

# **University of Northampton: Waterside Story**

**Nick Petford, Robert Griggs  
and Terry Neville**



## About the authors

**Professor Nick Petford DSc** is Former Vice-Chancellor and CEO at the University of Northampton. Trained as refrigeration engineer, he was founder member of 'legendary' 1970s punk band Strate Jacket before reading Geology as a widening participation student. Nick has extensive research, management and Board-level experience at universities and public sector / social enterprise organisations in the UK and overseas. He is an Alumni of London, Liverpool and Cambridge Universities, the Royal Society JRF scheme and Harvard Business School. He is currently visiting professor at Durham University.

**Robert Griggs** is a Chartered Accountant who has worked extensively in both the public (Camden Council) and private sectors (KPMG). Bob has a heavy focus on project management and project finance with experience in higher education, schools and local government. He was the Project Director for the University of Northampton Waterside Campus scheme.

**Terry Neville OBE** is a widely experienced higher education professional who has held university positions including Director of Finance, Chief Operating Officer and Deputy Vice-Chancellor. He has held posts at the Universities of Birmingham, Hertfordshire, Northampton, West London and Imperial College. He has a successful track record in setting up and acting as a director of university spin-out companies and is highly accomplished in major campus developments, raising over £450 million of public and private funds to date.

## Acknowledgements

Too many to mention but include the University of Northampton senior team, Jane Bunce, Chris Powis, Rob Palfreman, Rob Howe, Ale Armellini, Deborah Mattock, Simon Badcock, John Howes, Becky Bradshaw, OVC Team Nick, Vanessa, Stef, Emma and Donna, Milan Shah and former Board Chairs, Martin Pettifor (Chair of PAC), Chancellors Baroness Falkner and Rev. Richard Coles, MCW architects, Savills, Doug Segers (HM Treasury), The Leathersellers', Cordwainers and Curriers Livery Companies and Northampton Borough Council.

*HEPI Debate Papers are designed to stimulate informed conversations about topical issues. They are based on the experiences and views of the authors and should not be taken to represent a fixed HEPI position.*

# Contents

Foreword by Sir John Armitt	4
Preface by Baroness Falkner of Margravine	6
Introduction	8
1. National and regional policy background	11
2. Project scoping	13
3. Off the blocks	15
4. Show me the money	17
5. Build it and they will come	22
6. A new type of campus	28
7. Role of the board	40
8. Lessons learned and recommendations	42
Endnotes	48

## **Foreword**

### **Sir John Armitt CBE FREng FICE Chair of the UK's National Infrastructure Commission**

The story of Northampton Waterside is one which reflects the many considerations and challenges which must be faced in such projects – and typically these pertain over at least a decade. Handling these issues effectively therefore requires clear governance and leadership.

What are the desired outcomes for teaching, research and social space? What is the scale of the facilities required, what flexibility is needed over the usage of space (which will inevitably change over time) and what are the implications for digital resources? All these areas needed consideration.

That is alongside designing for the lowest carbon footprint, cleaning up contaminated land, while regenerating an area and its community. And of course working up viable financing plans which can address risk to the University, investors, lending and underwriting bodies.

All this has to be managed in multiple stages, with hold points and go points.

As the Northampton team will attest, it is inevitably a series of highs and lows requiring vision, ambition, realism, innovation and engagement with multiple stakeholders.

It requires the bringing together in collaboration of many professions all willing to listen and understand each other's roles and perspectives.

It is all so important because a university campus can have a very significant impact on a community. It can create growth, a sense of pride and wellbeing, a large number of jobs, social benefits and – of course – opportunities for life for its students.

Those involved will remember and learn from the experience, taking those lessons on to future developments.

Northampton and its environs have been enriched with social and economic infrastructure for generations to come.

In the UK, we often focus on infrastructure schemes which struggle and occasionally fail. So the success of Northampton University Waterside is an absolute credit to Nick Petford and his team.

This publication tells the story from concept to delivery and shows what can be achieved with clarity of vision, consistency of leadership and bringing together all the myriad people and resources.

It is my pleasure to congratulate everyone involved and to offer every good wish for the future of the University.

# **Preface**

## **Baroness Falkner of Margravine Chair, Equalities and Human Rights Commission**

It is a pleasure, as former Chancellor of the University of Northampton, to write this Preface in support of the Waterside project.

As the inaugural Chancellor from 2008 to 2018, I was fortunate in that my tenure overlapped with the planning, design, commissioning and build stages of Waterside. From the outset I was struck by its aspiration and audacity, especially given the young age of the University. Many older, longer established institutions would have struggled with the scale and complexity of such an ambitious project and I watched with keen interest as the management team pushed ahead, often through what seemed impenetrable barriers, driven by a shared sense of vision and passion.

Government backing was an essential ingredient for success, but while other comparable large-scale UK infrastructure programmes struggled to get out of the blocks, the Northampton team surged ahead. In a climate where many construction projects seem bogged down by delay and escalating cost, the fact that Waterside was completed on time and on budget speaks volumes about the remarkable contribution from staff across the University and the quality of leadership from the Vice-Chancellor, senior team and Board.

In my role as Chancellor, I was able to contribute to the success of the project through advocacy and stakeholder engagement, at both local level with University supporters in local government and via the Northamptonshire lieutenancy, but also at the highest ministerial levels in the Cameron-Clegg Coalition Government.

I welcome this HEPI report as a guiding light for others who wish to embark on an ambitious programme of change, whether estates-related, digital or educational. Waterside has left a powerful and enduring legacy, and I believe the lessons learned are universal and translatable across the academy and beyond.

*You never change things by fighting existing reality. To change something, build a new model that makes the existing model obsolete.*

Buckminster Fuller

## **Introduction**

When I took up post as Vice-Chancellor of the University of Northampton in September 2010, I inherited a draft master plan for the University's estate. It was clear that a split campus on two sites was a concern to the previous management team and the estate was starting to look tired. There were several options. One was to consolidate onto the main campus, a 1970s build on the northern fringes of Northampton. The other was local expansion and closer physical integration between elements of the satellite campus. The showcase was a huge glass dome, bigger than the one at the British Museum, enclosing a courtyard with a huge swathe of external courtyard space. Both options were impractical. Consolidation would have consumed most of the sports fields and attractive greenery on the main campus, while the disruption of turning it into a building site for 36 months would do little to improve the student or staff experience. Not long after my arrival, and with a change in the way the recently installed Coalition Government wanted to drive the regional growth agenda, a 16-mile stretch of brownfield land bordering the River Nene in Northampton town centre, some five miles south of the main campus, was designated as an Enterprise Zone by the newly established Local Enterprise Partnership. The rest, as they say, is history.

An enduring aspect of higher educational institutions is change. Depending on timing, from a personal viewpoint, it can be a slow, almost glacial process. For others, caught up in periods of rapid transition, the hurly burly can be overwhelming. But change is always there. The various incarnations leading to the present University are listed by date in Figure 1.<sup>1</sup>



*Figure 1 Timeline of the University of Northampton*



Prior to Waterside, many of these phases would have caused a litany of excitement, stress, fretting, resignations, hope and probable despair! But they all have two things in common – they happened and (ancient university excepted) ended in success. In the history of relocations and mergers, conversations between doubters and

advocates are lost in time. In this wider context, Waterside is just the beginning in the next stage of the University's history. I say 'just' from the perspective of five years of operations of the new campus that included COVID disruption. Giving birth however was a multifaceted exercise in change management that encompassed new ways of working, digital transformation, a pioneering learning and teaching model, novel IT and estates integration, security, finance and stakeholder management. What follows is an attempt to capture some of the rationale and lessons learned from one of the biggest UK university relocation projects in the last decade.

## **1. National and regional policy background**

In May 2010, the first Coalition Government in the UK since 1945 came to office. A central aim of the Conservative-Liberal Democrat Coalition was to reduce public spending, along with other wide-ranging reforms including business support infrastructure. Both would have significant impact on universities, and the viability of the Waterside project.

