# Thought Leadership from UCISA24



# **The Introduction**

# **Digital Strategy in a University Context**

All of Dickens' major novels were published serially, in monthly (or weekly) instalments. A full-length novel was out of the price range of most of his readers but a monthly instalment, 32 pages with two illustrations and advertisements, could be sold for a shilling. Dickens wrote each instalment with this type of publication in mind, many of the instalments ended with a hook that kept the readers glued to the edge of their Victorian seats wondering what would happen next, thus ensuring the sales of the next instalment.

In a similar way, we would like to share with you our thoughts on Digital Strategy in a University. This builds on the discussion at the Leadership conference in Edinburgh. I can't always promise you illustrations and we will try and avoid advertisements, but I am sure that in all other respects it will be just the same. It does seem equally important that the strategy in the current financial environment is reasonably priced and it is delivered in a way that universities are able to consume. I recently had a senior academic colleague ask me, "with all of these investments you are making in the Digital space, you must be finished pretty soon, and you won't need to spend any more money". The Digital strategy is part of the answer to why this is unfortunately not the case – or "Please sir, I want some more".

I feel that sometimes the CIO role is a little like that of a Dickensian hero. She has to make her way in a complex world often against great adversity and with a few unhelpful characters wishing her ill. Despite this she normally triumphs and learns many things along the way. Our hope in writing these articles is to give some light for the darker moments of that journey and to provide camaraderie along the way.

Digital Strategy is not an easy thing to do in a university. It can be a defining moment for a CIO and their team and usually is only something you get to do once. How do you balance financial pressures and urgent needs with making strategic progress? Who do you work with to make it happen? A strategy process is a great opportunity for a CIO and their team

to engage with their organisation and answer key questions about university goals and priorities. How do we do this well and come out ahead?

The groups in Edinburgh dug into the following questions:

- With Universities facing a challenging economic climate and the pressure to make financial savings leading to short term vs long term trade-offs - how can a Strategy help address this? - Vipin Ahlawat, Director of IT Services, Loughborough University
- Digital Strategy role of the CIO and how to engage the wider organisation. –
  What are the leadership challenges for a CIO? Emma Woodcock, CIO, York St John University
- AI and Digital Strategy How will technology cause disruption and demand a strategic response? Simon Corbett, Director of IT Services, Northumbria University
- Harnessing external help Should you do it, and how do you get value? Brian Henderson, Director, Digital & Information Services, University of Aberdeen
- Strategy and Digital Operating Model What is the connection and does one drive the other? Jason Oliver, Director of IT, University of Sussex

I am delighted that Vipin, Emma, Simon, Brian and Jason will contribute a chapter to our weekly series which I am sure will leave you hooked. Standing on the shoulders of these giants, I will try to being some threads together and create a Dickensian climax when we discover that the CIO who had been abandoned in childhood and sold to a major strategy consultancy to pay for their keep, was in fact heir to a significant fortune which they inexplicably had decided to donate to the university to implement a new student records platform.

Until next week gentle readers.

# Andy Smith

CIO, UCL.

# **Chapter One**

# **Digital Strategy in Financial Headwinds**

This is a summary of the Digital Strategies roundtable session at UCISA24 in Edinburgh, from the group discussing the impact of current financial challenges on digital strategy. My thanks to the participating delegates for their insight and engagement.

Financial pressures are buffeting swathes of the UK HE sector, created or exacerbated by a combination of cost inflation, fixed UK undergraduate fees and a seeming collapse in the international student market. In this environment, many of us in IT teams are grappling with how best to position and advance our digital strategies. Budgetary focus is narrowing to shorter time periods and increasingly fixated on cost saving rather than investment – strategy Kryptonite, in other words – but we all know that the challenging operating environment makes digital transformation more important, not less. How to we adapt?

The first thing we must do is revisit the core aims of our digital strategies, to ensure that they are clearly and unambiguously aligned with broader institutional goals. The importance of this cannot be overstated, as anything that is not demonstrably furthering the institution's strategic ambitions risks being deprioritised as funding decisions become ever more selective.

Thankfully, the traditional perspective of IT departments as mere cost centres is evolving. Today, there is a broad recognition of their role as pivotal enablers of educational and operational excellence. As the role of IT in higher education transitions from a supportive function to a strategic driver, the integration of digital strategies within the broader institutional framework is imperative.

However, many higher education institutions still grapple with creating robust business cases for their IT investments. The sector is often criticised for its soft approach towards financial justification. Institutions are now being compelled to adopt a more rigorous framework that not only underscores the tangible benefits of digital strategies but also emphasizes real efficiency savings supported by solid evidence.

This rigorous approach necessitates a closer collaboration between IT and Finance departments – developing digital strategies is now, more than ever, a team sport. Working with Finance colleagues to understand and communicate the dynamics of capital expenses (Capex) and operational expenses (Opex) is crucial. There's a pressing need for financial acumen in IT strategy discussions to navigate long-term contracts and manage investments effectively. This is particularly pertinent when negotiating with suppliers – where a unified procurement and IT strategy can leverage better terms and realise significant savings – and building robust, credible business cases.

