

Universities through the looking glass

Reinventing the business of higher education



The rapid demise of the benign economics of steadily-rising grant funding is forcing universities to rethink the ways they earn their living and manage their affairs. They must move on from the legacy of funding-led, cost-driven business models and develop alternative strategies built on their distinctive capabilities and the value they can generate. The challenge for universities is to remain competitive without losing the special qualities that make them distinctive and valuable. This paper suggests how this can be achieved.

The funding/cost spiral in higher education

Universities¹ are self-determining enterprises, responsible for their own academic and economic success or failure. But decades of financial dependency and bureaucratic impositions have led to them being run as if they were public sector bodies. The great majority of UK universities depend on Government grants and contracts, along with regulated and subsidised student fees, for the bulk of their income – around two-thirds across the sector, and over 90% for some. Universities have come to regard this public funding as their entitlement rather than an economic exchange, and have geared their spending to the funding available. Their plans and cost structures have been set in the expectation of increased funding for steadily growing volumes of teaching and research.

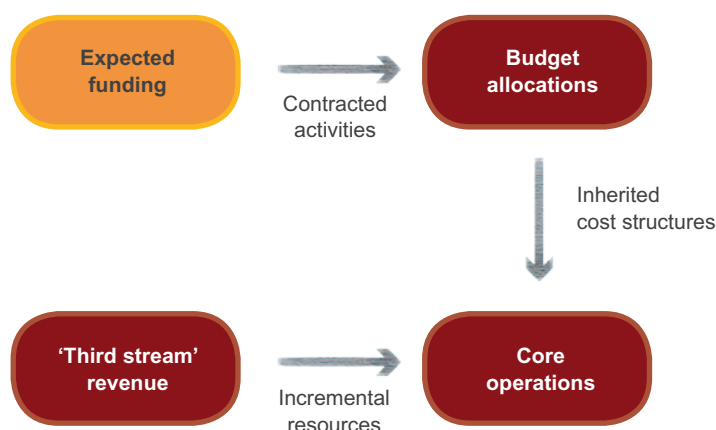
The resource flows in the current, funding-led business model are described in Figure 1. This model has underpinned the successes of the UK higher education system for many years, over which public funding has grown steadily and more or less in line with rising costs. It has provided an inherently stable context for institutional planning, since each year's income was based on last year's – plus regular increases to reflect inflation and volume growth. Overall the sector has grown substantially and has managed to sustain small

surpluses (1.4% on the most recent analysis) from this regime, despite their staff and operating costs rising by around 8% every year².

Not surprisingly, universities' management structures and systems have been shaped by the rules and mechanics of public funding. This reflects a combination of imposed requirements (from funding and quality agencies) which have been assimilated into custom and practice. For example, internal resource allocation methods have usually mirrored external funding formulae, reinforcing attitudes in academic and central service departments that budgets represent their entitlements to spend. Institutions' strategic planning, management information, financial controls and performance systems are similarly geared to the public policy and funding regime, which they have come to regard as synonymous with their external market. Even the organisation of academic activities is shaped by funding rules (especially for research), which are based on discipline-based cost units and can discourage cross-disciplinary provision.

A direct effect of the funding-led model is that costs (predominantly salaries and associated staff costs) take on a life of their own, being set according to the funding available and then growing inexorably, fed by national pay agreements and protectionist employment terms.

Figure 1: Overview of the funding-led business model



Academic and business planning in this model is derived from previous levels of formula-based public grants and other contracted funding and the associated outputs (such as student numbers) required. Expected funds are typically distributed to academic departments through versions of the external funding formula, after deductions for institutional overheads, and are used to cover inherited operating costs (mainly staff).

Revenues from 'third stream' and other private income sources are used to subsidise any shortfall in available funding for core teaching and research operations.

¹ We use the term universities to refer to all formally-recognised higher education institutions.

² See, for example, HEFCE Annual Accountability returns, July 2010/20.

Unlike any other business enterprises, the dominant business imperative for most universities has been to secure sufficient revenues to sustain an escalating cost base. This imperative is reinforced by the widespread equation of costs with excellence, especially in published league tables and external expectations. The pressures to maintain league table rankings, and other imposed requirements (such as professional accreditations) place undue weight on resource inputs such as staff-student ratios, spending per student or contact hours, rather than valuing outcomes like career success or research-led innovations.