The first was financial. Set up under the previous Labour administration, the Browne Review led to a higher tuition fee cap for English-domiciled undergraduates, which was voted through Parliament in late 2010, raising the student undergraduate Home Fee from £3,290 to a maximum capped at £9,000, starting in the 2012/13 academic year.<sup>2</sup> The second was the replacement of Regional Development Agencies (RDAs) by sub-regional Local Enterprise Partnerships (LEPs).<sup>3</sup> Northamptonshire County Council (pre-unitary) had its own Northamptonshire LEP approved by the Department for Business, Innovation and Skills in 2011. While this reflected the spirit of localism, the county was also part of the larger South East Midlands LEP (SEMLEP) region that included Milton Keynes, Bedford and Luton, and was incorporated into SEMLEP in 2016.<sup>4</sup> An important milestone in 2011 was designation of Northampton Waterside as a SEMLEP Enterprise Zone, one of 21 Enterprise Zones across the country.<sup>5</sup> The vision was for Northampton Waterside to become a national centre for excellence for advanced technologies, precision engineering, low carbon technology, sustainable construction and high-performance engineering. Having a university at its heart became a compelling prospect.

Despite positive support from local agencies, it was not all plain sailing. The land identified for the University site was owned jointly by two building contractors who had fallen out over the land valuation, purchased at a market high point prior to the 2008 credit crunch. An early critical intervention by the University and its legal team,

before any construction work had even begun, involved successfully challenging a request for a Compulsory Purchase Order (CPO) on the earmarked site, brought about by another regional agency, West Northamptonshire Development Corporation (WNDC). A CPO would most likely have killed the University project off at inception, introducing unnecessary delay through a potential Judicial Review and adding unjustified cost. The land was also heavily contaminated, having been the site of a major coal-powered power station (see Figure 4). Even with SEMLEP and others championing the project, the University received no funding from any government business support agency, despite the scale of infrastructure development and positive commercial benefit to the town and wider region.

Where vital support was forthcoming was via the UK Guarantees Scheme.<sup>6</sup> This backing, and vote of confidence, from HM Treasury would prove critical, not just as a safety net for investors but as a counterweight to critics of the scheme.

## **2. Project scoping**

We knew from the outset that simply recreating the number and range of buildings that we had on the existing campuses at the new location would be an exercise in futility. It was clear the old regime of each Department and Faculty having its own dedicated building and facilities was no longer providing value for money. The upshot of the previous system was that there was tremendous underutilisation of space and consequential waste.

The design concepts and brief discussed with our architects centred around a completely new approach to the efficient use and scheduling of space. Dedicated facilities would only be reserved for a particular department where necessary and instead an ethos of generic space that could be used by departments for a wide variety of teaching and research purposes was the guiding force. Consequently, there was a dramatic decrease in the amount of built space needed.

Clearly this could only work with a radical rethink of timetabling, scheduling and utilisation of space by developers. Those resistant to this approach forecast chaos but in practice we found that, if anything, we still had a surplus of space. We were not unduly worried by that because it would provide scope for future expansion of the University within existing facilities. Integral of course to this approach was the effective use of leading-edge IT facilities, as described later in this report.

The assessment of viability of the project was a constant iterative process involving the determination of probable capital cost (not just building costs but land acquisition, remediation, IT, furniture and fittings, relocation costs and so on) together with the expected annual running costs and income that could be derived from the new campus. With two 'surplus' campuses there was also the issue of maximising value from the disposal of those assets and securing,

where relevant, necessary change-of-use permissions for planning purposes.

To navigate the complex issues mentioned above, we set up a project team with a wide variety of consultant advisers together with, where appropriate, internal staff resource. The co-ordination and management of the project team was a key task, one which spanned a period of seven to eight years and which would ultimately be measured by the success or otherwise of delivering the new campus on time and budget.

### **3. Off the blocks**

Two of the authors of this paper (Terry Neville OBE and Robert Griggs) were involved at a senior level in a similar project at the University of Hertfordshire. This involved the closing down of two existing campuses, one parkland and another based around a listed mansion property and moving both onto one brownfield site.

The de Havilland campus opened in 2003 and the key ingredients of that project were based on efficiency (the two outlying campuses were 22 miles apart) and a focus on Hatfield where the Polytechnic (as a forerunner to the University) had its roots.<sup>7</sup> In addition, both campuses had a considerable estate value with planning that would go a long way to fund part of the academic development on the new campus. (This was also important in the Northampton development but not to the same extent as land values were considerably lower than in Hertfordshire.)

However, the approach to the Northampton development was markedly different. What had changed since 2003 to cause this? Digital technologies. The rapid development of smart phones and social media, along with advances in Wi-Fi technology, came after the Hertfordshire project but this transformational growth developed in parallel with Waterside and had significant influence on our design thinking. With change being led by student expectations, it was clear that a radical future-focussed approach was imperative. That is, building for tomorrow as opposed to creating a traditional but backwards-looking estate, out of sync with the educational needs of students.

To this end, it was decided that Waterside had to be built around IT as a Smart Campus, with academic staff delivering the curriculum in ways best suited to the digital environment. A new model of learning and teaching called Active Blended Learning was developed to reflect the space design of the campus that required multiple small

teaching rooms without recourse to blockbuster-sized (100-seater-plus) lecture theatres.<sup>8</sup> Finally, all staff were to be accommodated in open plan areas.

The rationale here was that annual space audits of academic staff offices revealed consistently low (generally less than 30 per cent) average occupancy. And this would be considered good by some in the sector. Building this level of redundancy into the new estate was not considered practical, a decision well taken given changes in working practice subsequently brought about by COVID. Leading from the front, the Office of the Vice-Chancellor went fully open plan in 2016, letting staff see for themselves what the future might hold, an important cultural signal that helped dampen (mostly) academic concerns about privacy, noise levels and layout.



## **4. Show me the money**

The financing of the Waterside campus represents the triumph of persistence and endeavour over a pre-existing funding system more concerned with maintaining the status quo than supporting forward-looking entrepreneurial projects. The scale of the financing required – £330 million – was considerably more than the received wisdom about how much a university of the scale and history of Northampton could reasonably undertake. Indeed, the regime used by the sector regulator, which at the time was the Higher Education Funding Council for England (HEFCE), pegged the amount of borrowing that a university could take to 10 per cent of its annual turnover. For Northampton, this would have fallen considerably short – more than £200 million – of the amount needed to finance such a large-scale project.

In the early days of the feasibility study, the team approached a long list of banks, pension funds and insurance companies to gauge interest. While there was enthusiasm, it failed to translate into anything close to the scale of financing required.

Perhaps the most significant step in the whole journey from idea and feasibility through to a project that could be delivered arose when we explored the possibility of using the UK Guarantees Scheme for Infrastructure Projects (HMT Guarantees Scheme) – a government-backed guarantee for projects seeking debt finance. This scheme received Royal Assent in October 2012, a timely outcome for the project.<sup>9</sup>

The Guarantees Scheme was run and organised by HM Treasury using the offices of Infrastructure UK (a unit within HM Treasury). By chance, the team at Northampton had worked previously with a key member of the Infrastructure UK team, albeit in a different capacity, on the University of Hertfordshire redevelopment.

The strategic objectives identified for Waterside were a good fit with the Guarantees Scheme objectives, in that they were aligned in significant part to assist with the regeneration of Northampton's town centre. It also helped that the build would take place in the newly identified Northampton Enterprise Zone. Following considerable negotiation and discussion with both Infrastructure UK and HEFCE, the Waterside scheme was passed for guaranteed approval in 2014.

The Guarantee changed fundamentally the landscape for the project. The Guarantee meant that prospective lenders could now ultimately look to the covenant of the UK government rather than the University, thus giving any debt covered by the Guarantee a higher quality status. Ironically, one of the prospective investors that turned down the opportunity pre-Guarantee then complained to HM Treasury when the Guarantee was issued, voicing the view that it was taking away their business. It did not stop that organisation of course then wanting to invest in some of the now guaranteed debt!

## **Bond financing**

The largest part of the financing portfolio used by the University was the issue of £231.5 million of listed guaranteed secured bonds for a term of 40 years. The effective interest rate on the bonds was 3.302 per cent, which was considered a highly competitive rate for such long-term borrowing.

The nature of bond financing is that the monies are raised from the market (in this case largely from a variety of pension funds and insurance companies) up front in one go.<sup>10</sup> However, the capital expenditure on the new campus was naturally phased over several years and thus the bond monies raised were placed in an escrow account with a planned drawdown schedule designed to reflect the spending profile on the project as closely as possible. In order that

the cost of holding money was minimised, a Guaranteed Income Contract known as a 'GIC' was used, which provided for an interest earning on the monies in the escrow account until such time as they were drawn down.

