and monitor the student's work rate and task performance.

Option 7: New Curriculum and timetable

Although this might be the last development in an overall scheme this option could complement any of the previous 6 options. Here the university designs a specific curriculum around an EtoL scheme to better align with those employers who see EtoL as creating a skills academy relevant to their future needs and the Graduate Apprenticeship Scheme. A further development might involve adjusting term dates and teaching timetables to integrate learning programmes with EtoL schemes and facilitate a more constant availability of student resources for work. For example, running a summer term and providing 'breaks for work/holidays in the more usual term times.

Potential Student Financial Rewards

In terms of how much money a student might earn from EtoL, figure 7 below explains the potential student rewards based on a four-year undergraduate programme including a placement year and the student staying in University halls in the Midlands. The typical debt is reported as being around £50,000 (£30,000 fees and £20,000 living expenses for a 3-year programme). Whilst, universities would be keen to ensure that work would not be encroaching unduly on academic study it should be noted that some students already study on the basis of part-time study full-time work. Whilst, part-time degrees have existed for a long time the vast majority of students still see significant merit in experiencing campus life with its opportunities for social and sports activities that build life-long networks. Thus, this outline seeks to present a reasonable balance between study, work and campus life, and may be conservative in terms of the time that students may actually work.

Figure 7: Potential student rewards

EtoL During Study Years	Component	Total
Term – 10 hrs x 30 weeks x 3 years	900 hrs	
Vacation – 40 hours x 10 weeks x 3 years	1,200 hrs	
Total	2,100 hrs x £8 p.hr	£16,800
Placement year		
Annual salary	£20,000 x 10 months	£16,660
Living expenses		(£8,000)
Total EtoL earnings		<u>£25,460+</u>
Additionally:		
Reduction in fees through graduate apprenticeship scheme		<u>£29,500*</u>
Total benefit of EtoL for a student		<u>£50,000 approx</u>

* based on approximate inflation adjusted fees from 2017 onwards

Note: no allowances have been made for personal tax and National Insurance contributions

We argue that via EtoL, employers stand to benefit from a highly flexible workforce capable of offering a wide range of new, sometimes leading edge skills, diverse language capabilities and in some instances an understanding of cultural norms. Not only would students fill the gaps arising from talent shortages in areas such as data analytics and RPA, but they would also offer availability outside normal office hours, allowing ‘backfill’ and ‘follow-the-sun’ working onshore. In return, by ‘earning whilst learning’ students gain valuable work related, work based skills and experience likely to put them ahead of their peers when it comes to seeking employment post-University (Blackwell et al., 2001; Nortcliffe, 2012).

In the next section of this report we address two over-arching issues upon which the viability of EtoL will depend. First, we discuss ideas for good management and governance of the EtoL scheme by organisations and HEIs. Second, we describe how the student work experience in conjunction with capturing evidence of learning might be managed.

Management and governance

Participating BPCs might be cautious about the scheme because it involves supervising additional employees with risks around personnel management, confidentiality, data security, etc., compared with using permanent staff on a 9-5 basis. However, the world of work is changing rapidly and in our research offshore BPCs are always keen to tell us how they have a significant advantage in being able to work during UK evenings and weekends and there may be opportunities for blending a new, more flexible, workforce of students into existing BPC operations.

It may be possible for students to be organised in small self-managing work groups to provide the requisite availability in terms of a pool of hours each week around their individual study timetables. More experienced students could then become group leaders in the way that older students presently take on leadership roles for the Loughborough Student Union, supervising and managing large social events alongside a minimum number of professional staff. Thus, the model could become self-organising and self-developing providing students working in what might be perceived as mundane jobs, with opportunities for gaining management experience.

Managing the student work experience and capturing evidence of learning

Key to the success of the scheme will be the extent to which students develop a range of vocational skills and behaviours that complement academic theory and help them to move seamlessly into the mainstream workforce on graduation.

Whilst an HEI is unlikely to want to get involved directly in managing a BPC, we believe that there is a real opportunity for Universities to engage with the scheme by actively helping students to reflect on their work-based learning in a structured way that can bridge theory and practice and inform future development needs.

Appropriate work tasks would need to demonstrate a progressive hierarchy of skills over the course of a student's education programme. The starting point would be straightforward tasks that can be readily allocated and monitored with minimal training (say, working 8-10 hours per week in the first year), through to higher level work in the full-time placement year (3rd year). In the first year of study, where work might involve basic office practice with an emphasis on '*work readiness*' it could still involve formative personal/interpersonal skills such as communication, timekeeping, people skills, flexibility, motivation, application and analysis.

The later phase, building longer term employability, could be structured and evidenced using existing competency frameworks such as the Chartered Institute of Management Accountants (CIMA) competency framework (with formal assessment under the CIMA or

Association of Chartered Certified Accountants (ACCA) Certificates in Business Services). Note: other frameworks might also be suitable, e.g., CIPD for HR work.

Formalising the EtoL learning would require a development framework that will enable: 1) students to make sense of what might seemingly be basic tasks and 2) employers to understand how a range of office practices might be appropriate. In academia we refer to this as the ability to learn from the mundane, but that should not be taken as inferring that the tasks are necessarily deskilled and repetitive. We believe it can be developed into a comprehensive on-line toolkit to signpost and evidence the development of graduate abilities. Figure 8 below, shows how a typical progression of work-related tasks or activities from undergraduate Year 1-2 to research opportunities for post PhD stages might look, whilst Appendix 9 highlights a framework and scheme for structuring and evidencing work experience adapted from Herbert and Rothwell, 2004.

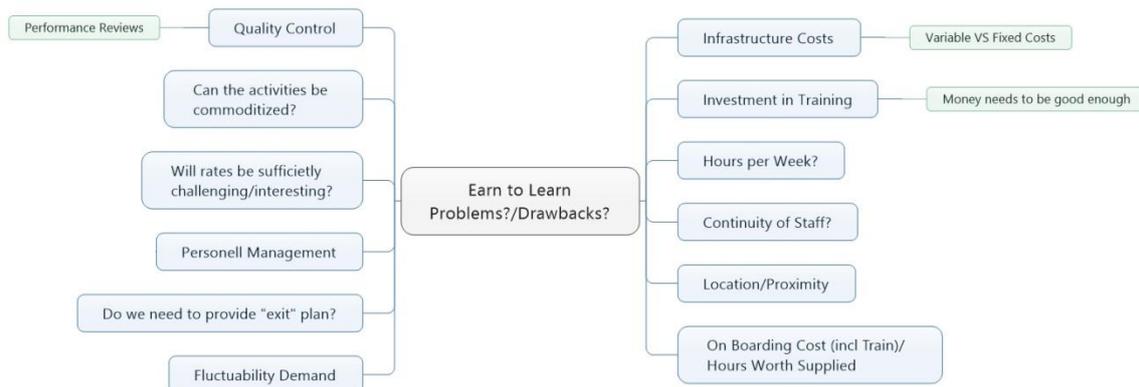
Figure 8: Progression of work activities through period of study