'Chasing the top line'

The need to sustain a growing and self-generating cost base has fostered an ethos of 'chasing the top line' – that is, prioritising the pursuit of incremental revenues from any source, rather than optimising the balance of earnings and costs (and hence surpluses) from universities' diverse activities. This effect is particularly visible in universities' strategies to diversify their revenues from non-Government sources.

All universities have worked hard to grow their earnings beyond their Government funding, with some success. In 2008/9 HE institutions earned nearly £3 billion or 12.5% of their total income from privately-funded services³. These range from contract research and technical consultancy to continuing professional development and the commercial exploitation of intellectual property rights. A further £2 billion, or 8% of sector income, is earned through tuition fees from (non-EU) international students.

The proportion of income from these sources is much higher than this for some universities – and much smaller for others. However, even in the institutions most successful in these areas, they are regarded as secondary or even tertiary ('third stream') adjuncts to the core business of (publicly-funded) teaching and research. Few universities regard competing for privately-funded learning, research or other knowledge-based services as their core business. Deep-seated adherence to the funding-led view of life has meant that privately-funded activities are pursued as an increment to institutions' core business and a source of subsidy for their otherwise under-funded teaching and research.

Running faster to stand still?

In the past, these criticisms of the funding-led business model could be dismissed as managerialist and irrelevant. The model clearly worked well for universities and for successive Governments on the terms of the prevailing environment, and there was no need to justify it against different criteria.

The vulnerability of universities within this model emerges when the fundamental expectation of steadily rising public funding no longer holds. Faced with sharp and perhaps permanent reductions in Government grant funding, universities find themselves with very limited options, because they are locked in to a fixed cost, spending-focused modus operandi. Instead they have to trim every element of their operations – offers, quality, services, investment and capacity – to cope with reduced revenues. This can quickly lead into a spiral of despair, of institutions feeling forced into doing less with less, reducing their capacity to adapt and innovate. We have described this as the Red Queen effect⁴, in which universities find themselves working harder and harder simply to stay in the same place.

The era of entitlement funding is over

Breaking away from the legacy of entitlement funding and fixed cost operations is vital to the future of our universities. Instead, they must adapt to an environment in which income is earned from the value and benefits they offer, in competition with a diverse and growing range of alternatives.

Greatly increased levels of engagement with the wider, largely private economy of learning⁵ will be essential for offsetting the imminent sharp decline in Government funding. Universities today are relatively minor players in the most dynamic and fast-growing markets for higher level learning and advanced knowledge. In each of the areas of current HE-business interaction, the amounts earned by universities represent only a small share of total expenditure. For example, the £2.1 billion earned by universities from privately funded R&D represents less than 8% of total R&D spending by UK industry⁶, while the £560 million earned from graduate-level continuing and professional development (CPD) is less than 10% of

³ Source: Higher Education - Business and Community Interaction Survey 2008-09, HEFCE.

⁴ *Escaping the Red Queen effect – succeeding in the new economics of higher education*, PA Consulting Group 2009.

⁵ We use the concept of an economy of learning to embrace total spending, by Government, business, agencies and individuals across the whole range of higher level learning, research and knowledge-based services. There are no official data for total spending in this market; our informal estimate is that it is worth at least £50 billion a year in the UK alone.

⁶ BIS R&D Scorecard 2008/9 (published January 2010).

total national spending on these growth services⁷. There are clearly huge opportunities here, and in many other areas, for universities – but not if they approach them as a source of subsidy for their ‘core’ business.

Government-funded teaching and research will of course remain crucially important for all universities. Even after the forthcoming public expenditure cuts, Government will still be spending upwards of £10 billion a year on higher level teaching and research. But the distinctions between the public and private markets for higher education, and between providers to them, are fast diminishing. The direction of public funding is moving towards ‘contestable commissioning’ and to subsidising student demand. Successive Ministers have made clear that taxpayers’ funding for HE should secure public policy objectives by the most cost-effective means available, and not simply support the activities and costs of universities or any other providers. Universities’ future abilities to secure public funding will accordingly depend on the tangible benefits they deliver towards the Government’s strategic priorities – just as they must do for the benefits sought by business, charities and individuals.