The requirements of the bond investors and HM Treasury as guarantor means there are material compliance and reporting obligations placed on the University designed to give comfort to the lenders and guarantor. So, we would say that entering such a sizeable long-term bond is not for the faint hearted! Notwithstanding this, the successful flotation of the bond made all the difference to the scheme proceeding on an affordable basis, so the red tape involved was well worth it. Along with Waterside, nine HMT Guarantees totalling £1.8 billion have been issued to high-profile projects including the Northern Line extension and Hinkley Point C nuclear power station.

### **PWLB financing**

Local authorities can access borrowing from the Public Works Loans Board (PWLB) for approved purposes.<sup>11</sup> Government had relaxed some of the rules concerning how much local authorities could borrow from the PWLB, basing it much more upon the ability to finance the borrowing costs.

Both Northamptonshire County Council (NCC) and Northampton Borough Council (NBC) were persuaded of the merits of the Waterside scheme which, as well as meeting the University's objectives, also addressed various local authority policies. As an example of the latter, the sale of the University's existing main Park Campus would release that land for house building, which would address a key local housing need.

In total, NCC and NBC borrowed a further £60 million from the PWLB over different terms and both on-lent those funds to the University to use on the Waterside project. Again, those borrowings were

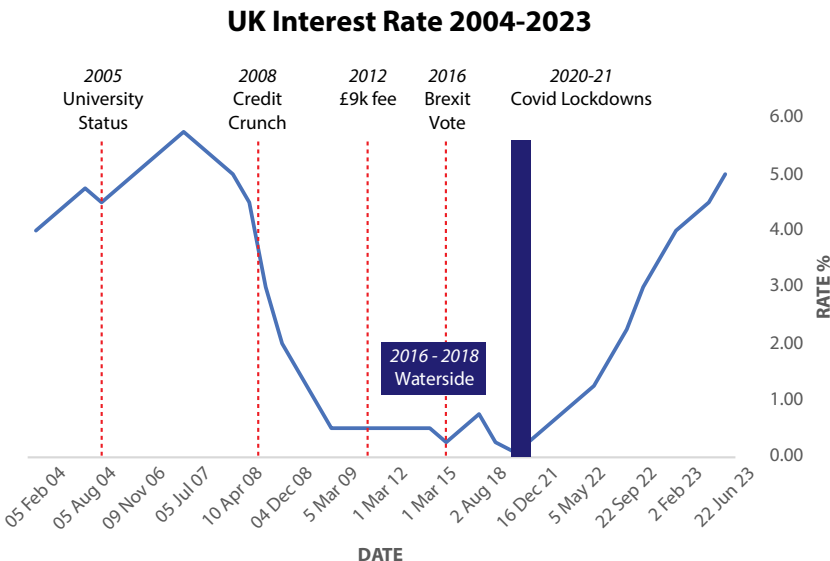
covered by an Infrastructure UK Guarantee. The University would, upon successful vacation of both its existing Park and Avenue Campuses, dispose of those assets to the market. A key part of the repayment of the PWLB loans would come from the capital receipts achieved from those sales. A final part of the financing jigsaw came from the University's own financial resources, which bridged the gap between bond financing, local authority loans (net of capital receipts) and total capital investment.

## **Credit ratings**

Part of the investment processes included obtaining a commercial credit rating for the University.<sup>12</sup> The pitch was complex and involved extensive scrutiny of the business plan, past financial performance, market position, governance and management and operating performance. There seemed to be an over-reliance in the process on research prowess as a financial metric but, in the end, any rating proved surplus to requirements as once in receipt of the UK Guarantee, the Bond automatically took on the credit status of the sovereign territory guarantor (Great Britain, 2016), with a rating of Aa1, stable. As a point of interest, one UK university had a higher credit rating than its sovereign host country!

It could be argued that the Waterside project took place during a fortuitous episode of financial history. When Northampton gained full University title in 2005, interest rates were 4.5 per cent. Over the project phase they were at an historic low of between 0.5 and 0.7 per cent.<sup>13</sup> Figure 2 shows the project nestles in a 'valley' between two highs marked by business as normal pre credit-crunch and inflation-driven rises post-COVID. The project also coincided with stable building inflation costs as opposed to current double-digit rates. Taken together, it is highly likely that costs would have rendered the project untenable if it had started any time before 2010 or after 2020.

Figure 2 Timeline for Waterside project



In summary, despite what seemed an almost impossible task at the outset, the financing arrangements put in place achieved an excellent outcome which in turn enabled the University to deliver its transformational campus relocation project.

## 5. Build it and they will come

### Philosophy and design

The University decided that it was essential to embrace the concept of a single campus with an emphasis on multi-disciplinary use of facilities so far as practicable. This philosophy permeated the whole of the design approach adopted by the master plan and the University's architects referred to it on occasion as the 'pedagogy of space'. The existing two campuses were comprised predominantly of buildings which were separately allocated to individual departments and faculties with the consequential impact that space utilisation was much lower than it should have been. Low levels of space utilisation have bedevilled the higher education sector with a consequent impact on not only cost, but also facilitating silo-type behaviour between faculties. The design created for Waterside dramatically cut the total quantum of space needed while at the same time providing a thoroughly modern integrated campus.

The scheme has left space for future expansion – approximately only 35 per cent of the site footprint contains buildings – the rest being surface car parking, landscaping, roads, sports and undeveloped areas.

*Figure 3 Project design and Waterside estate layout*



*Credit: The University of Northampton / CPW*

The University was also aware that absent an historic academic / research pedigree, facilities would form an increasingly important criterion in university choice by students. Thus, investment was seen to be key, and location was also another important factor. Research showed that students were less enamoured with the suburban locations of the two existing campuses and that a campus located much closer to the town centre, and transport links including a revamped train station, would provide significant benefit to student recruitment.

## **Procurement and project management**

The Waterside site was not a straightforward development site. It comprised principally of two areas – the first originally held by Avon Cosmetics was used, among other things, for the manufacture and distribution of cosmetics. The other half of the site had been the site of the Nunn Mills Power Station, with coal-fired power generation and two cooling towers.<sup>14</sup> A further part of the site had been used for a branch railway line with a train maintenance depot. Inevitably, there were significant site contamination issues to deal with. The site was also adjacent to the River Nene with potential flooding issues.

The first task to address was a composite groundworks contract to clean away the site contamination, raise the site levels to ensure that the flood risk was properly mitigated and to tackle issues such as below-ground obstacles or items that might impede development. Once that work had been largely completed, an infrastructure contractor, Volker Fitzpatrick, was appointed. They were responsible for the delivery of the required site infrastructure. This included, *inter alia*, the provision or co-ordination of: access roads; site roads; drainage; cabling; utilities supplies; street lighting; and car parking. Perhaps the biggest challenge in this contract was the delivery of two new bridges over the River Nene to access the site. The main bridge was a pre-cast road bridge crossing the river and the second a pedestrian S-shaped bridge which joined the campus to the local

park on the other side of the river. As the University always intended the new campus to be a community asset, these two bridges opened to the public an area encompassing 46 acres of land for the first time.

*Figure 4: Waterside site, previously Nunn Mills power station, demolished in 1979*



*Source unknown*

The largest construction contract was let to Bowmer and Kirkland for the main academic buildings and covered the development of the new Senate Building, the Creative Hub and the pre-eminent Learning Hub. A small hotel and the development of a student village of over 1,400 residences was the fourth contract involved – this time undertaken by Kier Construction. The development of a fully bespoke sports centre was a victim of cost rationalisation but instead we used a dome style cover (a bit like the Millennium Dome but a lot smaller) to provide indoor sports facilities and we also built a 4G all-weather outdoor football pitch and tennis courts.

Of significant interest to the industrial and archaeological heritage of the site is the Waterside Engine Shed (Figure 5). Its restoration



was funded jointly by the University and a £1.3 million grant from the Heritage Lottery Fund. The Students' Union was housed in the Grade-II listed Engine Shed, a former railway building restored from dereliction. Sympathetic restoration resulted in several national awards including its biggest award to date as overall winner of the National Railway Heritage Awards 2020.<sup>15</sup>

*Figure 5 The award-winning Engine Shed, home to the Students' Union*



*Credit: Michael Foley / Alamy Stock Photo*

Staying loyal to its historical manufacturing roots, the new campus included a state-of-the-art teaching and research tannery, unique in Europe and funded in part by the UK leather industry and City of London trade livery companies.<sup>16</sup>

## **Biodiversity**

In building Waterside, we were determined that development and protecting the environment should not be in conflict. By bringing back to life a heavily polluted and abandoned brownfield site, we set out deliberately to protect biodiversity and enhance habitats while educating staff and students on their own impacts. Members of the senior team had also seen first-hand how MIT (USA) had embraced its city community in Boston, making the green spaces of the campus open and accommodating to the public. This commitment involved

not scrimping on planting and landscaping, often soft targets when cost savings are being sought. The landscaping was further complicated by the need to incorporate flood mitigation measures such as the swales and dykes, in addition to general plantings.