Anticipated challenges to the EtoL scheme

Clearly, amidst the benefits and opportunities of EtoL there are a number of challenges and potential drawbacks with many outstanding questions to address. Some of these concerns were highlighted by another of our Focus Groups, see Figure 9 below:

Figure 9: Potential challenges to EtOL



Questions that arose were: Who will recruit, control and pay the students? How many hours will they work? Will they be reliable? Can students really achieve a good degree classification and graduate with substantially lower debt? Could the graduate apprenticeship scheme be used? How will good quality work experience be structured and evidenced? Will there be a certificate of participation or achievement awarded? Our exploratory discussions also show that although the BPC movement is predicated on intra-company standardisation and the adoption of increasing ‘vanilla’ IT systems, nonetheless, every organisation appears to have quite different operational approaches and business needs. Because the scheme has benefits for a number of stakeholders, individual groups might hold back expecting others to take the initiative and ‘pump-prime’ action.

It should be noted though that there are already a number of similar schemes that seek to create positive social impact from support service work and many of these operate in more challenging social and environmental contexts (Nicholson, Babin and Lacity, 2016; Sandeep and Ravishankar, 2016). However, such schemes tend to address particular areas of social disadvantage, for example; the rural sourcing initiative on the north-eastern seaboard of Sri Lanka (Herbert et al., 2014;), the military families and veterans scheme with AOL on some US military bases (Lacity, Khan and Carmel, 2016), and even the use of prisoners (Lacity, Rottman and Carmel, 2014).

Summary

Our research shows that, through the pressures of global competition and/or domestic austerity programmes, the vast majority of back- and middle- office positions in the UK are being challenged and that this commodisation and relocation of middle-office professional jobs is taking place under the radar of national labour statistics.

We believe that a new approach is required to provide real opportunities for young graduates to enter the world of work in roles that whilst initial process-based will enable them to gain the experience, skills and behaviours to develop sustainable professional careers. It is hoped that this report can contribute to that goal.

Recommendations

- Further research should be undertaken to establish the full extent of the reduction in graduate entry-level positions and the potential effects of the erosion of the talent pipeline into subsequent middle-career roles. This should include consideration of new activities such as data analytics that could be viable if there was a suitable cost-efficient labour force available.
- That a 'proof of concept' exercise is undertaken with a business process centre(s) to establish the range of tasks that could be suitable, or made suitable, for students to perform. This should also determine the viability of the graduate apprenticeship scheme in an Earn-to-Learn programme. This will also include evaluation of the extent to which students might work in self-governing groups to deliver services across each week.
- That an enhanced framework of entry-level skills and behaviours is produced to guide employers and students in seeking and evidencing skills development in entry-level roles, especially if the nature of the work is episodic.
- That awareness is raised across a range of stakeholders about the emerging issue of graduate underemployment as result of the offshoring of the traditional training positions, and the subsequent mid-career skills gap. In the context of the new high levels of graduation debt this is as much an ethical issue as a commercial one.

References

- Askin, O.Z., and Masini, A. (2008). Effective strategies for internal outsourcing and offshoring of business services: An empirical investigation. *Journal of Operations Management*, 26, 239 – 256.
- Blackwell, A., Bowes, L., Harvey, L., Hesketh, A.J., and Knight, P.T. (2001). Transforming Work Experience in Higher Education. *British Educational Research Journal*, 27 (3), 269 – 285.
- Burns, J. (2016). *Jobs market shrinks for new graduates, survey suggests*, [BBC Online] Available: <http://www.bbc.co.uk/news/education-37246632> [2 September, 2016]
- CIMA. (2016). *Global Business Services Programme*, [Online], Available: <http://www.cimaglobal.com/Qualifications/Global-Business-Services/> [July 2016]
- Couto, V., Mani, M., Lewin, A.Y. and Peeters, C. (2006) The Globalization of White-Collar Work, Booz Allen Hamilton Inc.
- Faulconbridge, J.R., and Muzio, D. (2007). Reinserting the professional into the study of professional service firms. *Global Networks*, 7 (3), 249 – 270.
- Goos M., and Manning A. (2007). Lousy and Lovely Jobs: The Rising Polarization of Work in Britain. *The Review of Economics and Statistics*, 89 (1), 118-133.
- The Hackett Group. (2015). *Shared Services: Achieve Operational Excellence*, [Online], Available: <http://www.thehackettgroup.com/shared-services/>. [15 January 2015].
- Herbert, I.P. (2013) *Transformation of the Finance Function: a new model for the global SME?* Executive Summary. London: SKS Business Services.
- Herbert, I.P. (2015) Royal Dutch Shell: a global perspective, *Professional Outsourcing Magazine*: 21(S), April, pp. 16-20.
- Herbert, I.P. and Dhayalan, A. (2016). The future of professional work - will you be replaced, or will you be sitting next to a robot? *Management Services Journal, Summer*, 22-27.
- Herbert, I., and Rothwell, A. 2004. *Managing your Placement: a skills-based approach*. Palgrave: Basingstoke.
- Herbert, I. and Rothwell, A. (2013). Professions are heading east forever. *Professional Outsourcing Magazine, Summer, Supplement*, 12-18.
- Herbert, I.P. and Seal, W.B. (2012). Shared Services as a new organisational form: some implications for management accounting. *British Accounting Review*, 44 (2), 83–97. <http://dx.doi.org/10.1016/j.bar.2012.03.006>

Herbert, I.P., Cooray, D., Lambert, S., Rothwell, A.T. and Stephens, D. (2014). *Talent Management for World-class Performance in Offshore Business Service Centres, Best practice in Sri Lanka*. Executive Summary, CIMA: London.

Higher Education Academy. (2016). *HEA comments on the destination of leavers statistics*, [Online], Available: <https://www.heacademy.ac.uk/about/news/hea-comments-destination-leavers-statistics> [25 July, 2016]

Hirsh, W., Pollard, E., and Artess, J. (2015). Changing employer practices in graduate recruitment: implications for career development. *Journal of the National Institute for Career Education and Counselling*, 35, 4 – 10.

Hutzschenreuter, T., Lewin, A.Y., and Ressler, W. (2011). The growth of white-collar offshoring: Germany and the US from 1980 to 2006. *European Management Journal*, 29, 245– 259.

Kirby, P. (2016). *Degrees of debt: Funding and finance for undergraduates in Anglophone countries*. London: The Sutton Trust, [Online], Available at: <http://www.suttontrust.com/researcharchive/degrees-of-debt/> [September 2016].