Moreover, the transient nature of financial planning in higher education—often constrained to 12-month cycles—poses a significant barrier to long-term digital transformation. IT leaders need to influence their institutions to adopt a strategic horizon that extends beyond immediate fiscal periods to harness the full potential of their digital initiatives. This entails a shift from short-term cost-saving measures, like reducing staff numbers, to investing in digital foundations that promise long-term efficiency and enhanced student success.

The measurement of student experiences remains elusive, yet it is a critical metric for the success of digital strategies. Universities need to develop clear methodologies to gauge the impact of digital technologies on learning outcomes and student satisfaction. Only through such measures can institutions justify the investments and demonstrate the added value to skeptical stakeholders.

Articulating business benefits is one thing – but credibility soon evaporates if those benefits are not delivered. Organisational change management, therefore, plays a pivotal role. Instead of being an afterthought, it should drive the implementation of digital initiatives. This approach ensures that digital strategies are not only about deploying new technologies but also about fostering a culture that embraces continuous improvement and adaptation and – crucially – visibly delivers against claimed benefits.

In conclusion, for higher education institutions navigating these challenging financial times, it is vital to rethink their digital strategies not just as a part of IT but as a cornerstone of institutional resilience and innovation. The key lies in strategic alignment, robust financial planning, and a culture that prioritises long-term benefits over short-term gains. By doing so, universities can ensure that their investments in digital technologies yield substantial returns, both educationally and financially.

Vipin Ahlawat

**Director of IT Services** 

Loughborough University

# **Chapter Two**

# Unravelling the role of the Chief Information Officer (CIO) Leadership challenges and how to engage the wider organisation.

When Andy Smith (CIO @ UCL) likened the role of the CIO to that of a Dickensian hero, it sparked a moment of introspection.

He said that "she has to make her way in a complex world often against great adversity and with a few unhelpful characters wishing her ill. Despite this she normally triumphs and learns many things along the way".



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Andy's words prompted me to ponder whether the role is effectively addressing the challenges it faces in the higher education sector and if it is truly triumphing.

Back in the 1980s, a new title emerged in the tech landscape—the "Chief Information Officer" (CIO). But the role itself wasn't born overnight; it's been on a journey of evolution ever since. Understanding its origins and trajectory is key before we delve into how today's Higher Education CIOs are shaping digital strategy.

In the 1980s, the rise of mainframe computing brought forth the dawn of IT managers. Organisations began to recognise the potential for technology to streamline administrative tasks, particularly in accounting. These early IT managers, often tucked under the CFO's wing, were valued for their technical prowess rather than their seniority. In higher education these early IT managers often emerged in the library space. As the 1980s rolled into the 1990s, personal computing gained momentum alongside a proliferation of departmental applications. However, this growth led to the creation of technology siloes and a murky web of data with inevitable confusion over roles and responsibilities for data, technology, and infrastructure. Enter the era of "data spaghetti" and the creation of what we now call "legacy architecture," a tangled mess that IT professionals continue to grapple with daily, often unnoticed, and rarely understood by senior leaders.

By the late 1990s, technology suppliers upped their game, marketing integrated systems as the holy grail of competitive advantage. Organisations eagerly invested in these solutions, implementing them via monolithic waterfall projects that spanned months or even years. Unfortunately, many of these initiatives only added layers of complexity to existing infrastructure, trapping organisations in a cycle of "break-fix" woes.

Amidst this digital upheaval, organisations began to feel the strain on their bottom lines. The rapid pace of technological change, coupled with a lack of strategic guidance, left many questioning the return on their investments. The emergence of e-commerce and customer-facing technologies further underscored the need for effective digital strategy.

Out of this chaos the role of the true CIO emerged, to put it simply, the role was desperately needed to get to grips with the issues created from years of un co-ordinated technology decision making and a lack of architectural design. It was needed to support organisations to understand how to manage and re-design their digital ecosystems with a similar level of care and attention to their physical ones.

Never has the CIO role been more needed than now as we unpick the legacies we have inherited and navigate the relentless threat of cybercrime alongside the continued pace of change.

And here lies the challenge: while the CIO has been entrusted with a broad set of responsibilities, do our organisations understand enough to provide adequate support for CIOs to Triumph?

During the roundtable session in Edinburgh, it became evident that the role of the CIO is continuously evolving, becoming more complex and pivotal. While there were varied opinions on how to approach the development and implementation of a "digital strategy," there was unanimous agreement on the critical importance of the CIO role in fulfilling any university's strategic objectives.

Nevertheless, several key challenges stand out on the horizon, including:

### 1. Securing a seat to the top table

In Edinburgh, the CIO's influencing ability was seen as the number one challenge voiced at the round table. One contributor put it as "Being high enough up the hierarchy to get your voice heard".

For CIOs, influence is paramount, yet many find themselves sidelined from executive decision-making. While progress has been made, with a majority reporting to an executive role, the disparity between the private sector and higher education remains stark. The onus lies on executive teams to recognise the pivotal role of the CIO and provide the requisite support for success.