In the final reckoning, landscaping amounted to around 1.5 per cent of the total build spend. While unarguably the right thing to do, this investment has paid dividends in unexpected and creative ways. A post-build sustainability and wellbeing project (Project Awesome) was launched with a strategic aim to make Waterside one of the most biodiverse university campuses in the UK. Work is ongoing to enhance, conserve and protect wildlife and the environment in and around Waterside Campus and encourage students and staff to observe wildlife and monitor the environment.

In addition to gaining gold accreditation in the Hedgehog Friendly Campus awards (2022/23), Waterside biodiversity helped the University achieve a top 100 Global ranking in the United Nations Sustainable Development Goal (SDG) 15 Life on Land.<sup>17,18</sup> Other Waterside-relevant SDGs where the University has had global impact include SDG10 Reduced Inequalities, SDG12 Responsible Consumption and Production and SDG5 Gender Equality. In addition, the wider Waterside campus has also won, or been shortlisted for, a string of awards, including the Royal Society of Chartered Surveyors Design through Innovation Award, Construction Project of the Year Award at the East Midlands Property Awards, University Impact Initiative of the Year Award from the Association of University Directors of Estates and commendation in the 2020 Civic Trust Awards.

## **Social procurement**

In keeping with the University's strategic commitment to Social Impact as a Changemaker Campus, all award contracts for Waterside were based on Social Impact evaluation criteria. Social Impact was embedded within all contract negotiations and communicated from

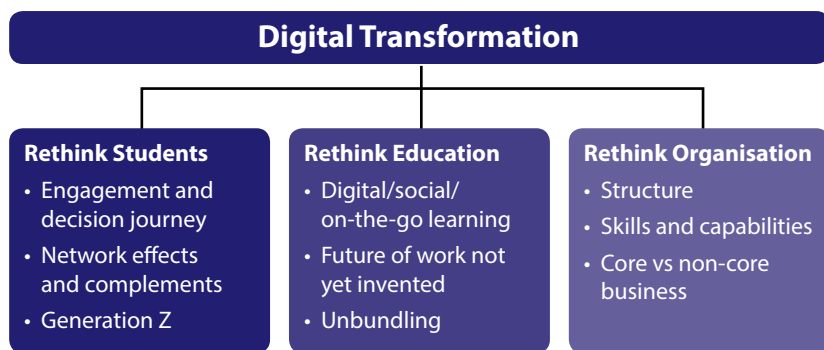
the outset as part of the tender and evaluation process. Criteria for supplier contract awards covered Q.C.D.I.S.SI: Quality, Cost, Delivery, Innovation, Service and Social Impact, with a 5 per cent weighting within the evaluation process for Social Impact. In addition, a social levy fund was negotiated as part of the post-contract award. Elements of social procurement included a commitment to reducing long-term unemployment (for example, working with those not in Employment, Education or Training [NEETS]), student placements and purchasing through local supply chains (buying local).<sup>19</sup>

In summary, the interplay, timing and co-ordination of these combined activities was a significant task, involving not only traditional client / contractor matters but also inter-contractor issues of remit and co-ordination. Experience gained by the senior team from previous campus development elsewhere was a significant factor in the success of the project. The University also made full use of a multi-disciplinary consultancy team spanning design, engineering, landscape, property, services, conservation, geology, ecology, planning, legal and finance. The Project Team, chaired by the Project Director and the Chief Operating Officer, oversaw the entire venture, from initial feasibility studies through to completion and took seven years from start to finish, a significant achievement given the scale and complexities of the project.

## 6. A new type of campus

Deloitte, in their original vision for a Smart Campus, define 'smart' as a layered network of interconnected capability comprising computer hardware, mobile devices and software, all run through the internet.<sup>20</sup> Suggested technology layers include presentation channels, analytics and automation, enterprise applications and security. At Waterside, a key strategic aim linked to Digital Transformation was to embed IT across the estate, not only to provide efficient horizontal and vertical integration of operations but also to enable the digital scaffolding needed to rethink education delivery.

*Figure 6 How the Digital Transformation was articulated in University of Northampton's Strategy for 2017 to 2022*

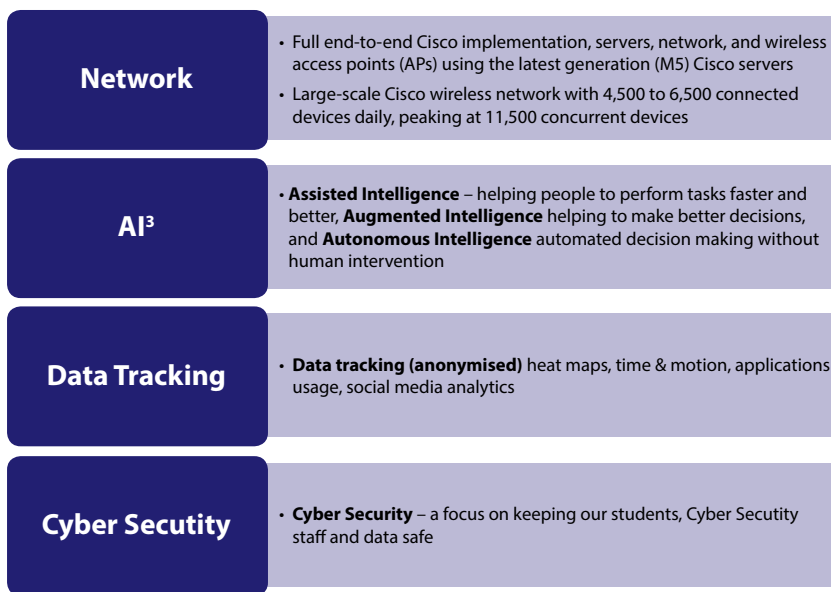


The strategy was operationalised through our chosen IT partner, Cisco Systems. The project became the largest Cisco SD-WAN (Software-Defined Wide Area Network) in education in Europe and, at the time of construction, was the second largest Cisco SDN in Europe (BT was the largest).

Below is a summary of the key elements of IT infrastructure in support of quality digital learning and teaching, plus presentation of the kinds of data a Smart Campus can collect as routine over a

24-hour period. Reference is also made to the importance of IT infrastructure as an enabler of net-zero carbon estate strategies.

*Figure 7 Summary of Smart Campus system architecture*

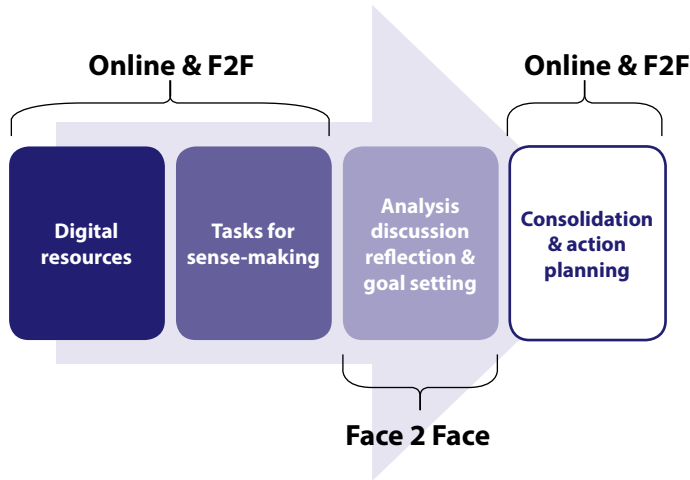


## Active Blended Learning

Active Blended Learning (ABL) is the Northampton approach to learning. ABL combines face-to-face teaching with a carefully designed experience rich in digital skills, enabling students to study at their own pace and time. It employs small group teaching, teamwork and one-to-one tutorials that promote experimentation, creativity, problem solving and feedback. The Cisco SD-WAN infrastructure is a critical enabling component.<sup>21</sup> There are four components to ABL as shown in the figure below. While digital and edtech are critical components, face-to-face remains an essential element, along with personal academic tutors.<sup>22</sup> ABL is not an easy-fix, content-only delivery vehicle. It is designed with the proactive

student in mind, where online resources, materials and information are available in person or online, anywhere in the world. Arizona State and Amity are two international examples of universities pushing boundaries in edtech ABL models.