Lacity M., Rottman J., and Carmel E. (2014). Impact Sourcing: Employing Prison Inmates to Perform Digitally-enabled Business Services. *Communications of the Association for Information Systems*, 34 (51), 913-932, [Online], Available: <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=3774&context=cais> [16 June 2016].

Lacity, M., Khan, S., and Carmel, E. (2016). Employing Military Families to Provide Business Process Outsourcing Services: A case study of Impact Sourcing and Reshoring. *Communications of the Association for Information Systems*, 39 (9), pp. 150-175. [Online], Available: <http://aisel.aisnet.org/cais/vol39/iss/9> [22 July 2016].

Lambert, S.A. (2016). Navigating professional careers in new organisational forms. Unpublished Ph.D. Thesis. [Online], Available: <https://dspace.lboro.ac.uk/dspace-jspui/handle/2134/21910>

Nicholson, B., Babin, R., and Lacity, M.C. (Eds.) (2016). *Socially Responsible Outsourcing: Global Sourcing with Social Impact*. Basingstoke: Palgrave.

Nortcliffe, A. (2012). *Embedding Professional Experience and Employability into Engineering Sandwich Degrees*. Paper presented at the International Conference on Innovation, Practice and Research in Engineering Education, Coventry University, UK, September 18 – 20.

Rothwell, A.T., Herbert, I.P. and Seal, W.B. (2011). Shared Service Centres and professional employability. *Journal of Vocational Behaviour*, 70, (1), 241-252.

Roza, M., Van den Bosch, F.A.J., and Volberda, H.K. (2011). Offshoring strategy: Motives, functions, locations, and governance modes of small, medium-sized and large firms. *International Business Review*, 20, 314–323.

Sandeep, M.S., and Ravishankar, M.N. (2016). Impact sourcing ventures and local communities: A frame alignment perspective. *Information Systems Journal*, 26 (2), 127 – 155.

Seal, W.B., and Herbert, I.P. (2013). Shared service centres and the role of the finance function: advancing the Iron Cage? *Journal of Organisation and Accounting Change*, 9, (2), 188 – 205.

Wallis, L. (2016). *The debt-free alternative to University*, [BBC Online], Available <http://www.bbc.co.uk/news/magazine-37550769> [10 October 2016]

Youngdahl, W., and Ramaswamy, K. (2008). Offshoring knowledge and service work: A conceptual model and research agenda. *Journal of Operations Management*, 26 (2), 212–221.

Appendix 1 – Higher and Degree Apprenticeships

Introduction

Higher vocational and degree apprenticeships offer young people the opportunity to combine working whilst studying for a work-based academic or vocational high-level qualification. Such apprenticeships include the achievement of academic and vocational qualifications and learning from NVQ Level 4 upwards. Degree apprenticeships are the latest model to be developed as part of higher apprenticeship standards, with apprentices achieving a full bachelor's or master's degree as a core component of the apprenticeship. The courses combine higher and vocational education whilst testing occupational competence and academic learning via a fully-integrated degree co-designed by employers and Higher Education Institutions, or using a degree plus separate end test of professional competence.

Who can deliver higher and degree apprenticeships?

An HEI must be listed on the Skills Funding Agency (SFA) Register of Training Organisations (RTO) and already receive funding for apprenticeship delivery from the SFA.

How long does a higher apprenticeship or degree apprenticeship last?

Both frameworks and standards must last a minimum of one year. Degree apprenticeships will last longer, typically up to four years, though there is no fixed maximum duration. The framework or standard documentation will usually set out a typical expected duration. The funding value set for an apprenticeship covers the total delivery costs regardless of the apprenticeship length.

Funding

Higher and Degree Apprenticeships are allocated to one of the funding caps (*currently 5 funding caps, new funding rules and rates are due for publication in the very near future and it is highly likely that there will be an increase in the number of Caps*). The Cap sets the limit for the government contribution, but the ratio remains consistent:

Employer pays 1/3 of the cost of the apprenticeship.

Government pays 2/3 of the cost of the apprenticeship.

Additional incentive payments are also available for SMEs,

Comprehensive information about higher and degree apprenticeships, delivery standards, employer and HEI benefits and responsibilities, eligibility and funding can be found at:

<https://www.gov.uk/government/collections/sfa-higher-and-degree-apprenticeships>

<https://www.gov.uk/government/publications/apprenticeship-levy-how-it-will-work/apprenticeship-levy-how-it-will-work> [24 June 2016].

Appendix 2 - Summary of EtoL benefits

Students:

- Graduate with lower debt (dependent upon length of course and accommodation costs)
- Employability - build up work skills and experience as a fast track to entering higher level graduate roles
- Work readiness – through work orientation and business practice
- Try certain employers and types of work before making career choices
- Relate academic theory to work, and bring practice into the classroom – improving both grades and the learning experience

Universities:

- Attract more students
- Help towards social inclusion targets
- Improve learning through combining theory and practice in the classroom –improving grades and learning experience
- Develop networks with wider cross section of industry (presently skewed to science and technology)
- Reduce the need for placement support in job hunting during second year of study
- Foster PR opportunities
- Provide research opportunities to study new working practices new organisational forms, service work, IT and education schemes/curricula development in laboratory conditions

Employers:

- Help to keep jobs onshore close to business
- Promote corporate social responsibility and develop onshore talent pipeline
- Improve working methods and technology through scientific study of work
- Attracts more diversified but still graduate workforce with cross-over skills
- Reduces training costs of graduates – through self-learning in entry level jobs (bootstrapping) rather than with full-cost graduate training programmes
- Reduce attrition levels through 'long interview' of prospective graduate employees

Local population:

- Bring employers to local areas

Home economy:

- Keep jobs on-shore, develops/preserves skills and contributes taxes
- Create sustainable international competitiveness and employment
- Rebalance economy from over dependence on the financial services sector
- Address the challenge of low-cost economies moving up the value chain and taking progressively higher level work

Society:

Improve social inclusion, See Appendix 7, *Mature student - Jessica*.