The 2024 UCISA CIO Survey (results to be published soon), has found that 10% of CIOs in UK HEIs have a seat at Executive Board level reporting directly to the VC. Most CIOs, just under 60%, report into the COO position, with 8% reporting to the CFO. Nearly 20% of CIO's report into positions such as PVC's with a handful reporting into positions below Executive level.

Whilst it is encouraging to see that most CIO's report directly into an Executive role in UK HEI's it is still in stark contrast to the private sector where over 70% report directly to the CEO (CIO Professional Network Survey, 2022)

In the USA 39% of HEI CIOs report direct to the Principle, 22% to the highestranking administrative officer and a further 22% to the highest-ranking business officer. (The Adaptive CIO, EDUCAUSE, 2022)

As the chair of UCISA, I can categorically say that I have seen examples of exceptional IT leadership across the sector regardless of whether the individuals concerned have an actual seat at the top table or indeed, hold a C level title. These talented IT Leaders are most definitely getting their voices heard and I can easily name a dozen who have influenced from within to develop respected and valuable digital strategies. Leaders who have professionalised their IT departments and adopted new ways of working to keep pace with the wider IT sector. The position and title hold some sway, but it is the experience and skill of the role holder that creates the conditions to influence and operate at a senior level.

However, I'm concerned that some organizations have yet to recognise the importance of investing in their IT leadership. I've spoken with senior IT leaders who worry that the highest-ranking IT role in their organisation is still perceived as purely operational, with corresponding remuneration. Consequently, these positions may not be appealing to individuals with the requisite experience and gravitas to navigate their organisations through the digital challenges ahead.

I have also spoken to talented CIOs that have left the sector because they have felt stifled by the governance practises within their organisations which they felt inhibited their ability to deliver real change. An excellent IT Leader is not going to be satisfied with simply modernising the IT estate, they want to make a difference, deliver value, and support the organising to use technology to transform how it operates, they will challenge the status quo. Without strong IT leaders and evangelists for change, our sector risks becoming outdated.

So, the real challenge is for Executive teams to consider if they want a CIO that will challenge the status quo and bring new ways of working into the organisation and whether they will provide the right level of support for the CIO to be successful.

### 2. Breaking the Mould

In our quest for digital transformation, it's time to break the mould and rethink our approach. As one contributor aptly put it, we need to "move on from tools and technology." Another emphasized the need to stop "doing things the way we've always done them."

The reality is that complex digital technologies demand a fresh perspective. Organisations must embrace new ways of working to extract value from their digital investments and challenge existing operating models and governance procedures.

For a CIO to succeed, they must wield influence to shift organisational behaviour. It's about moving away from a fixation on tactical deliverables towards a collaborative approach to investing in and delivering products and services that can truly transform the way we work.

Taking cues from other sectors, it's time to shift from traditional project-based thinking to the more agile and iterative product lifecycle approach. Design thinking becomes paramount, guiding us towards solutions that evolve with our organisation's needs over time.

Consider this: What would our physical campuses look like without the guiding hand of planners, architects, builders, and surveyors? The chaos that would ensue is akin to the unbridled growth of our digital estates. It's time to recognize that managing and maintaining these complex digital environments requires a level of control and professional skill akin to that of their physical counterparts.

In essence, it's time to break free from tradition and embrace a new era of digital management.

### 3. Redefining funding and change governance models.

Transitioning to iterative, product-based delivery necessitates a rethink of funding mechanisms.

CIOs must collaborate closely with CFOs and governance colleagues to implement the necessary changes and move away from monolithic projects. Building collaborative partnerships with vendors is equally essential to achieving sustainable value and long-term user satisfaction.

The shift towards Software as a Service (SaaS) and Cloud products presents its own set of challenges, particularly for those seeking to utilize capital-based funding. CIOs play a critical role in navigating these complexities and understanding the nuances of accessing funds for change initiatives.

### 4. Democratising Tech Literacy

Let's kick this challenge topic off with a classic joke:

A man decides to use a hot air balloon to travel to meet his friend, he sets off and after an hour he realizes he's lost. He reduces height and spots a woman down below. He lowers the balloon and shouts, *"Excuse me, can you tell me where I am?"* The woman below says: *"Yes. You're in a hot air balloon, hovering 15 meters above this field. You are between 40- and 42-degrees north latitude and between 58- and 60-degrees west longitude."* 

"You must work in Information Technology," says the balloonist.

"I do" replies the woman. "How did you know?"

*"Well,"* says the balloonist, *"everything you told me is probably technically correct, but I have no idea what to make of the information, and the fact is, I'm still lost."* The woman below replies, *"You must work in senior management."*  "I do," replies the balloonist, "But how'd you know?"

"Well,", says the woman, "You choose a solution without understanding if it would meet your needs, when it went wrong you asked for my help but you didn't actually specify your requirements so I didn't know how best to help you. I gave you the information you asked for but you're in the same position you were before we met, but now it's my fault."