Figure 8 Four linear stages comprising ABL



### Employability

Digital skills for employability are a central part of the edtech learning and teaching ABL model. It involves problem-solving activities (e-tivities) that reflect the workplace, with best-in-class e-tivities designed jointly with employers. At its core, ABL is helping to train students for jobs not yet invented. This may sound like nonsense, but think about it. Digital transformations across all industry sectors are likely to close traditional employment routes, but in doing so open new opportunities. Google recognise this and seek out employees who are self-propelled, comfortable with ambiguity and connectors. ABL incorporates this philosophy. In support of this approach, Jisc highlights the following key recommendation:

*Universities should ensure they have strategies for maintaining high levels of student motivation and engagement as a core feature of the technology-enhanced learning experience.<sup>23</sup>*

Finally, one developing issue relates to individual differences in student preference and engagement levels. These personality dimensions, while still poorly understood regarding edtech use, are nonetheless associated with different forms of traditional education activity and performance.

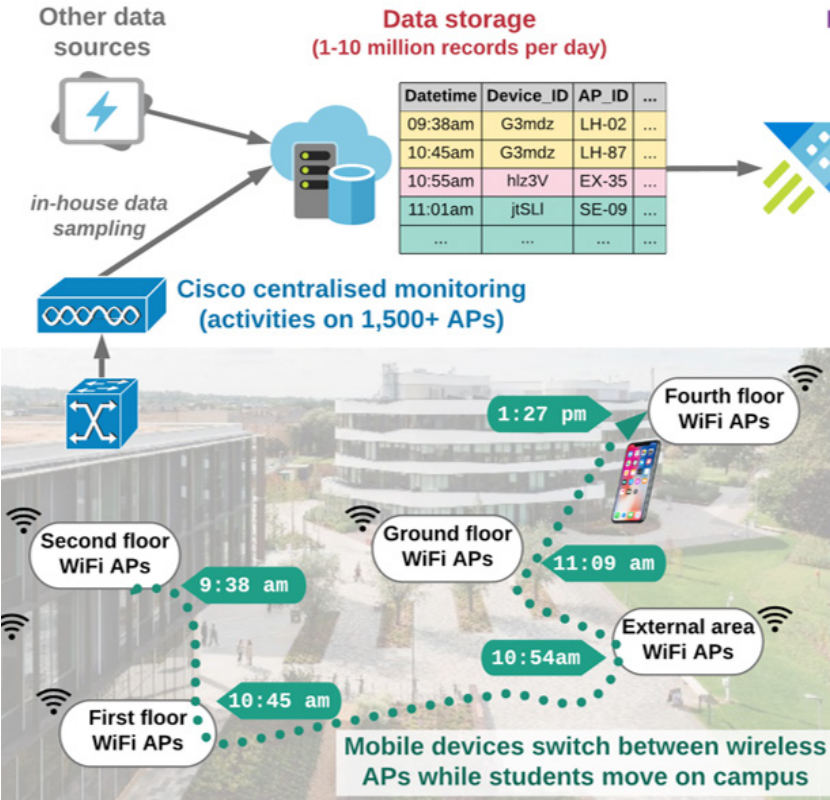
Research undertaken at Regent College London looked explicitly at issues faced in managing online learning beyond the basic challenge of technical skills. The study found that digital engagement overall was significantly higher in students who scored higher on extraversion, but lower for those scoring higher on anxiousness.<sup>24</sup> A similar pattern may exist in teaching staff. It is critical that ABL and similar models take these key observations into account in current and future developments.

## **Data tracking**

A unique feature of the Smart Campus is the ability to track movement through the Cisco AP (Access Point) configuration. The SD-WAN can detect signals from mobile devices when logged into the system. Combined with smart card access, it is possible to build up a day-to-day picture of the people (device) traffic as they enter and traverse the estate, in real time.

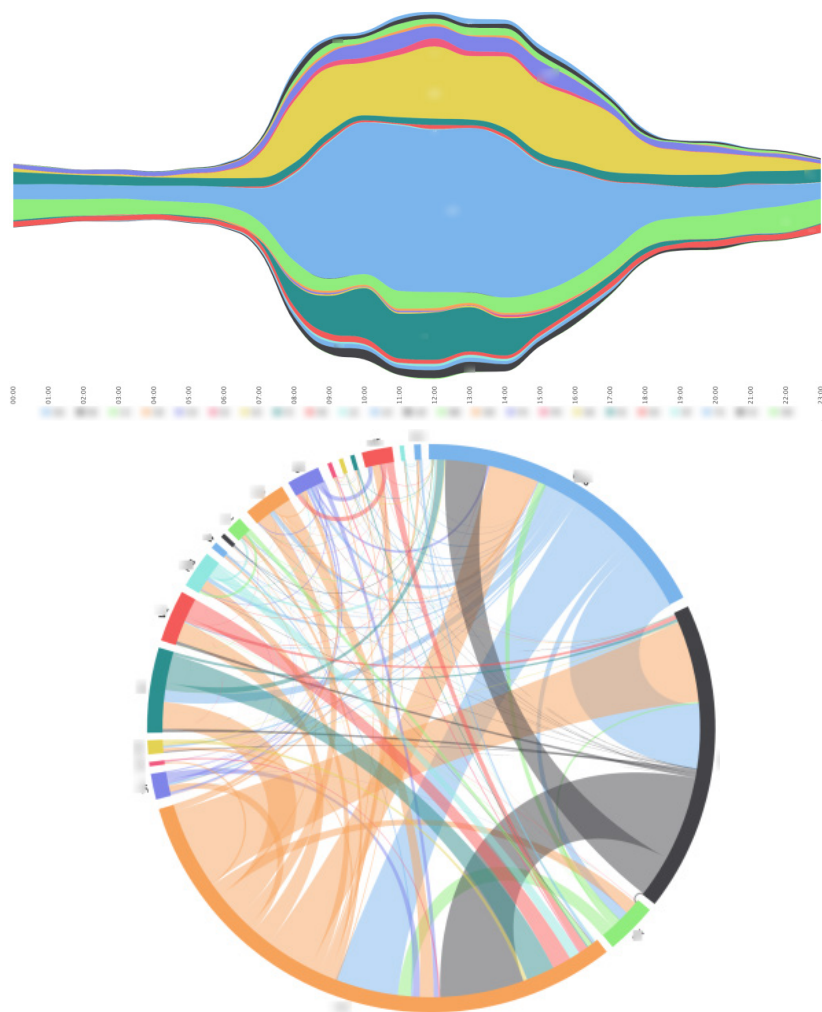
All data are anonymous, and the intention was to analyse movement and room occupancy not to collect and store data for its own sake.

Figure 9 Schematic showing how the Smart Campus SD WAN captures (anonymised) data tracking and movement across the University estate





*Figure 10 Maps of (a) student movement across the Waterside Campus in one 24-hour period and (b) real-time room usage by students across the entire University estate in one 24-hour period*



In passing, it is important for those embarking on the Smart Campus journey to be alert to negative perceptions from some quarters, who may not see the technology for the good thing it is.

*Figure 11 Headline from the Daily Mail reporting on a Keynote delivered at the UCISA 2019 Annual Conference on the Waterside Smart Campus<sup>25</sup>*

The image shows a headline from the Daily Mail. The text is in a large, bold, black serif font. The headline reads: "University uses 'sinister' new tech to spy on its students". The background of the headline is a light beige color.

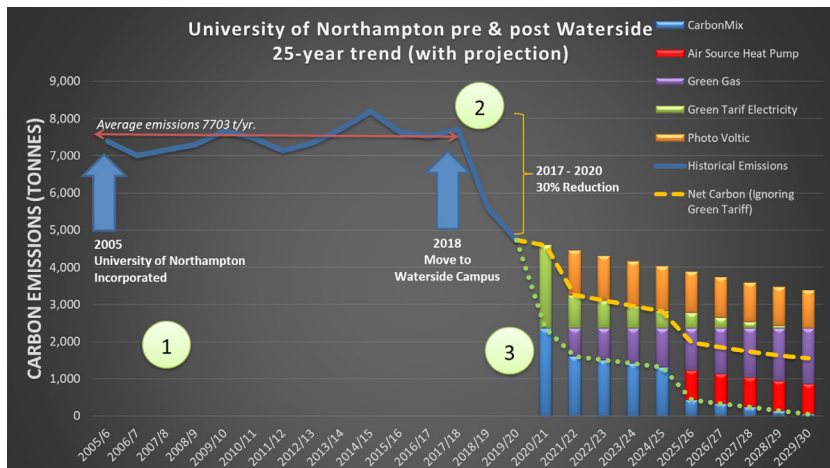
### **Net-zero carbon**

A key part of the Smart Campus project design and construction was to use low embodied carbon materials combined with smart energy monitoring software and lighting solutions. Prior to the move, yearly average energy consumption (combined gas and electricity) split over two sites was c.27,000 megawatt hours producing 7,703 tonnes of CO<sub>2</sub> per year.

