

IT Services Strategy



2020-2025

1. Executive Summary

The University has undergone a period of rapid, seismic change in response to the Covid-19 pandemic, resulting in uncertainty for future planning and heavy reliance on its IT infrastructure for business continuity. Uncertainty is expected to continue as the practical implications of Covid-19, Brexit, student recruitment and income pressures play out.

Four Key Performance Indicators underpin the University's 2030 Strategy (student recruitment, student retention, student experience and financial sustainability), against which its activities will be prioritised and performance measured. These KPIs remain at the forefront of our focus in IT Services as we build on the successes and progress made during the last year to refocus the department and align it with the business needs of the University.

This Strategy will guide IT Services in our role as strategic enablers to deliver resilience and value where it is most needed in this period of uncertainty during the 2020-2021 financial year.

The focus for this period is to build a solid foundation of digital capability from which to build an agile, adaptable platform to support the University's future endeavours in delivering increasingly diversified teaching and learning in a mixed mode environment. Five key themes have been identified as the focus during this period:

1. Resiliency

In recognition of the criticality of the IT infrastructure to business continuity, IT Services will refresh core end of life systems and invest in a second data centre to maintain compliance and enhance resiliency. The success of all four KPIs is heavily dependent on a resilient IT infrastructure.

2. Consolidation and Simplification

The University has invested in a number of new technologies in pursuit of Cyber Essentials; we will maximise existing investment by embedding these technologies to maintain compliance and reduce the risks associated with common cyber security threats. Notwithstanding our particular focus on financial sustainability, this theme is a vital prerequisite for delivering the systems and services that underpin recruitment and retention activities, and indirectly the student experience.

3. Compliance

Having achieved Cyber Essentials accreditation in March 2020, there is an onus on the University to maintain the strict criteria associated with annual certification. As Government contracts have moved towards a requirement for the next level of certification (Cyber Essentials Plus), this requires focus and effort to achieve during the next few months.

As a University our compliance position is inextricably linked to our financial and reputational sustainability.

4. Mature Service Management

The necessary tools are in place to realise significant benefits in terms of the ability to manage University hardware and software assets effectively throughout their lifecycle. Effective, proactive management of resources will be embedded across the University using the principles of IT Service Management best practice including workflow automation, shift-left and self-service to reduce hidden costs, with a direct and positive impact on the student and staff experience.

5. Value for Money

By aligning its objectives with the University's four KPIs and focusing on deriving the best value from existing investment, IT Services will deliver maximum value for money to the University in support of financial sustainability.

We will build upon the successes and investment of the last year to lay a solid foundation of secure, reliable, agile and well-managed IT infrastructure and services to support the University as it navigates these uncertain times and prepares for the future of diverse and digitally-focused learning.

2. Current Position

Within the last 12 months, IT Services has seen a change in the department's senior management which has focussed upon improving engagement with and delivering value to the wider university. This has led to a sea change in the way that the department is perceived and respected across the University.

The process for gathering, identifying and agreeing priorities has been completely transformed in recognition of the relationship between prioritisation at the University level and the ability of IT Services to deliver value. The IT Leadership team meets regularly with most members of the Senior Leadership Group to understand current and emerging business requirements. These relationship management meetings are backed by a mature process enabling the prioritisation of initiatives which identify where IT Services can provide best value and help maintain sustainability.

We've also been able to demonstrate how we've added value during the 2019-20 financial year. By implementing an End Point Device Procurement and Management Policy and centralising all University IT hardware budgets under the auspices of IT Services, we've instigated equipment standards and reduced the overall spend on hardware over previous years. We've also invested in enterprise management tools enabling us to manage our PC assets much more effectively. These measures made it possible for IT Services to quickly and effectively support the virtualisation of the University in a way that would not otherwise have been possible.

Along the same lines, the new Software Management Policy formalises a similar focus to ensure that maximum value as well as improved compliance is achieved from a centralised approach to the management of software licences.