Appendix 3 – The segregation of business support functions and the implications of the SSC model for professional business support workers

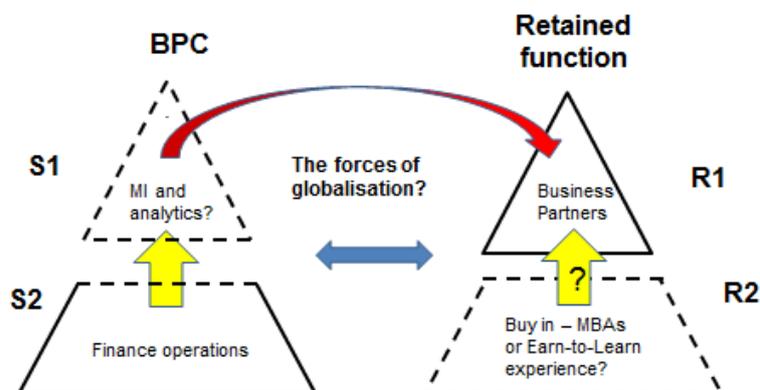
Rothwell, Herbert and Seal (2011) examined the increasing segregation of the finance function and drew attention to how the rise of the so called ‘martini workers’ in an hourglass-shaped profession may have serious consequences for individual workers, organisations and professional bodies.

Taking finance as an example of a professional function within organisations, accountants are presently enjoying something of a ‘honeymoon’ period as those management accountants (MA) acting as business partners are freed from the tedium and distraction of transactional activities and are able to realise their full potential as expert partners to business teams. Those accountants joining the SSC are becoming experts in systems design and people management. Some of these new SSC experts are making new careers as highly paid expatriate managers in the new destination countries, e.g. Malaysia, Sri Lanka - see the new role of the ‘Global Process Owner’ (Herbert, 2015). Other, ‘late-career’ MAs are leaving accounting, either before or after SSC migration, encouraged by attractive redundancy/early retirement compensation, which the large multi-national firms can still offer. In destination countries, good jobs are being created in ‘brand name’ companies and the cost of finance functions is falling as a % of revenue (Hackett, 2015). This is a ‘win-win’ scenario in which business partners in developed countries thrive, once freed from transactional and routine reporting activities. Location arbitrage is attractive to individual organisations for various reasons; labour cost, infrastructure flexibility, tax, legislation, etc.

At higher levels in society the knowledge-based economy is a ‘golden scenario’ of new prosperity for both *developed* and *developing* countries although, it is a moot point whether everyone can continue to win? Based on our research some of the issues already emerging are as follows;

- i. As the present generation of business partners moves on there is more often no strategy to replace them when the traditional training ground for accountants is now in a BPC, based, say, on the other side of the world. The segregation of finance functions between transactional and transformational aspects is depicted in the diagram below as the ‘globalisation’ gap.

The segregation of finance



- ii. As a corollary to point #1 above, it could be argued that if future BPs no longer have the technical skills/experience and professional behaviours of accounting then most of their strategic work could be done by people with more general business qualifications, such as MBAs who can call on either finance specialists for the figures or other technical specialists for technical expertise in, say, data analytics and economics.
- iii. BPCs in destination countries are rapidly ascending the value chain of accounting activities (S2 to S1 in figure 2). In a few years' time it is not inconceivable that the majority of workers in many organisation will be both in the SSC organisation and destination countries, see *Professions are Heading East Forever*, Herbert and Rothwell (2013).
- iv. The split between business partnering and low-level mundane accounting tasks in the SSC is maybe too simplistic. In some of our case organisations a middle corpus of MAs is being formed for more routine management information (MI) activities such as forecasting, planning, budgeting and monthly reporting routines. The MAs in this 'middle ground' are being moved towards the SSC model and many jobs are being offshored.
- v. With a need for skills more akin to those of managers in operations style environments such as large scale manufacturing and service operations, there are now many examples of managers that have no formal qualifications in accountancy leading finance teams in SSCs.
- vi. The counter argument is to the concerns above are misplaced and that professionally qualified business partners will become the elite professionals who work within top management teams to provide insight from the management information produced in the SSC. This which should be a particular concern to the more specialist professional institute of accountancy because the consequence of the specialisation scenario is that there are presently a lot of accountants in more general accounting roles and, if too many of those jobs disappear, will result in a significantly smaller membership base.

Appendix 4 – Student Survey 2016

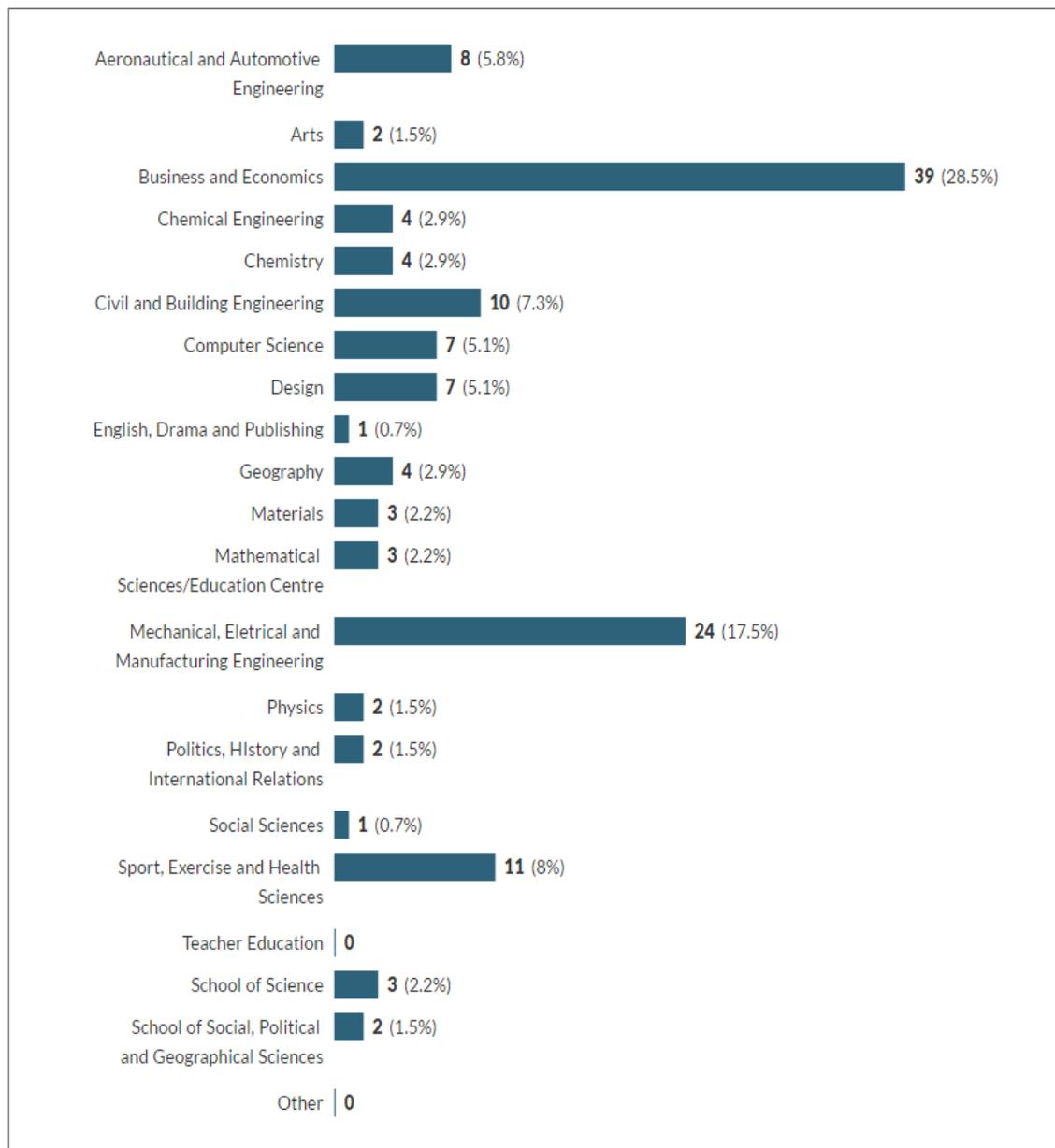
A modest, mixed-methods (qualitative and quantitative), survey was conducted on the Loughborough Campus in June 2016 amongst c1,600 international students (response rate 12%). Three questions were asked in order to establish:

1. How interested students are in the concept of EtoL
2. How many hours they would be willing to work in term time
3. How many hours they would be willing to work during the holidays

Figure 1 illustrates the distribution of responses by schools and programmes. The outcomes broadly reflect the respective size of the student population within the overall university but there may be some bias towards the School of Business and Economics because this school is driving the EtoL initiative. Yet we believe most work could be undertaken by students from all fields of studies.

Figure 1: Distribution of responses, by Schools and Programmes

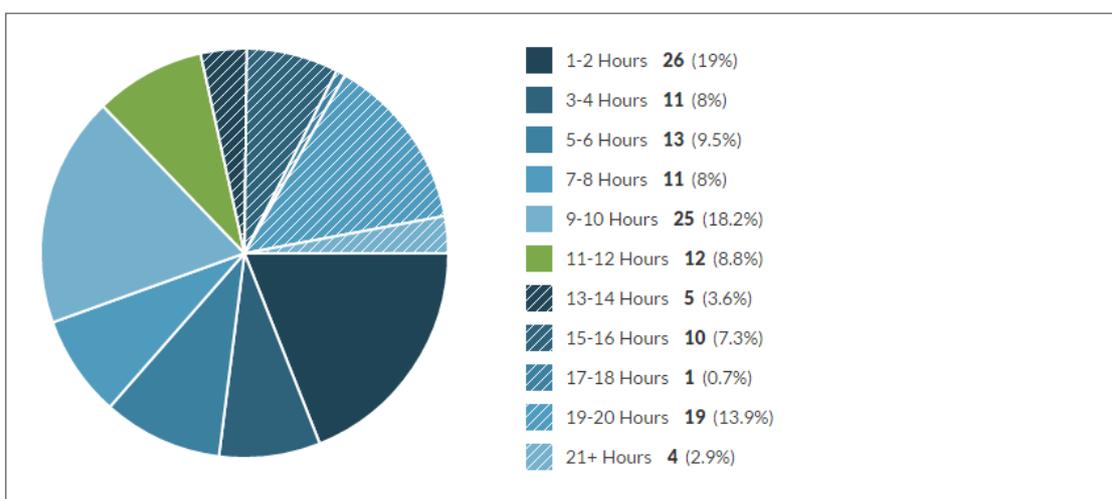
1 Which school are you in?



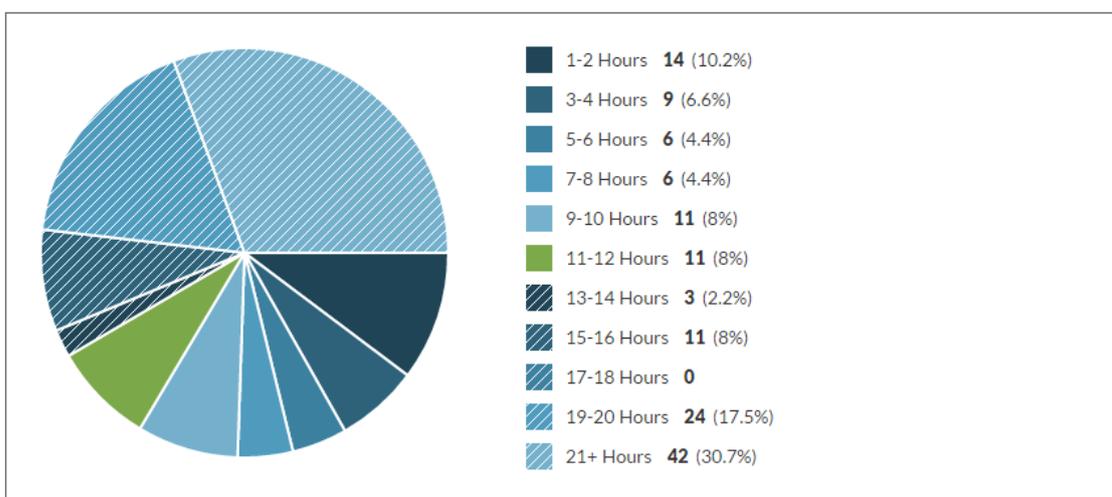
Figures 2 and 3 (below) show the number of hours students are prepared to work during term time and the summer/easter holidays. We make the assumption that employers would prefer to see a commitment of around 10 hours per week minimum, and that tutors would prefer no more than around 15 hours per week to be worked by students. Our data (Figure 2) show that student preferences for term time work of between 9 – 14 (inclusive) hours amount to 30.6%. At a mid-size University such as Loughborough (16,000 students) this would be a potential pool of approximately 4,500 students wanting to work. During the holidays, 48.2% of students indicated that they would be prepared to work 19 or more hours, a potential pool of around 7,000 students, see Figure 3.

Figures 2 and 3 – How many hours could you contribute to part-time work while studying?