The need for a new university proposition

This is not simply a matter of universities becoming more market-focused, business-like and enterprising. It is at least as much a question of redefining the special nature and identity of universities – the university proposition – within the new economics of HE. In every area of their business, including publicly-funded teaching and research, universities already compete with a host of specialist providers, ranging from FE colleges and private education colleges to commercial research institutes and consultancies. This competition, across the expanding spectrum of higher education activities and services, is set to increase substantially. In their responses to this development, there are real dangers of universities confusing competition with emulation and seeking to become more like the very different players they come up against. The risk is that universities lose sight of what makes them different and special within the economy of learning, and with it their distinctive capabilities and competitive advantages.

There are, of course, many truly excellent FE colleges, private education providers, research companies and consultancies that are able to satisfy elements of Government and private demands for learning and knowledge services. But they are not universities, nor should they expect to be.

What’s so special about universities?

Unique features of universities that have been and will remain the basis of their special place in society are:

- their mission for sustaining learning and knowledge as public goods, to be kept accessible for collective social and economic benefits
- their interpretation of creating, sharing and applying knowledge as indivisible dimensions of advanced learning
- their commitment to learning as an open, collegial process, engaging academics, students, professionals and others outside the academy.

The combination of these values is unique to universities, and sets them apart from other players in the economy of learning⁸. Sustaining the practical manifestation of these values, while earning a living in a market economy, is the 21st century challenge for universities. It requires a change in the mindset of university leaders, staff and representatives, to recognise that the worth of these special features is not axiomatically self-evident, but must be demonstrated and earned.

The ‘sustainability question’ for universities must be reframed, from inside-out: “who will pay for us to continue doing the excellent things that we do?” – to outside-in: “how can we deploy our distinctive capabilities to generate value for others, and thereby to sustain our mission?”.

This requires a fundamental reinvention of the university business model, from a cost-driven spending machine to a mission-driven social enterprise.

⁷ Council for Industry and Higher Education, Employer Demand for Higher Education, CIHE 2008.

⁸ See *Keeping our universities special – surviving and thriving in turbulent times*, PA Consulting Group 2008.

Towards a capability-led business model

Achieving this requires a 'looking glass' reversal of universities' business focus, from expected revenues (public or private), which the university cannot control, to organisational capabilities, which it can. These capabilities comprise two things – the distinctive assets available to the university and the operating structures and systems through which those assets are mobilised and deployed. The combination of assets and operations, directed towards opportunities within each university's chosen strategic focus, provides the basis for a self-sustaining academic and business portfolio.

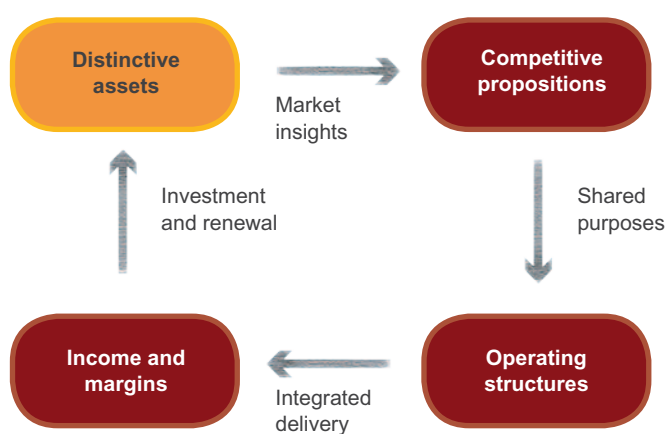
Distinctive assets...

Universities are able to draw upon a brilliant array of unique organisational assets, most of which do not appear on any balance sheets. In addition to their tangible assets of buildings, facilities and technology infrastructure, the distinctive asset base of any university derives from a wealth of intangible resources including:

- **human capital** – the knowledge, skills, values and energies of academic faculty and other professional staff, and also of the student community
- **intellectual capital** – the accumulation of proprietary course content and structures, research findings, teaching and research expertise and related knowledge
- **relationship capital** – the networks of academic, professional, business, Governmental, community and alumni associations that the university has built up
- **reputational capital** – the brand and market standing of the university, which underpin its attractions to staff, students, business clients and other partners.

All universities are rich in these assets, which are not available (at least not to anything like the same extent) to their non-university competitors. But relatively few nurture and manage them as platforms for competitive advantage in the ways demonstrated by the most successful commercial organisations⁹.