In Edinburgh we discussed the need for our communities, especially our senior leaders, to have a greater understanding of technology, one contributor felt that the CIO role is about "Being a business leader and helping everyone be tech leader."

Reflecting on our joke, imagine if the balloonist had sought navigation advice before taking off, or if the woman had probed deeper to understand his journey's purpose and his level of geographical understanding. It's a two-way street, requiring a shift in working practices from both sides.

It's less about understanding the actual technologies and more about grasping the policies and practices around managing them.

Every professional discipline has specialist skills and knowledge. As CIO, I'm expected to understand financial policy and practise well enough to manage an IT budget, support financial planning and financial security. I don't claim to understand accounting practise as well as colleagues in finance departments, but I defer to their expertise when needed. Similarly, I expect others to understand IT practices well enough to manage their digital capabilities, support digital planning, and digital security and to defer to IT expertise when needed.

All leaders, regardless of discipline, must translate their expertise into language that others understand. Successful leaders work in partnership with stakeholders to understand their requirements and provide appropriate support.

### So, do I think the role of CIO is triumphing in the HE sector?

In my opinion we are making great progress, but we are not quite triumphing. While there are some outstanding digital strategies leading to substantial advancements, I contend that most CIOs are still primarily overseeing the digital modernization of their institutions. For the majority, true transformation and that moment of triumph are still on the horizon.

And finally, I would like to propose that the role of CIO is more like that of a Genie than a Dickensian hero.

She can conjure forth technological marvels, weaving intricate webs of connectivity and efficiency across the digital realm. But you must phrase your wishes carefully to ensure that she will transform your antiquated systems into beacons of modernity, breathing new life into outdated processes and workflows. Be warned, if you use your wishes poorly, the CIO's powers will be shackled by the constraints of legacy systems and outdated practises.

Make no mistake – the CIO is no mere servant of the lamp. They are the architects of transformation, the visionaries of tomorrows digital landscape. Their role transcends mere technical proficiency; it encompasses leadership, innovation, and strategic foresight.

So, the next time you encounter your organisations CIO, remember the analogy of the genie. For they are more than just a purveyor of technology—they are a catalyst of change, the guardians of digital destiny. And with their guidance, the possibilities are truly limitless.

Think carefully. What three wishes will you make?



Credit Adobe Express 2024

E Woodcock, Chair of UCISA & CIO @ York St John University

# **Chapter Three**

# Al and Digital Strategy – How Will Technology Cause Disruption and Demand a Strategic Response?

I can't lie, there was a temptation to type the above title into ChatGPT and get it to produce a blog. But then Andy opened this series with a story about Dickens, and since Dickens managed to produce all his works without the use of a large language model, I thought I better do the same.

I guess I was tempted because AI is becoming part of the technology stack everywhere you look. I'm writing this in Microsoft Word, where AI is just a click away in the form of CoPilot. Thinking back to the UCISA Leadership Conference, I was reflecting on how many times AI was mentioned in presentations, around the vendor stands, or just in conversation. But also let's face it AI has become a catch all for a lot of new shiny things, and some of them are not really artificial intelligence.

In the rapidly evolving landscape of higher education, AI can't be ignored - not only as a disrupter in how we do things, but also as the catalyst for strategic innovation. As we all grapple with the financial pressures across the sector, the integration of AI into our digital strategies is no longer just an option, it is going to be a necessity. And that's not just me, at the Thought Leadership session in Edinburgh, 87% of us in our group thought it would be a part of our next strategy.

This pivot requires a nuanced understanding of how this technology will reshape the academic environment. Emma mentioned in her blog, the role of the CIO is changing, it's time to break the mould and rethink our approach. Maybe this is the means to do it.

So where to start? I guess first and foremost, if a university digital strategy is going to incorporate AI as a core component, it will need to seamlessly align to the overarching institutional goals. The significance of this alignment cannot be understated —as Vipin highlighted in his blog, technological initiatives that do not explicitly advance strategic objectives may find themselves on the budgetary chopping block as resources become increasingly scarce.

Herein lies the challenge. If we're going to put AI into our digital strategies, so we can be disruptive and break the mould, we're going to have to construct a robust business case, that is linked to the university's strategic goals, for a technology that is changing frighteningly quickly, over a strategy timeline that is normally years.

Possibly the easiest answer is to integrate AI into the digital strategy with some broadbrush statements, emphasising not only the potential enhancements in educational quality but also the operational savings and efficiencies. But this isn't really thinking strategically about the disruption AI could cause.

Going to the other extreme, a new digital strategy could really push the boundaries of disruption in the sector. As an example, we could envisage a strategic move to all marking, assessment, and grading of students to be completed automatically by AI tools. This would certainly have operational efficiencies; save significant amounts of time and we would never need to worry about marking assessment boycotts again. Certainly, high impact. But how comfortable would we be? Would our students be comfortable that their degree was marked and graded by AI and no human was involved in giving them their final qualification? How would our academic colleagues feel about having no input into assessments?