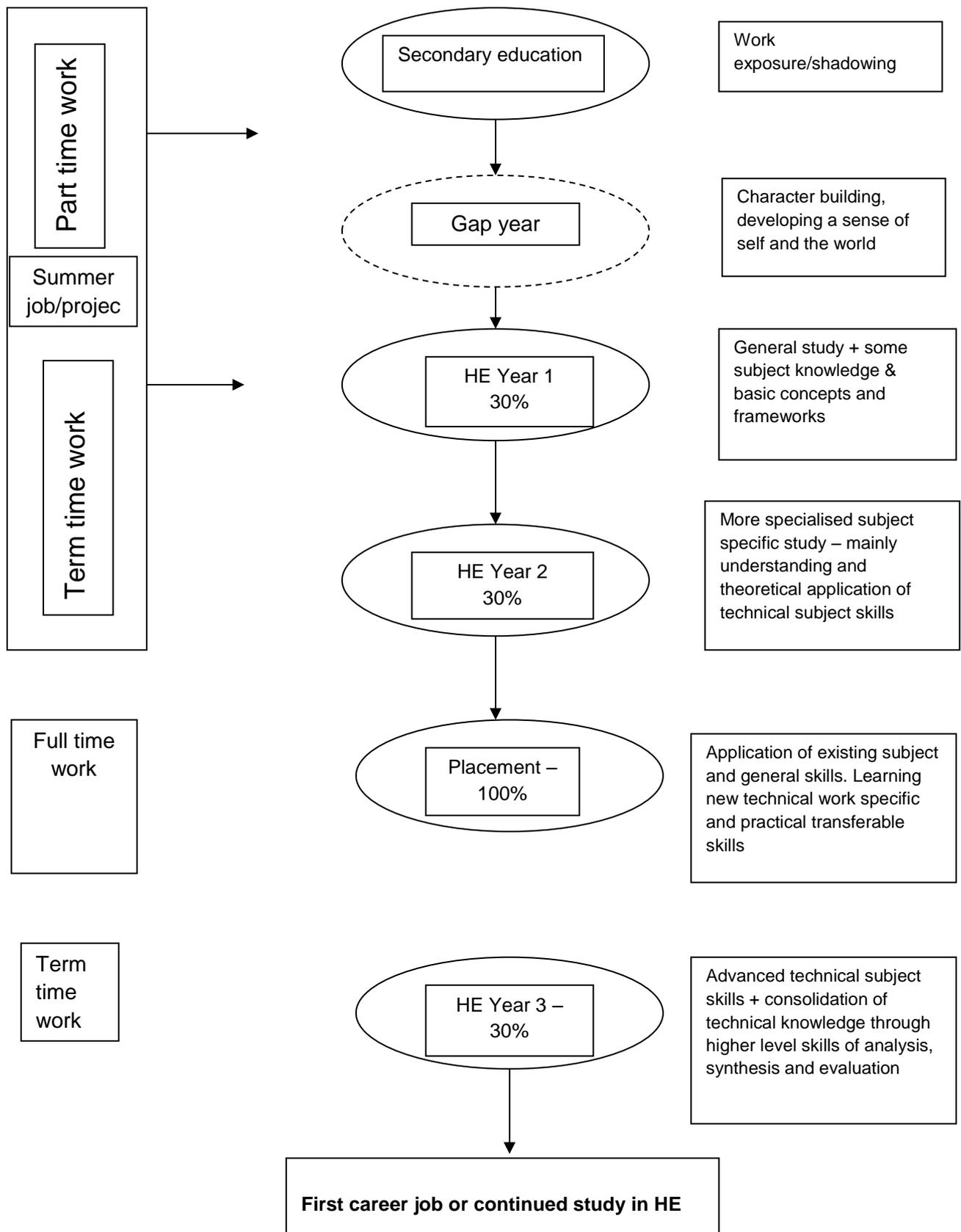
2 How many hours per week could you contribute to part-time work while studying?



3 How many hours per week could you also contribute to part-time work during your Summer/Easter break?



Appendix 5 – Stages of development and progression whilst participating in EtoL



Source: Herbert and Rothwell (2004)

Appendix 6 - Organisation Scenarios

SCENARIO 1 – Powerco: Special long term project, transaction processing and data analysis

Powerco is a large, multi-national, engineering company headquartered in the UK. It makes a range of high-tech products for civil and government customers. The company has maintained its pre-eminent reputation for performance and reliability through investment in human and technological resources. Continuous improvement in power capability and reliability is a significant and ongoing challenge. In the meantime, the company must secure successive marginal improvements in performance in relation to its competitors.

Consequently, the company is considering optimizing running performance and service scheduling through data analytics. This means gaining insight from existing data whilst capturing and analyzing new data sources. Such a strategy will require a range of competencies to ensure improvements in capability and capacity and may also offer the opportunity for partnership with a HEI. We have identified two particular sets of activities which offer a viable means of achieving such a partnership. Both activities are likely to be non-critical in terms of timing and would fit well with the academic cycle and student availability.

1. Data Management capture and curation - transactional skills

A range of students are engaged to digitalize manual records from which service history patterns vis-à-vis engine operating scenarios could be correlated. Cleaning up master operating data is a significant 'manual' task and students could be used to provide a cost-effective resource, say, validating/cleaning master data from engineering and accounting records and/or augmenting master data with additional contextual data.

2. Data Scientist – data analytics – maths, IT, engineering

Universities, such as Loughborough, which have complementary strengths in maths, IT and engineering skills could spawn new projects or generate new solutions based on statistical analysis or insights from emerging data. In all these instances, there is the potential to involve collaboration between university research staff and students.

How might it work?

Data management activity could involve students working in a specific (Powerco dedicated) or shared office facility on campus. Work might also be undertaken remotely, e.g., from home, in the holiday periods. Lower level tasks could be organized using workflow task scheduling and monitoring. Students would work in small groups co-ordinated by a lead student responsible for ensuring that a core number of hours are provided by the group across weekly time slots.

Data analytics activity is likely to be conducted on campus within existing academic departments or in a bespoke facility on an adjacent business park. Students would likely be organized by staff or a full-time subject specialist.

Data security and confidentiality is an important consideration for Powerco but we suggest that with a pool of students involved, work could be organized such that no single student could 'see' any significant section of data/results.

SCENARIO 2 – Pharmco: Transactional backfill and special projects

Pharmco is a large, multi-national, pharmaceutical company headquartered in the UK with business processing centres on three continents covering accounting, HR, procurement and IT functions. Its BPC in the south-east of the UK provides a range of services which need to be closer to internal and external customers. Pharmco seeks to supplement its onshore operations with:

- 1) 'backfill' capacity to accommodate peak demands around month-end and holiday periods
- 2) extension of the working day from 5pm to 9pm onshore on a permanent basis
- 3) the option to move around 25% of the work that is presently undertaken in the south-east to a cheaper site, say, in the Midlands.
- 4) develop business cross-over skills amongst the company's science graduates

How might it work?

The company does not wish to invest in alternative premises directly. It would be interested in taking a number of dedicated desks (around 100) on campus in a managed third-party facility which could be supplemented with another 50 - 60 desks at peak times.

Tasks are generally entry level and would be organized using workflow task scheduling and monitoring. Students would work in small groups co-ordinated by a lead student responsible for ensuring that a core number of hours are provided by the group across weekly time slots. The work envisaged would not require elaborate security considerations by Pharmco.