After relocation and consolidation on one site, average emissions dropped by nearly 40 per cent, or 3,000 tonnes to a new baseline of 4,734 tonnes CO<sub>2</sub> per year.<sup>26</sup> Other operational factors include central IT management of the printer fleet. Further steps can be taken when this level of integration is combined with carbon-neutral printers.

Against this is the impact of video streaming (both for teaching but more significantly as entertainment) for students in halls of residence, particularly in the evenings and at weekends. Both online TV and computer gaming take a toll on bandwidth, hence Wi-Fi stability, at peak times.

Figure 12 Timeline of CO<sub>2</sub> reduction from old to new campus, projected to 2030



The solution required a separate server system to cater explicitly for student gaming. It is noteworthy from a net zero perspective that student streaming in halls of residence is a significant contributor to sector CO<sub>2</sub> emissions. For example, if one streaming hour equates to about 50 grams of CO<sub>2</sub> equivalent, a single student in one week streaming / gaming for three hours a day could generate over 1 kilogramme of emissions. Multiplying by the total number of students in residence could easily generate several thousand tonnes of CO<sub>2</sub> equivalent weekly, which presents a sector-wide problem of carbon offset.

Additionally, the University developed an Energy Centre on-site, designed initially for combined heat and power (CHP), a highly flexible technology that produces electricity and thermal energy at high efficiencies using a range of fuels, including renewables.<sup>27</sup> Plans were scuppered when we realised the local grid could not handle the excess energy generated. Instead, the plant was reconfigured using a one-megawatt biomass (woodchip) boiler

and three four-megawatt gas boilers, providing all heating and hot water for the campus via a 1,600-metre district heating network.

The tower incorporates a 12-metre high LED screen linked to the University IT system allowing notices and video streaming. The total cost (£6.5 million), which comes with a 1,000 tonne annual CO<sub>2</sub> saving is also a civic investment, as in future an upgraded CHP plant could provide energy to the wider community beyond the confines of the University, a powerful (literally) contribution to civic engagement.

*Figure 13 The on-site energy station with LED tower and landscaping*

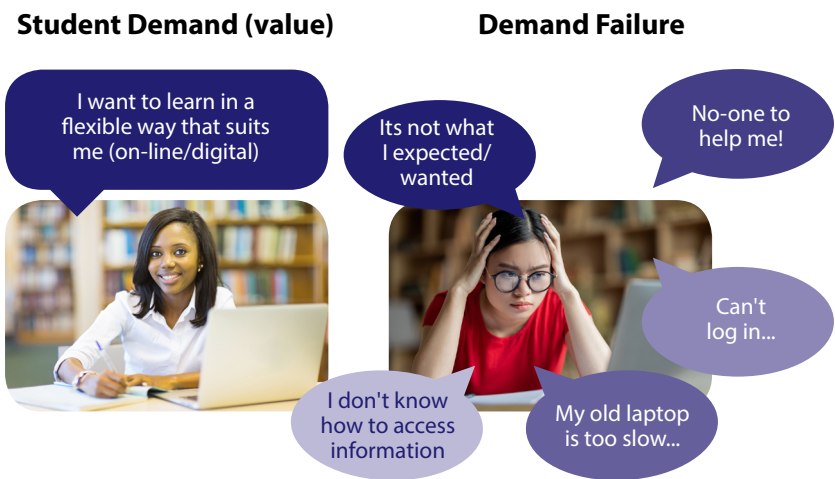


*Credit: University of Northampton*

## A cautionary note on demand failure

An important first-order distinction exists between *asynchronous* learning, a more traditional form of online delivery where students work through materials at their own pace, mostly without input or guidance from teachers, versus *synchronous* delivery involving real-time interaction between student and instructor. While both have their pros and cons, synchronous delivery is the most resource intensive mode from an IT perspective, and the riskier in that technical or accessibility issues may bring the session to a sudden halt.

*Figure 14 Summary of issues facing universities where edtech is not run professionally or poorly resourced*



This is an example of *demand failure* – a known area of risk in the consumer industry (banking / telecoms and so on), but one yet to be explored in detail in the context of edtech, where innovations need to ensure a high-level of student and staff satisfaction is maintained. Both marketing and PR functions need to be aware of the pitfalls. A good experience is a marketer's dream. A constant string of angry

complaints streaming over social media is a PR nightmare, with the potential to impact negatively on recruitment and admissions.<sup>28</sup> As an example, the digital system that replaced telephone landlines had early teething troubles, causing frustration among some staff and students.

Finally, with no individual academic staff offices, large open plan areas kept secure with card entry prevented students meeting their tutors impromptu. Creative solutions were needed to resolve access issues.

### **Smart Campus pre-and post-COVID**

The pandemic struck 18 months after the Waterside Campus opened. By that time, we had embedded ABL and other forms of digital content delivery across much of the curriculum. We were therefore in a more favourable position than many to deliver in remote mode when the inevitable March 2020 lockdown began.

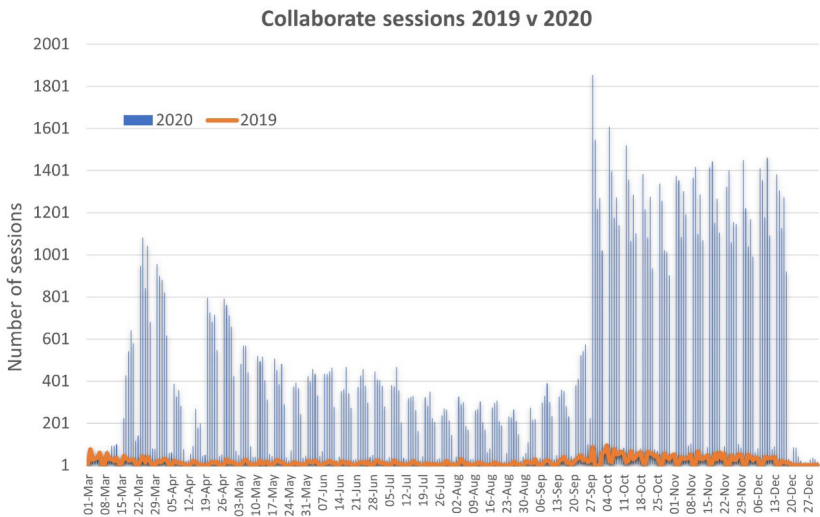
This is where our Smart Campus layered analytics came into their own, giving unprecedented insight into the University's digital response.<sup>29</sup> We were able to analyse data from three online delivery vehicles: Microsoft Teams; Cisco WebEx; and Blackboard's virtual classroom Collaborate.

Together, these data provide a unique digital record of the delivery by staff and uptake by students, in response to the pandemic, benchmarked against the previous 12 months. Focusing just on Blackboard Collaborate, by December 2020, we had logged a 2,307 per cent increase on the previous year (Figure 14).

As the timing of Collaborate sessions varies, taking a conservative estimate of 30 minutes per session equates to 4 million minutes, or 7.7 years' worth of cumulative screen time, delivered during the first wave of the pandemic in 2020. This translates roughly into several millennia of screen time delivered by UK universities in 2020.

Globally, the screen time figure would stretch back to the end of the last Ice Age.

Figure 15 Blackboard Collaborate online sessions – 2019 versus 2020



## **7. Role of the Board**

In 2011, the University of Northampton Governing Body was a representative one. It consisted of local politicians, clergy, retired senior nurses and teachers, past sheriffs and deputy Lieutenants and substantial landowners. Many had been governors when university status had been achieved a few years before and many were coming to the end of their tenure. It met once a term. On the business side, there was a Finance and Estates Committee that met slightly more regularly. There was strong leadership from both the Chair of the Governing Body and the Finance and Estates Committee.