And so, if we are going to be disruptive with AI in our digital strategies, we are no longer just thinking about a technology stack. The traditional view of our IT departments as an inhouse contractor of all things IT is rapidly giving way to a broader recognition of our role as central enablers of educational and operational excellence. In this context, AI becomes a key player in transitioning IT from a support function to a strategic linchpin and a trusted partner for the entire business. This transition is critical as the role of AI in higher education shifts from automating routine tasks to enabling complex decision-making processes, thereby enhancing both learning outcomes and institutional efficiency.

So, our response to the disruption of AI is that we're going to have to be the trusted business partner that understands how the technology works but also ensures everyone is comfortable with the technology. We will need to show the value and answer the "so what?" question. And in doing so, we will need to consider transparent and effective measure to justify AI investments and prove their worth to the sceptical stakeholders in a climate of financial challenges. We will also be at the centre of the wider debate on ethical and moral concerns, privacy, bias, and sustainability. Developing an AI-enhanced digital strategy is going to become an increasingly collaborative effort.

Given we are at the top of the seemingly never-ending hype curve, as new products are constantly entering the market on an almost daily basis, there is no doubt there will be an expectation that as technology leaders we will have AI included in our roadmap. We can also be pretty certain that all our suppliers will be pushing AI as part of their solutions, as none will wish to be left behind. The disruption is coming and its probably out of our control. The strategic response we can influence though is to be at the centre of the discussions.

Just to provide some balance and contradict myself, maybe the hype in Al will burn out quicker than we think. Al fatigue as the novelty wears off and a blasé attitude towards Al could find its way to consumers. The chance of consumers and businesses being desensitised due to the rapid pace of Al development is real, as we start to see advancements as incremental improvements rather than revolutionary changes. But as digital leaders, even in a world where the hype dies down, we'll have to manage the expectations of our students, who will grow up with a level of technology outside of their university lives that they expect to see when they come to study at our institutions.

To end, I couldn't really resist, and I probably need some more lessons in prompt engineering, but it's over to ChatGPT to wrap up

... let's recall Charles Dickens' insight:" Change begets change. Nothing propagates so fast." AI is reshaping our world at breakneck speed, touching everything from healthcare to art. As we ride this wave of tech evolution, it's crucial to keep it real and responsible. Embracing these rapid changes thoughtfully can lead us to a future rich with possibilities. Let's make sure it's a good one!

Dr Simon Corbett, CIO, Northumbria University

# **Chapter Four**

# Strategy and Digital Operating Model – What is the connection and does one drive the other?

On first appearance, the topic presents a bit of a 'the chicken or the egg?' conundrum doesn't it...

If strategy is the direction that an organisation sets to achieve its long-term goals, and the operating model defines how the people, processes, and technologies work together to execute the strategy effectively, then surely you need the strategy first and the operating model is dictated by it?

Spend any time considering this though and you start to realise that it isn't as straight forward as that. Most institutions will have an embedded operating model in place long before a new strategy is devised. How often does the new strategy take into consideration, and build in time for, the operational changes that will be needed across the entire institution to realise it's strategic ambition? And how open to macro change are we actually anyway? Many universities still operate in the same silos and divisional structures as they have over the past decade – indeed many also still employ the same processes. Throw the term 'digital' into the operating model equation and this extends the concept by emphasising a new 'customer-centric' approach to activity. Are there many in the UK HE sector that can truly say they have fully embraced customer-centricity; most that I am aware of still balk at the term customer!

So perhaps the digital operating model needs to drive the strategy and that will be the best way to ensure its execution?

Where parts of an operating model do not function effectively, strategy falls over. A onesize-fits-all approach to digital operations will fail to realise, for example, the nuances required to deliver world-class research services and that in turn will reduce the potential for optimum research outputs. The digital operations required to maximise research success will need to be specific to the research community, the research itself and even potentially the individuals involved. Does this mean the operating model should be designed and then the strategy be considered based on what the optimum returns will most likely be?

As is always the case, the answer probably lays somewhere in-between. For me, the connection between strategy and digital operating model is that they are interdependent –

they represent the 'Why' and 'How', they need to be considered in tandem. The target operating model will define how our institutions will achieve their strategic objectives by outlining the structure, processes, people, technology and governance required to execute. But the strategy will only ever be as good as its execution. This implies that a strategy has to articulate a vision for why we need to 'be' digital. A well-designed target operating model provides a framework for executing effectively by clarifying roles and responsibilities, streamlining processes, and ensuring resources are allocated appropriately. The strategy, however, needs to be cognisant of surplus generation for investment, external funding, the regulatory environment, the culture (will come back to that later!), the talent pool and any skills gap – these are core considerations of why an existing operating model is most likely in place and how it is structured. A strategy that overlooks the reality of these items will be set up to fail as the existing operating model might not be capable of changing to, nor executing, digital effectively.