SCENARIO 3 – UniOrg: SSC or BPO emphasising corporate social responsibility (CSR)

A successful university, UniOrg is experiencing difficulties in student recruitment and this is putting a pressure on costs. The senior management board are attracted to a proposal by a major BPO which involves a combination of onshore and offshore outsourcing. The EtoL scheme offers the possibility of reducing costs and satisfying UniOrg's commitment to its CSR responsibilities.

How might it work?

UniOrg could specify that the BPO vendor operates the BPC on their campus and employs a minimum percentage of student labour in addition to legacy staff. In doing so UniOrg would need to consider the potential for employment relations as students will be replacing some existing, expensive workers which may provoke a reaction from the staff union.

UniOrg could set up an SSC and involve a number of other universities. This would create a critical mass to leverage economies of scale and enable existing staff to be kept on but supplemented by student workers.

SCENARIO 4 – Profco: Onshore BPO to complement offshore operations

Profco has forged a novel business model based on the mutual sharing of an offshore business process centre (Herbert, 2013). The strategy has two complementary strands.

First, a 'one-stop-shop' concept which supplies finance service to SMEs that wish to grow quickly but do not wish to accumulate the 'baggage' of support services along the way.

Second, the provision of 'high street' professional accounting services. In this sector, the company has ambitious plans for growth based on the selective acquisition of small public accounting practices, each with a range of clients and the servicing of growing medium-sized companies that seek to work with a virtual management team.

In the case of the second strategy, traditionally an acquiring firm will typically retire the senior partners and keep the staff that actually do the accounting work. By contrast, Profco retains the partners and moves the back-office work to a dedicated offshore SSC that it has set up in a third-tier city in India (Askin and Masini, 2008). The core services comprise broadly bookkeeping, accounting statement preparation, tax returns and company secretarial services. These activities have now been supplemented with basic management accounting services such as budgeting and cashflow planning which help SMEs to gain support for funding. The SSC also provides indirect support activities such as HR, IT, Procurement support to the front-line units.

Profco have recently secured significant venture capital funding and are keen to experiment with an onshore BPC that could provide decision making support to clients and the EtoL scheme offers a means to do this at a more modest cost in a scaleable manner.

SCENARIO 5 – *Digitalco*: Set up of new capability and flexible, lower-cost, capacity in Europe/middle time zone by overseas company.

Digitalco is a household name. Originally specialising in internet access and one of the first search engines it has since diversified into a range of media, content-led, activities. With headquarters in the US and London, it has interests around the world with three shared service hubs undertaking transaction processing work in Mexico, Eastern Europe and Asia. Digitalco's existing business model is mature and whilst it still has a good subscription base and ownership of valuable media content, the company has, more recently, become locked in a downward spiral of cost reduction, each stage of which depletes the capacity of management to think creatively and grasp new opportunities.

Digitalco's latest strategy therefore sees a return to disruptive technology as it eyes opportunities to take on incumbent banking services through emerging 'FINTECH' opportunities. The company has identified three strategic capabilities that will allow it to once again be a 'nimble' player in the interface between technology and consumers.

1. **Data analytics** – will enable the growing volume of data flowing into the company to be better captured, curated and analysed with the potential to improve both revenue and margin in business operations. Insights from data will create a more individual customer service proposition and enhance a data rich environment that will allow algorithms to undertake much of the routine and semi-routine decision-making of operating divisions.

2. **Robotic Process Automation** – significant opportunities exist to make good margins out of existing business streams by adopting a ‘light-outs’ process mentality. This will reduce costs significantly faster than its competitors whilst producing valuable, real-time digital data which can feed into the data analytics initiative.
3. **‘Digital intimacy’** – This is a term coined by the CEO to describe a new approach to a more personal, valued-added, customer service (sometimes called a ‘white-glove’ approach). The company has a vast database of customers but only interacts with them through either blanket outward mailshots or individual telephone conversations when customers complain or raise service queries. The basic idea is that a premium care package could be offered to the more affluent customers which would be both an interactive help service and a digital education platform with and content about how to make the most of the web.
4. **FINTECH** – the company has tentatively identified opportunities to work with incumbent players by offering so-called ‘white-branch’ facilities in towns too small to present any one bank with sufficient scale to maintain its physical footprint. This could also extend to digital support as in 3. above for even more remote areas.

These initiatives will require additional labour capacity and new skills which the company does not currently possess. Via collaboration with HEIs offering skills and research at the vanguard of data analytics and social media, the EtoL scheme could provide a complimentary solution to expanding the present capabilities, especially as most UK universities have diverse student populations that have the capability to work in a multitude of world languages.

Appendix 7 - Student Examples

Student 1 – International student seeking UK work experience

Joe is an international student from Brazil doing a 2-year exchange year at Loughborough University. He is studying Engineering and also undertaking two business related modules, Management Accounting and Operations Systems. He has a generous scholarship from his government and is keen to work in Europe and to return to Brazil with a sound knowledge of UK working practices.

Joe is fluent in Japanese, Portuguese, Spanish, English and German. He has good mathematical and analytical skills and is particularly interested in information technology and business systems. He has had practical experience in an engineering company in Brazil but he has never worked in an office-based environment. Being part of the EtoL scheme Joe can observe the middle-office side of a company and gain practical experience. Furthermore, with his analytical competencies and language abilities he can continue to develop his soft skills whilst contributing to the workplace.

Student 2 – Mature student returning to education, seeking income and work experience

Jessica is a mature student from a nearby city. Now that her child is starting school she is thinking of applying to study Economics. Working in a supermarket for the past three years to support herself and her family, Jessica would like to work in the financial services industry. Despite good A-level results, she did not have the financial resources to fund university. She worked full-time as a payroll clerk until she started her family but there was little opportunity to gain a range of experience and to make career progress.

Jessica is eligible for bursary support from the university as a lack of finances are still the main obstacle to studying. However, she is conscious that when she graduates she could find that without good quality work experience with multi-national companies, employers may perceive her as overqualified for entry-level positions. The EtoL scheme offers a chance to study a campus-based degree whilst also gaining such work experience, e.g., around 20 – 25 hours per week in term time. With her previous experience and maturity, Jessica hopes to earn around £200 - £250 in term time.

Student 3 – European student seeking income and UK work experience

Ivanka is from Bulgaria and studying BSc Management Sciences. Following a placement year she is now entering the final year of her studies. She speaks Bulgarian, German, Russian and English. Her ambition is to work in management consultancy in a European multinational. Consequently she wishes to build on the experience gained during her placement year and her interest in the process management and project coordination aspects of her degree. The EtoL scheme is an important opportunity to gain valuable middle-office experience offering team-leader and supervisory responsibilities and the chance to develop the soft skills sought after by major employers. Ivanka would also welcome the extra income as she is being supported financially by her parents and would prefer greater independence.