Figure 2: Overview of the capability-led business model



Strategic planning in this model starts with assessment of the distinctive assets which give the University competitive advantages in selected market areas, and the kinds of innovative propositions that would meet market needs and opportunities.

Shared focus on these propositions is reflected in the operating structures – organisation models, management systems and performance incentives – through which the University's distinctive assets are harnessed to realise new opportunities.

Success in creating value for different client groups, channelled through integrated and efficient delivery models, generates the earnings for renewal and growth.

⁹ See for example, Prahalad and Hamel, *Competing for the Future* (Harvard Business School Press, 1994).

... coherent operating structures

Internal structures and processes shape the experiences and behaviours of the people who make universities what they are. These in turn decide how the organisation will respond and adapt to changes in its external environment. The key to redirecting the behaviours of the university community is therefore to redesign these structures and processes in coherent and mutually supportive ways. Each university must create a culture of shared purpose and self-sufficiency, aligned to the institution's particular mission and goals. This means rethinking:

- how the assets and activities of the university are organised
- how resources are shared and managed across the organisation
- the processes for deciding which activities to develop and which to stop doing
- the effectiveness with which business intelligence is generated and shared
- the leadership processes for encouraging staff to work towards shared goals.

... determine institutional capabilities.

The alignment of distinctive assets and coherent operating structures around the needs of selected client groups underpins a completely different business paradigm for universities, which we call the capability-led model. This is illustrated schematically in Figure 2.

Through the Looking Glass?

The capability-led model requires universities (by which we mean the whole community of staff, students and governors) to adopt a different perception of their institution and its place in the world. Some of the dimensions of this re-orientation, and the implications for institutional operating structures, are indicated in Figure 3.

Applying the capability-led approach

There is no standard blue-print for a university within the capability-led business model. Indeed, the whole rationale of the approach is for every university to create the dynamics that best relate its distinctive strengths to market needs and to the conditions for success within its chosen mission.

The fictionalised 'possible futures' on the following pages illustrate three very different ways that universities can use the capability-led approach to achieve this goal.

Figure 3: Comparing the funding-led and capability-led models

	Funding-led model	Capability-led model
Institutional goals	Maximising institutional reputation	Self-sustaining business portfolio
Business imperatives	~3% net surpluses for resilience	5-10% surpluses for self-sufficiency
Critical capabilities	Peer-rated teaching and research	Competitive service propositions
Organisation	Discipline and function based	Open and flexible resourcing structures
Resource management	Revenues allocated 'as earned'	Devolved minimum operating surpluses
Cost drivers	Staff and other fixed operating costs	Optimal inputs for competitive pricing
Performance measures	Activity and output level performance indicators	Differentiation, value, cost-effectiveness

Possible futures

Professional Pathways

University Q had great assets in the professional services sector, including strong relationships with professional bodies and major employers, internationally-recognised faculty members, good alumni relationships and strong external learning programmes. However, the impact of these capabilities was diminished by their fragmentation across a number of discipline-based departments. Moreover, the University's provision of professional services exams was regarded as no better than that offered by specialist private providers, and more expensive.

In order to enhance its capabilities in this important sector, the University developed a new operating structure based in an integrated College of Professional Studies. As well as drawing together relevant staff and specialist resources from 'contributing' departments, the College incorporated a joint-venture with a leading private sector provider of professional training programmes. The College was organised on matrix lines, to deliver a range of 'joined-up' lifelong professional formation programmes. These offered students a choice of individually tailored pathways from initial education and qualifications through to ongoing professional development. Practice-based experience and work placements were offered through a 'family' of sponsoring employers including public agencies. The private partner delivered teaching and coaching towards specific professional exams and also supported research and development work in current professional issues and practice.

Through these innovations, the University was able to strengthen and mobilise its distinctive assets to create a unique combination of propositions to meet client needs in the professional services market in ways that no other providers could match.

Possible futures

Four Seasons Learning

#2

University T was a small teaching-focused institution, providing highly-rated undergraduate and post-graduate programmes in humanities, education and healthcare. Demand for these programmes was strong, and student satisfaction ratings consistently high, but numbers had been capped for several years and past financial surpluses were turning into growing deficits. Analysis showed that the university actually made money for half the year, but then ran at a substantial loss for the other half-year when students were away or on placements. In effect, the University had 12-month fixed costs but only six months of core income.