At the Digital Strategies roundtable session at UCISA24 in Edinburgh, numerous leaders from across the sector discussed the topic. There was a consensus that a digital operating model should be a live entity – something that is constantly adapting and evolving but many suggested that they did not buy into their institutional strategies, commenting that the concept of a digital operating model was at odds with the way that their organisations worked in the day-to-day – and indeed, the way that they engage 'customers'. This misalignment is something that is damaging for the sector. If our strategies talk about digital but do not set up to deliver as digital, then there will always be friction and conflict which will challenge the ability to execute. Strategies that talk about embracing digital need to reflect that through their operations, structures and investments. If they don't then it just becomes lip service.

Given that part of the digital operating model will be the selection of tools, some commented that by leveraging digital technologies effectively, universities can improve operational efficiency, enhance teaching and research capabilities, and better engage with students, faculty, and other stakeholders. For instance, implementing a cloud-based infrastructure or adopting data analytics tools can enable more efficient resource allocation and decision-making, thereby supporting strategic priorities related to cost optimisation or research excellence. Yet, many commented about how 'digital' doesn't take in account the years of legacy IT investment and the failure to address it (technical debt). Some felt that digital was about 'new' which leaves a challenge about what to do with the 'old' (IT) – particularly if investment is supposed to be linked to strategic outcomes. Clearly there is a tension in some organisations about the journey ahead of them as digital becomes the norm (and already is) for most students. This has major potential to create divide between

IT and digital in mindset, in perception and in support of great outcomes. It is also problematic for those that have to create an operating model (and cost model) when strategy fails to address the reality of the tech estate.

For me, the discussion gave a sense that there is an impending inflection point for tech leaders within UK HE. When we discussed 'old' and 'new' there was a sense that strategy and institutional operating model was something that was being done to IT teams – not something that we were shaping, driving... leading. This links back to Emma Woodcock's earlier blog about the 'seat at the top table'.

If we want to properly embed a digital operating model, or shape strategy, so that it is delivers in reaching our ambitions and addressing the things that need fixing, then we need to step up and grab hold of leadership in the digital space. It is not enough to be 'traditional IT' and keep the lights on. Or to talk about digital without demonstrating what it means to be digital. We must disrupt and change the views and, subsequently, operating model across the whole institution. Who else is going to do it and make it a success?

As new technologies emerge at an ever-increasing velocity, it can be argued that universities need flexible operating models that can adapt to evolving conditions and staff/student needs but how many of us truly have these? Or have a budgeting process that allows for an agile, flexible approach to staffing? A siloed or rigid operating model will hinder ability to respond quickly to new opportunities or threats. If therefore, a university strategy refers to embracing emerging tech (AI, bioinformatics, quantum, etc) those who create it must also appreciate, indeed advocate, for responsive operating models that prioritise speed, innovation, and continuous improvement. An acceptance of experimentation and failure. This is where culture and leadership too, become critical factors.

Leaders play a fundamental role in setting the tone for organisational culture and driving alignment between strategy and operations. The phrase "culture eats strategy for breakfast", stresses that while strategy is important for any organisation, a company's culture - the values, norms, and behaviours shape that how people work together - can have a greater impact on its success or failure. This is a commonly accepted principle but fostering a culture of that enables collaboration, innovation, and accountability has to be driven through the successful implementation of a target operating model. Therefore, strategy and operating model are not isolated – they are part of an overall consideration that needs to also incorporate leadership and culture. This is holistic.

In conclusion, a well-crafted strategy can inform the design of an effective digital operating model, and a robust digital operating model should enable the execution of the chosen strategy for the digital landscape – but they need to be considered together not separately. The right leadership is then paramount to garner a conducive culture within which the digital operating model can thrive. Neither the strategy nor the digital operating model should be static for any enduring period as this will affect culture and ultimately, execution. So, in respect of the question, 'What is the connection and does one drive the other?', my answer is they drive each other... but there are more vehicles on the road!

### Jason Oliver

### **CDTO, University of Sussex**

# **Chapter Five**

# Harnessing External Help: Should You Do It, and How Do You Get Value?

As IT Professionals in education, we navigate a world of constant change. New technologies emerge, student expectations evolve, and budgetary flux are ever-present. Conceiving a meaningful strategy in this dynamic environment is tough, and the question of whether to leverage external help and if so who, is potentially a critical one.

Our organisations are crammed with valuable expertise and experience across all our academic and professional service teams, so when we talk about "external help," we should consider our wider institutional resources, as well as a surprisingly varied list of external opportunities.

A group of University representatives discussed this topic at the recent UCISA Leadership Conference in Edinburgh, and this short article touches on some of the invaluable insights and examples colleagues shared in that conversation.

### University-wide Expertise:

Education institutions are powerhouses of knowledge and talent. By looking beyond our own IT department, we can harness valuable resources and expertise from across the organisation. Here are just a few examples.

Academic colleagues possess deep subject-matter expertise, and in many cases our organisations are home to world-leading experts in a particular field. Trusted partnership here can be invaluable for strategies related to educational technology, learning analytics, or specialised software development. As we consider institutional buy-in to digital strategies this was also felt to be a valuable source of collaboration.