While the feasibility study was progressing (apart from the initial incredulity at the proposal to close the two old campuses of Park and St George's Avenue who many were very wedded to), it became frustrating for both the Governors and the management team that many of the reports that had been presented previously had to be repeated as the Governors had lost touch over the last three or four months since they previously met. There was some resentment at the fact that the Finance and Estates Committee members knew more of what was going on than the rest of the Governors, which was true.

In order that the project was not rejected out of hand, the then Chairman preceded the meeting by a 'Let's be clear, we are not asking you to make a decision on the project at this stage'. What the tensions did precipitate was a wholesale review of the Governing Body, an outcome of which was that the revised Board would meet 10 times a year, with the Finance and Estates Committee (and others), disbanded. Further, as vacancies arose, these would be filled on a skills basis rather than one of representation. Of the Governing Body that made the decision to go ahead with the project, only one member remained when the new campus opened in summer 2018.



As the project began in earnest, Governors soon realised that as a group they could not deal adequately with the level of project detail alongside routine business. It is worth pointing out that the University was also, for example, setting up a major student residential development and an Innovation Hub in the centre of Northampton. In response, the Board set up a Project Assurance Committee (PAC) tasked exclusively with monitoring the Waterside project. It had no delegated powers and was largely made up of newer Board members, with both HEFCE and HM Treasury being invited to each meeting and having scrutiny of committee minutes. Interestingly, while HM Treasury attended most meetings, HEFCE did not attend at all.

Unusually, this Committee also monitored academic progress (bypassing Senate), in particular the transition to Active Blended Learning (ABL), a process that took three years to complete. PAC was designed to be agile, convening ahead of monthly Board meetings so the PAC Chairman could give scheduled updates. Additionally, PAC would meet outside this schedule as and when the situation demanded.

The Project Assurance Committee was invaluable in giving the Board confidence that the project was progressing well, to time and to budget and, if not, what risk mitigation measures were in place to deal with unexpected problems commensurate with such a large undertaking.

## **8. Lessons learned and recommendations**

### **Project management**

- The key to success here was the ability to have delegated power from the Governing Body and the Executive to take decisions promptly in a relatively fast-changing situation. We have seen projects where every decision must be referred to a committee for approval which inevitably means that the project becomes bogged down, slow moving and liable to failure.
- Inevitably, changes to the advisory team were necessary from time to time to remedy things that were not working or where the dynamic did not work properly. The ability to be able to switch the team around quickly, where necessary, was an important attribute. That said, most of the team were there for the greater part of the project and gelled in a way that was a material ingredient in the project's success.
- There is inevitably a tension between the contracting team and the advisory client team in most development projects. Experienced advisers alive to some of the negotiating tactics and strategies is an important attribute. Being able to say 'no' is also something project managers need to learn.
- Changes in specification, design and requirement can be accommodated but, normally, at a cost greater than when those requirements were identified at the outset. Minimising changes and controlling users' expectations are often necessary. Sacrificing popularity is sometimes the price that must be paid.
- Do not assume that organisations initially well disposed towards the project will necessarily be co-operative or flexible. Even organisations with a vested interest in seeing the project through could be obtuse and difficult. Unnecessary problems to be overcome only add time and cost.

- Development and a commitment to maintaining biodiversity and sustainability are not mutually exclusive.
- The student profile changed considerably during the project lifetime. What started as a residential, homogenous and generally middle-class student body had diversified, following significant growth in socio-economically disadvantaged groups (POLAR4 quintiles 1 to 3) and the student body became notably more ethnically diverse.<sup>30</sup> This shift had several consequences for the student experience at Waterside. First, the catering requirements had been poorly specified, with too much choice and too many outlets providing an expensive offering. Unlike the previous campus where students were a 'captive market', at Waterside there was plenty of competition from outside vendors. The third-party catering operator quickly ran up considerable losses and the operation was taken back in-house. Within two years of opening, two-thirds of the onsite catering outlets were closed and reconfigured to provide social spaces for student learning.

## **Digital Transformation and Smart Campus**

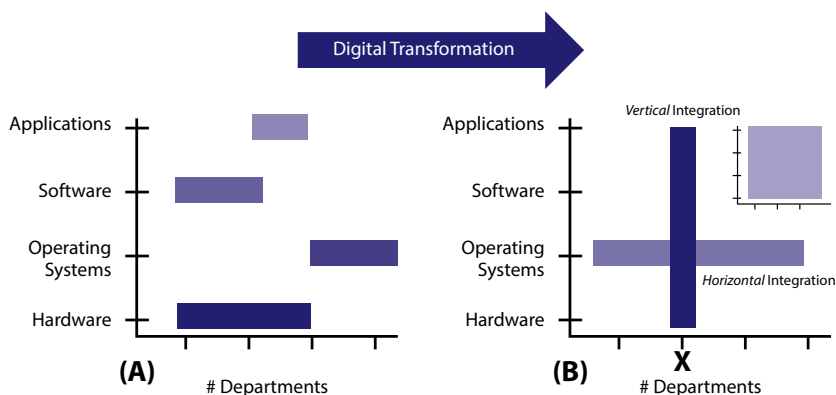
- Articulating a clear and compelling strategy setting out organisational appetite for digital innovation is mission critical. Leader or follower, full implementation (Big Bang) or incremental via pilots? Our approach with Waterside was that if you were going back to basics and rethinking students and education, you may as well go the whole hog and rethink the organisation in terms of structure (academic and service functions), staff skills and capabilities needed to transform and what would define core versus non-core business. We never claimed complete satisfaction; projects remained uncompleted, then COVID hit, but we had a clear intellectual basis for the change programme.
- A clear goal for any digital transformation solution must be to help deliver a student-centred learning environment. This means

edtech as an enabler for students to learn in ways that best suit them, not their instructors. The win-win is that the technology enables the instructor to provide quality individual support while freeing up time to focus on other value-adding activities.

- Digital delivery and concepts like ABL offer new ways to address educational inequalities relating to inclusion and / or disability. Starting from the premise that all students learn differently and at different rates, any shift away from standardised learning and teaching models by creating bespoke, digital and customised pathways, should be encouraged and rewarded.
- The full benefits from digital transformation will only be realised on completion of horizontal and vertical integration of IT enablers across the enterprise. This is much easier said than done. Strong vested interests are at play with and between software suppliers and university clients in many areas of administration. Ultimately, a smooth, modular interface between hardware, software, operating systems and applications is needed.
- Despite best intentions, not all Smart Campus IT capabilities were used. Log-on records showed a significant minority of academic staff were not using the digital resources to full advantage. Arguably the student experience suffered as a result, and measures to support compliance should have been more robust.
- Despite a c.50 per cent reduction in space between the old and new campus, there was still under-utilised space across the estate. Extending building use later into evenings and at weekends could, in future, potentially offer further untapped opportunity to use the estate in a more efficient and cost-effective way.
- As shown by our transformation to ABL, both pre- and post-COVID, students have much to gain by adopting flexible delivery modes underpinned by innovative edtech solutions. It is vital that the regulator does not see this by default as a lesser form of

education, either in terms of value for money or quality. Similar mistakes were made in the US Public School system where disruptive innovation in the classroom was seen as too 'risky'.<sup>31</sup> The overseers, including the Office for Students (OfS), Ofsted (degree apprenticeships) and the Competition and Markets Authority (CMA) with an interest in consumer protection, must not become barriers to change.

*Figure 16 Schematic illustration of the inter-relationship between university departments (HR, Estates, Student Services etc) and IT services*



(A) represents a university where most functions run siloed systems with little horizontal and no vertical overlap; (B) a more digitally mature set up, where one department (X) has achieved full vertical IT integration, with full horizontal integration of operating systems. The strategic aim is to integrate fully in both dimensions across the organisation.

## Board-level and stakeholder engagement

- It is noteworthy that the governing body that made the decision to go ahead with the Campus Relocation project was an entirely different animal to the one that foresaw its opening. The governing body in 2011 was embedded in the local community; they were worried about what the effects were on that community and how the University would be perceived. They had

an emotional attachment to the two existing campuses, they had lived through the transition to being a University and one or two had been past members of academic staff. They were concerned mostly with external politics and countering opposition to the move from a few prominent local voices, rather than financial or other project management risks.