The University's solution was to redesign its business model for 'four seasons' operation, with four 12-week terms and two main student intakes during the year. Staff were offered a choice of flexible contracts – either for year-round teaching, or for a nine-month year (leaving them free to pursue research interests in the fourth quarter), or for a combination of teaching and research time with agreed performance targets. This enabled the University to flex its staff resources to the variable teaching load over the year, and also to redeploy staff onto short courses or accelerated programmes according to demand.

The more flexible business model was further extended through a partnership with a national provider of academy schools, within which the University became the sole provider of teacher training and staff development and also provided expertise to support innovative teaching and learning management methods.

The Four Seasons model, and the flexibility it opened for students to shape their own programmes proved extremely popular with mature students who previously had difficulty finding suitable mixed-mode courses. The partnership with the academies provider further generated an assured flow of pre- and post-qualification students and of academic consultancy business.

Possible futures

#3

Research Co-op

The School of Sciences at University W was rated among the best in the country in the 2008 Research Assessment Exercise, with 90% of staff classed as research-active. It was however losing money every year, and the University was finding it increasingly hard to justify the required cross-subsidy from other areas. Most of the School's revenues were from public and charitable research sources, which did not cover the full costs of the activities concerned. Academic staff opposed efforts to divert their time to more profitable teaching or third stream applications, arguing that this would undermine their research standing. Since the School's operating losses were written off each year, there was little incentive for local management to challenge this assertion.

Benchmarking against other universities showed that research excellence and financial viability were not inherently incompatible, and led the University to rethink the operating model for the School of Sciences. In essence, the School was reconstituted as an autonomous research co-operative within the wider University, with collective responsibility for its own economic viability. The School became accountable for all of its costs, both direct staff and non-staff operations, and for its use of University accommodation and other shared services through internal service agreements and cross-charges. It negotiated a target for the financial contribution expected towards the other costs and wider development of the corporate University. Within these parameters, the School's faculty developed a business development plan which balanced the resources committed to research with fee-earning teaching and research-based enterprise activities to generate the margins needed for sustainability. All faculty staff were required to agree personal performance plans for research, teaching and enterprise activities, tailored to their individual strengths.

Since all revenues and surpluses – beyond the agreed net contribution – were retained within the School, staff shared the benefits of optimising their collective economic performance. After two years, the School's research performance was as strong as ever – since much previous activity was revealed to have generated only marginal gains – and net earnings had been grown from a portfolio of post-graduate and professional teaching and research-based enterprise.



Reframing the public-private divide

There is much debate at present about opening private sector access to public funding and regulated powers in higher education, in order to stimulate competition and choice for students and businesses. There has been less debate about the other side of the same coin, which is to free universities to be more enterprising and innovative within and outside the regulated market for HE services.

Aspects of the alternative futures described here are already being explored in some universities, successfully pushing the boundaries of established operating models. However, current regulatory regimes and the constraints of collective employment practices would combine to prevent changes of the scope envisaged here. Universities will not be able to innovate and adapt if they remain tied to the rules of public funding and a public sector ethos. If fiscal pressures and changed policy priorities lead Government to withdraw from the legacy of entitlement funding, then universities must be free to adapt to the new economics without the constraints of intrusive regulatory controls and atavistic employment practices. The new business and operating models we have described here will depend on, and require, new models of public accountability as a parallel requirement for real transformation.

Capitalising on adversity

The pressures for change in universities' traditional ways of working have been apparent and growing for some years, but have not been sufficiently strong or urgent to overcome the powerful inertia of the status quo. The impacts of recession and the prospect of unprecedented cuts in public funding for HE will force every university to rethink its business. For some, this will involve cost-cutting efficiency measures, reduced offers and redoubled efforts to grow overseas student fees and other unregulated revenues. This is the Red Queen response, which at best offers the prospect of a continuing struggle for survival.

The capability-led model offers universities a powerful approach for breaking out of the Red Queen spiral and weaning themselves from dependence on the levels and current priorities of Government funding. It is moreover, a 'scalable' business model, which is to say that the only constraint to long-term growth is the size of the global market opportunities with which universities engage. Many universities are already using the momentum of adversity to reform outdated operating models and to explore innovative ways of engaging with new opportunities. Elements of our three fictionalised possible futures can already be seen working in some universities. While not without its own risks, this response shows universities shaping their own futures, rather than being shaped by the vagaries of Government policies and public spending.

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