Like many others, Bournemouth University's IT team maintain ongoing dialogue with their computing academics around areas such as cyber security and software development, benefiting both the IT team with a broader and deeper knowledge pool, and the academic team with real-life experience of current issues and threats. University of Strathclyde sponsored their internal cyber team to undertake the University's Cyber Security Masters programme, not only helping to advance their own knowledge in the subject, but also providing valuable first-hand insights into the student experience and ultimately student employment.

### When to Look Outside:

There are of course many situations, and no lack of emails offering services, where partnering with external organisations and experts can be the key to success. Here are some examples of good collaborative approaches that may help in making an informed decision:

Venturing into unfamiliar technological territory? External consultants with proven experience can be a game-changer, helping to ensure a smoother implementation and avoiding costly mistakes. It's important to find the right consultancy partner though, University executive teams can easily disengage and lose faith if they're faced with too many consultancy buzzwords and overly glossy PowerPoint slides; keeping things simple is key.

Bringing in external specialists for specific tasks can complement your team's strengths and fill knowledge gaps.

One University needed the skills and expertise to develop institutional capabilities around web analytics but didn't have the people. They leveraged external support, in this case from a digital marketing agency, initially to make the case to the wider organisation, then as a sounding board for ideas, to sense check decisions, and to provide valuable market intelligence around potential products and solutions.

Another University found value in a multi-partner approach, one as a delivery partner, the other as a critical friend, to support a cloud readiness review ahead of a datacentre migration.

Remember, external support can free up your team's bandwidth for core functionalities, however it is vital to make sure sufficient handover has taken place before all that knowledge walks out of the door at the end of the contract!

Exeter University have created an exciting and productive volunteer digital advisory network, leveraging the experience and knowledge of leaders and managers from businesses and other organisations based in their region. They've found this extremely valuable knowledge and advice base in several areas, including sanity checking and staff reassurance about change, for example adopting Agile, or hybrid working adoption post pandemic. They use this network for consultation on new products and services too – which has additional reputational and relationship benefits. Following a session focused on

a new student app, the external digital advisor now meets with the digital product manager, providing free mentorship.

### The University Advantage:

When partnering with external providers, Universities have a unique advantage, we can leverage our research capabilities and deep understanding of the educational landscape to collaborate on developing solutions that truly address the needs of our institutions. But that's not all. Universities are also home to a large, diverse, and motivated cohort of students. This student body represents a vast pool of talent with fresh perspectives and cutting-edge technological skills. By involving students in IT projects through internships, hackathons, or research collaborations, we – and our external partners - can benefit from this valuable resource. Students also benefit from experience and skills that can differentiate them in the workplace.

Students are often early adopters of new technologies – generative AI (Artificial Intelligence) being the most recent example - and have a keen understanding of user needs. They can provide valuable feedback on usability, design, and functionality, helping external partners develop solutions that resonate with their target audiences.

Today's students are digital natives with a strong grasp of coding, data analysis, and emerging technologies. They can challenge traditional working methods and innovatively contribute directly to development projects, cx ethos, testing new features, identifying bugs, and even writing code. This not only benefits the project but also provides students with valuable real-world experience that enhances their employability and fosters a sense of ownership within the university community.

Goldsmiths University of London have benefitted from the expertise of students who have come from industry to undertake the MSc in User Experience Engineering, particularly in digital storytelling.

### Maximising the Value of External Help:

Whether seeking help from external vendors, consultants, internal departments, or students, here are some helpful pointers to maximize the value:

• Define and share project goals and desired outcomes before seeking any external support, including student involvement. Make the effort to test your partner has a solid understanding of your requirements, but don't be afraid to tweak and evolve these as the relationship grows and you seek feedback.

- Carefully assess the specific needs of the project. Match partner, IT, and student skillsets with the required tasks. Leverage networks such as the UCISA groups, to help identify suitable partners with the right expertise and experience, and any potential gotchas.
- Maintain open and transparent communication throughout the project to address challenges and ensure everyone is working towards a shared vision.
- Ensure the engagement approach is right for your organisation. Some organisations really value in-person human contact, with a partner that feels like "part of the team." Consider an approach goes beyond email and Teams/Zoom calls, with humans spending time talking to other humans in person.
- Be open and transparent with your team and other internal stakeholders about who you're bringing in, why, and what their role and purpose is.
- Agree a set of quantitative and qualitative measures to assess the value of the external engagement. This can be helpful in informing future relationships, demonstrating the ROI to stakeholders, and ultimately ensuring a successful partnership.

## Conclusion

By looking beyond our own IT departments, fostering collaboration across the university, and strategically involving students in partnerships with external organisations, IT departments can harness a wealth of expertise, resources, and fresh perspectives. This collaborative approach allows us to achieve our IT goals, optimize resource allocation, developing wider reputational and relationship benefits for our institutions, empower change, and ultimately, prepare students for success in the ever-changing technological landscape.

As respected author and consultant Ken Blanchard puts it very succinctly, "None of us is as smart as all of us."