- In contrast, the new governing Board, as it developed, became obsessed with the risks inherent in the management of such an ambitious project. This is hardly surprising given their professional backgrounds, but led to tensions and frustrations between the Board and Executive (and their project advisers) that needed careful and diplomatic management. Given the same circumstances in which the former governing body, selected mostly for advocacy, made the decision to go ahead would the revised Board, selected for executive oversight and accountability while alive to professional risk aversion, have made the same decision? The answer is possibly not.
- The Local Government Pension Scheme (LGPS) fund accounting deficit (a national issue affecting all members) meant by default the University had to report a near negative balance sheet concurrently over several years (2020 to 2022). Follow-on technical 'going concern' issues, originating outside the control of the University and unrelated to Waterside borrowing, nonetheless attracted negative and misleading press coverage.

### **Staff attitudes to change**

- Volumes have been written about change management in all types of organisations. We learnt that many people would learn to be accepting of change, even welcome it, but it is impossible, and fruitless to try and please everyone.
- You do not need all the staff base on your side before you implement change. Half of the workforce is enough. Trying to

engage everyone everywhere is expensive and time consuming, with increasingly limited return on effort the more cynical the audience, and the most cynical may comprise up to 20 per cent of all staff. Focus support instead on the early adopters and lead from the front.

- Irrespective of your best intentions, many staff will view the change project initially with suspicion. Academic case studies of the change processes tend to be written from a management perspective. Show by action, not words, you mean to be understanding, genuine and capable and plot your route carefully!

## Endnotes

1. David Walmsley, *An Ever-Rolling Stream: Ongoing Story of Development of Higher Education in Northampton and Northamptonshire*, 1989
2. For the history of the fee structure in UK higher education institutions see <https://commonslibrary.parliament.uk/research-briefings/cbp-8151/>
3. Background to the formation of Local Enterprise Partnerships <https://publications.parliament.uk/pa/cm201011/cmselect/cmbis/memo/localent/localent84.htm>
4. Expanded SEMLEP area review [https://assets.publishing.service.gov.uk/media/5a81d48e40f0b62305b91083/South\\_East\\_Midlands\\_Area\\_Review\\_FINAL.pdf](https://assets.publishing.service.gov.uk/media/5a81d48e40f0b62305b91083/South_East_Midlands_Area_Review_FINAL.pdf)
5. For Northampton Enterprise Zone see: <https://www.semlep.com/enterprise-zones/>
6. Brief overview of the UK Guarantees Scheme [https://assets.publishing.service.gov.uk/media/5a7c26f5ed915d0b036b55b4/UK\\_Guarantee\\_-\\_A\\_brief\\_overview\\_-\\_Allen\\_Overy.pdf](https://assets.publishing.service.gov.uk/media/5a7c26f5ed915d0b036b55b4/UK_Guarantee_-_A_brief_overview_-_Allen_Overy.pdf)
7. Background to University of Hertfordshire de Havilland Campus <https://www.turnberryuk.com/projects/education-science-technology-and-institutional/university-hertfordshire-de-havilland-campus/>
8. Generic overview of Active Blended Learning <https://ecampusontario.pressbooks.pub/blendedflexibleteaching/chapter/an-overview-of-active-learning/>
9. <https://www.gov.uk/government/news/chancellor-announces-uk-guarantees-scheme>
10. Useful summary of how Bonds work <https://www.investopedia.com/financial-edge/0312/the-basics-of-bonds.aspx>
11. Link to background on PWLB lending facility <https://www.dmo.gov.uk/responsibilities/local-authority-lending/about-pwlb-lending/#:~:text=The%20PWLB%20is%20a%20non,also%20borrow%20from%20the%20PWLB.>
12. Moody's UK Higher Education Credit Ratings <https://www.moody's.com/researchandratings/region/europe/united-kingdom/042050/005007000>
13. <https://www.bankofengland.co.uk/monetary-policy/the-interest-rate-bank-rate>
14. [https://en.wikipedia.org/wiki/Northampton\\_Power\\_Station](https://en.wikipedia.org/wiki/Northampton_Power_Station)
15. <https://mcwarchitects.com/university-of-northampton-locomotive-shed>



16. <https://www.cityoflondon.gov.uk/about-us/law-historic-governance/livery-companies>
17. <https://www.northampton.ac.uk/news/the-gold-standard-hedgehog-squad-hits-high-mark-for-hog-happiness/#:~:text=They%20award%20universities%2C%20colleges%2C%20students,ensured%20silver%20status%20in%202021.>
18. <https://www.topuniversities.com/university-rankings/world-university-rankings/sustainable-development-goals>
19. Article on social procurement and the role universities can and should play <https://www.theguardian.com/higher-education-network/blog/2013/feb/18/university-procurement-consortia-savings-investment>
20. Deloitte study on the Smart Campus and what it means in practice <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/strategy/the-next-generation-connected-campus-deloitte.pdf>
21. CISCO systems SD-WAN case study <https://www.intelligentciso.com/2018/06/11/cisco-to-transform-uni-of-northamptons-new-330m-campus/>
22. See link to article by Ale Armellini <https://www.igi-global.com/chapter/active-blended-learning/275671>
23. <https://www.jisc.ac.uk/reports/technology-enabled-teaching-and-learning-at-scale>
24. Report by Patrick McGhee on digital learning at Regent College London [https://www.rcl.ac.uk/app/uploads/2022/12/rcl\\_student\\_engagement\\_in\\_digital\\_learning.pdf](https://www.rcl.ac.uk/app/uploads/2022/12/rcl_student_engagement_in_digital_learning.pdf)
25. Martin Beckford, 'University accused of using "sinister" surveillance technology to track what website its students are looking at', *Mail on Sunday*, 20 January 2019 <https://www.dailymail.co.uk/news/article-6611317/University-accused-using-sinister-surveillance-technology.html>
26. <https://www.universitiesuk.ac.uk/latest/insights-and-analysis/university-northampton-net-zero-carbon>
27. For more information on the Biomass and CHP heating at Waterside <https://www.vitalenergi.co.uk/our-work/the-university-of-northampton/>
28. Blog explaining demand failure in a digital environment, with ramifications for providers <https://medium.com/@stephen.gill/failure-demand-a-definition-471d9c99b81e>
29. Rob Howe explains how Waterside digital technologies helped overcome COVID and a cyber attack [https://pure.northampton.ac.uk/ws/portalfiles/portal/39849476/Howe\\_Rob\\_2022\\_Learning\\_Technology\\_experiences\\_through\\_COVID\\_Cyberattacks\\_and\\_beyond\\_manoeuvring\\_for\\_a\\_new\\_world.pdf](https://pure.northampton.ac.uk/ws/portalfiles/portal/39849476/Howe_Rob_2022_Learning_Technology_experiences_through_COVID_Cyberattacks_and_beyond_manoeuvring_for_a_new_world.pdf)

30. Measurement of student participation at local level <https://www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/>
31. Clayton Christensen, with contributions from Michale Horn and Curtis Johnson, *Disrupting class: how disruptive innovation will change the way the world learns*, 2008

## **Trustees**

Professor Dame Sally Mapstone (Chair)

Sir David Bell

Mary Curnock Cook CBE

Professor Dame Julia Goodfellow

Professor Dame Helen Wallace

## **Advisory Board**

Alison Allden OBE

Professor Sir Chris Husbands

Professor Carl Lygo

Professor Nick Pearce

Professor Iyiola Solanke

Professor David Sweeney CBE

## **President**

Bahram Bekhradnia

## **Director**

Nick Hillman

## **Partners**

Advance HE

Chegg

Curio London

Elsevier

GatenbySanderson

iQ Student Accommodation

Jisc

Kaplan

Kortext

Lloyds Bank

Mills & Reeve LLP

QS Quacquarelli Symonds

Research England

Studiosity

Taylor & Francis

TechnologyOne

Times Higher Education

Unite Students

UPP Group Limited

**In this HEPI Report, the authors explore the rationale and development of the University of Northampton's Waterside Campus, one of the UK's most ambitious university relocation projects.**

**They conclude with a series of lessons learned.**

HEPI was established in 2002 to influence the higher education debate with evidence.

We are UK-wide, independent and non-partisan.

January 2024 ISBN 978-1-915744-16-6

Higher Education Policy Institute

99 Banbury Road, Oxford OX2 6JX

[www.hepi.ac.uk](http://www.hepi.ac.uk)

Printed by BCQ, Buckingham

Typesetting: Steve Billington, [www.jarmanassociates.co.uk](http://www.jarmanassociates.co.uk)