Ivanka is conscious that the final year will be demanding and will only want to work about 10 hours per week in term time. In the holidays she is happy to work 40 – 50 hours per week because she tends to stay on campus as most students have returned home. Consequently Ivanka is encouraged to learn that BPCs are often keen on team bonding and development activities outside work.

Student 4 - International student studying for an MBA with mandatory work placement

Aravindhana is studying for a full-time MBA. He is a mature student who has already worked in a number of BPCs in his home city in India. He can afford the relatively high costs of study and living in the UK but is very keen to gain work experience in the UK. The study period of the MBA is 12 months followed by a 6-month work placement. Aravindhana is keen to use the new insights from his MBA in systems design and data analytics in a UK BPC so that he can look for a permanent job either in the UK or in India.

Student 5 – Doctoral student seeking income and the opportunity to ‘in-it’ research

Graduating with a First from his undergraduate degree in mathematics and accountancy, David now wishes to undertake a Ph.D. in business systems and analytics but already has debts of £45,000 and three more years could double this. He worked in the finance office of a large multi-national bank in Geneva during his placement year and was asked to be part of a team developing robotic process automation (RPA) in the company’s SSC in Poland. He quickly saw that the approach being used to automate purchase ledger transactions could be applied to many operations within the bank. He also saw that RPA was acceptable for a non-core activity but there was stiff cultural resistance to automating mainstream banking process, even though these had many times the scale of the purchase ledger tasks. Consequently, he wishes to explore the way in which SSC and BPO operations could be extended to ‘front-line’ services and how ‘lights-out’ processing can help companies to lever enterprise information and maybe even develop new business models.

David, hopes to work at a systems development level in an SSC environment during his PH.D. and thus, engage in what his supervisor calls ‘in it’ rather than ‘on it’ research.

Appendix 8 – Work-based learning module combining theory and practice and assessed by coursework: currently used on the Loughborough University part-time business undergraduate programmes, Singapore.

AIMS:

The aims of this module are to:

- enable participants to apply knowledge gained from taught modules
- to act as a catalyst for the acquisition and application of learning through research and reflection of their own learning and development
- develop skills in obtaining, analysing and applying information from a variety of sources, including publicly available material to the work-place

INTENDED LEARNING OUTCOMES:

On completion of this module students should be able to:

Knowledge and Understanding

- understand the process involved in conducting a research project in the workplace environment
- assess various approaches to gathering research data
- apply appropriate theoretical concepts and models, and practical techniques to reflect on the work-place environment and the student's own learning and development

Skills

Subject-specific skills

- discover, select and review pertinent literature sources
- apply appropriate research methods and learning concepts to investigate workplace development
- demonstrate linkages between academic theory and management in practice.

Key/transferrable skills

- research and reflect upon skills acquisition in the work-based environment
- work independently and manage one's own learning
- write a substantial report with clarity, structure and brevity.

CONTENTS:

Project research methods and concepts of learning, personal development, literature search and review.

The nature of the contemporary management environment and implications for employability and career.

Student Effort (hours) 200

ASSESSMENT:

100% coursework: Comprising one draft proposal outline (20% weighting, maximum 500 words) and one individual report (80% weighting, maximum 4,500 words)

Appendix 9 - Framework for Capturing and Evidencing Skills

The *PINT* framework (Herbert and Rothwell, 2004) helps students to monitor and record their development by rating skills and competencies on a score from 1 to 5 (1 is the lowest). Note: a maximum % for each section (say, 60% in year 1) will be suggested at progressive phases of work experience to encourage students to use the range of scores available.

Development of Personal Skills (Maximum score 5 points x 5 items = 25 points)

	1	2	3	4	5
Displays effective meeting skills					
Makes decisions based on research/analysis/fact					
Plans, prioritises and tracks activities/tasks					
Effectively manages use of time					
Speed/accuracy of work					

General Conduct and Behaviour: (Maximum score 5 points x 4 items = 20 points)

	1	2	3	4	5
Interest shown and sustained					
Reliability					
Confidence					
Conduct					

Development of Interpersonal Skills: (Maximum score 5 points x 14 items = 70 points)

	1	2	3	4	5
Identifies fresh approaches and has a positive approach to future developments					
Creativity					
Shares responsibility for all aspects of team performance/team building					
Influences or negotiates in a manner that gains agreement or acceptance					
Shows motivation, initiative and proactiveness					
Is resilient and consistent in the face of challenges and change					
Displays a willingness to accept/act on feedback received					
Problem solving					
Ability to reflect on and learn from experience					
Critical assessment of progress towards objectives					
Development of Leadership:					
Demonstrates the ability to manage 'whole' projects					
Seeks to improve work related processes and documents appropriately					
Understands and addresses personal development needs					

Communication (Maximum score 5 points x 17 items = 85 points)

	1	2	3	4	5
Writing reports					
memos-internal					
letters -external					
note taking					

	1	2	3	4	5
Verbal speaking					
listening and comprehension					
feedback					
body language					
presentations structure and use of visual aid					

audience contact					
handling questions					
negotiation					
personal assertiveness					
dealing with customers/clients					
handling queries					
working as part of a team					
task management					

Knowledge and Number (Maximum score 5 points x 3 items = 15 points)

	1	2	3	4	5
Integration of subject knowledge from studies					
Exposure to other disciplines/areas of business					
Use of numerical data					

Technology – Information and Communication (Maximum score 5 points x 5 items = 35 points)

	1	2	3	4	5
Word-processing					
Spreadsheets					
Presentation Package					
Databases					
- E-mail systems					
E-commerce/The Internet					
Specific applications such as scientific packages, business systems etc.					

Acknowledgements

The production of this report is due to a number of people who have provided support either in the underpinning research on shared services and/or in the development of the EtoL scheme as a means of addressing the emerging challenges, specifically;

The General Charitable Trust of the Chartered Institute of Management Accountants (CIMA) for supporting elements of the research on SSC developments that helped to make us aware of the otherwise hidden problem of middle-office job migration.

David Mitchell and Rashpal Hulit (both formerly with the Hackett Group) for proposing the original concept of the Earn-to-learn scheme.

Many colleagues at Loughborough University especially; Dr Andrew Rothwell, a long time co-author on professional employability matters and Dr Stephanie Lambert, whose Ph.D. thesis contributed insights into professional development in SSCs.

Members of the EtoL Steering Group who have been very supportive and to the LU Enterprise Office for financial support.

Natali Raleva and Victor Shioya-Ionemoto who worked on early versions of this proposal and, as placement students undertaking their own work-based learning, provided significant new insights to the project.

Dr Christine Blackie for help with reviewing, editing and contributing to some of the careers content in this document.