James Crooks, CIO, Durham University and Brian Henderson, CIO, University of Aberdeen

### The Final Chapter

### Digital Strategy – The Last Chapter

I write this final chapter in my final week in my role at UCL and possibly my final week in HE (although never say never). Firstly, thanks to my fellow CIOs and collaborators in this endeavour: Vipin Ahlawat, Emma Woodcock, Simon Corbett, Brian Henderson, Jason Oliver, James Crooks; and to the workshop participants at the UCISA Leadership conference in Edinburgh. This article builds on the key ideas and provocations that come from their work over the last few weeks. There is lots of excellent material and I am delighted to draw some threads together with their help and support. Also thanks to my UCL team who have helped me to learn HE and tolerated my impatience over the last four years for as Dickens says "If I could not walk far and fast, I think I should just explode and perish."

When in my initial article I spoke optimistically about the CIO in HE being able to follow a path to success on Digital Strategy, Emma was right to offer caution that this is not always the case and that there are structural reasons why this can be particularly challenging in universities.

From my own leadership journey, one of things that has stayed with me is the "Stockdale Paradox" that is described by Jim Collins in "Good to Great". Please have a look at the book for a fuller explanation, but the gist of it is that a leader needs to do two things which could be seen as in opposition (hence the paradox) – they need to confront the brutal reality of their situation and they need to sustain belief that they (and their team) will overcome these challenges. I firmly believe that this is the role of the leader and what is necessary to realise Digital Strategy in HE.

Emma does a great job of laying out the brutal reality: CIOs in HE struggle to wield the "influence to shift organisational behaviour" and often don't have the literal or metaphorical seat at the top table that this requires. New approaches are needed and "Transitioning to iterative, product-based delivery necessitates a rethink of funding mechanisms". Finally, to really engage on Digital Strategy you need to be able to be understood by the wider leadership of the organisation, and it is still very acceptable for a senior university leader to say "I really don't understand how technology works". Ours are not easy environments for realising change. My UCL colleague Alan Harper shared with me the new book he is reading called "*Whatever it is, I'm against it*" which is the story of trying to deliver change in HE. I try to discourage my team from reading books, but what can you do.

Vipin shares the reality of the current financial position and the fact that "Budgetary focus is narrowing to shorter time periods and increasingly fixated on cost saving rather than investment .. but we all know that the challenging operating environment makes digital transformation more important, not less".

We need to confront all of this reality and still sustain the believe that we will overcome. The overcoming won't be quick, and we need to be realistic about the step we can each achieve in the institution we are part of.

As Jason says there is a synergistic relationship between Digital Strategy and Digital Operating models. One way in which we overcome our challenges is by aligning our strategy and our operating model. The strategy nudges the operating model forwards and the operating model reinforces the principles the strategy espouses.

I have AI firmly in the opportunity bucket for CIOs. As Simon says, "AI becomes a key player in transitioning IT from a support function to a strategic linchpin and a trusted partner for the entire business". The prospect of AI galvanises progress on a data strategy which might otherwise be stuck in the mud and can join-up the critical leaders in Education, Research and Operations who can then engage on the wider strategy.

Brian and James bring to life some of the inherent opportunities of working in a university as they say "Education institutions are powerhouses of knowledge and talent. By looking beyond our own IT department, we can harness valuable resources and expertise from across the organisation". The options for this are as varied as the institution's own students to the local business community.

To achieve progress requires collective action and to harness points of change recognising that they will occur asynchronously across different institutions. This could over time cause the work of a CIO to be easier and more downhill because as Dickens notes, "In journeys, as in life, it is a great deal easier to go downhill than up".

So in concluding I would encourage you to:

### Take advantage of points of change

For CIOs, if you have the luxury, don't take roles where the CIO is not part of the top table. If this is not possible then ask questions about how the role will have a voice in the wider running of the organisation and how Digital connects to the institutional strategy. If at least one serious person in the interview process is saying this then it enters the consciousness of the organisation, and with each new appointment we nudge this along. You are never listened to as much as when you have just been appointed and you need to make the most of this honeymoon. I think that this initial period, when you have the most influence, is the perfect time to push the digital strategy door wide open and frame the questions it should answer.

### Don't be shy about money

In these challenging financial times, I think it is very important that we don't self-censor and settle for a very constrained view of a strategic digital agenda. It is our role to lay out the opportunities and the choices, and I have found that putting money on the table, and being persistent, drives interest and engagement from university decision makers.

### Harness the natural advantages of being in a university

The more we align with our mission the greater our chances of success. Ensuring that the Digital team is involved in education, innovation, and research and that we speak this language brings credibility and alignment. We should seek out and partner with the related disciplines whether those are computer science, cybersecurity, strategy or psychology. For our strategy bringing those disciplines in to partner with us is a win-win to economically access skills and for credible voices to lend weight to our story.

If you can do all these things then I think you position yourself to be the hero of your story or, perhaps the genie of the digital lamp that gets asked to do sensible things. Thanks to UCISA for being our publisher and supporting this exploration for thought leadership. If these ideas have resonance, please think about the opportunity you have to take some of them forwards.

All the best,

Andy

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