The achievement of Cyber Essentials accreditation has provided the University with a strategic advantage: the potential for added financial sustainability in the ability to bid for valuable Government contracts, and a solid baseline from which to manage University IT systems and data more securely. It must be recognised however that Cyber Essentials certification is an ongoing commitment which must be subsequently upheld in order to maintain accreditation during annual renewals and the benefits accrued as a result.

The preparatory work for Cyber Essentials accreditation has delivered significant advantage to the University, having made the recent virtualisation immeasurably easier to achieve. It has also provided greater assurance that University systems and data can be managed more securely moving forward, both in the virtual environment and the business as usual context. Ongoing management of the technology, systems and processes governing the management of red data is a vital future prerequisite to retain the necessary accreditation.



3. What do we need to achieve in the next 12 months?

3.1 Resiliency

The core network infrastructure, incorporating the back up data centre equipment, wireless network and core switches, is coming to the end of its life during 2020/21. This hardware is critical to the delivery of all University IT systems including all administration, teaching and learning and research systems connected to or reliant upon the University network. It also provides the infrastructure to allow wireless connectivity to students, staff and visitors, and is therefore pivotal to achieving all four University KPIs.

Operating end of life equipment that is out of support is inherently risky because it presents a cybersecurity risk, leaving the University vulnerable to a higher risk of a data or security breach and the potential for significant financial and reputational damage.

Notwithstanding the apparent saving associated with not replacing it, operating such equipment is also inherently costly as it would

inevitably lead to the loss of Cyber Essentials certification and associated Government contracts, because Cyber Essentials mandates that all hardware and software which handles “in scope” or “red” data must be up to date and supported.

IT Services will adopt a value-focused approach to the replacement of critical infrastructure by exploring a variety of options to maximise the return on the University’s investment.

3.2 Consolidation and Simplification

The University has invested in a number of tools to manage its large estate of IT hardware and software assets in order to achieve Cyber Essentials accreditation. Obtaining visibility and the capacity to manage the IT estate is just the first step in an ongoing programme of work required to maintain Bath Spa’s compliance position, and develop it in line with the needs and risk appetite of the University.

The technology we have invested in provides numerous opportunities to achieve this, with features and functionality as yet unexploited. It also presents the opportunity to identify overlaps in the functionality of our management tools and consolidate where possible.

The focus of IT Services will be twofold: to fully embed the tools, processes and procedures required to sustainably manage the University’s IT estate, and to fully exploit the available technologies to realise maximum value from them.

3.3 Compliance

The compliance position of the University is balanced with risk management, benefits accrued and the resources required to attain and retain the required level of compliance. As such it is a vital component of the University’s financial sustainability KPI. Government contracts now require Cyber Essentials Plus as a prerequisite and in order to bid for them, the University must develop its compliance position accordingly with the next level of maturity. This will be a focus for IT Services during the next financial year; we will work closely with the University to ensure a shared understanding of the costs, risks, benefits and resources required to achieve the required level of accreditation.

3.4 Mature Service Management

Mature Service Management entails making sure that the services provided to the University are closely aligned with and responsive to changing business needs across all four strategic KPIs. This in turn requires that the underpinning assets are effectively managed. Recent centralisation of the University’s IT hardware budget and the acquisition of enterprise level PC management tools are the necessary foundations upon which added value can be achieved by embedding mature asset management processes on top of a transparent, controlled estate.

Substantial savings have already been made in 2019-20 on annual IT hardware spend, and effective asset management will ensure that maximum value continues to be obtained from hardware assets purchased. A similar approach to centralise the procurement and management of software assets will yield further savings and enhance the University’s compliance position.

This marks a cultural transition from reactive to proactive service and asset management, a new level of maturity of the IT service and accompanying advantages in service quality, transparency and value.

3.5 Value for Money

The need to achieve value for money in support of the strategic financial sustainability KPI is especially important during this period of uncertainty, and will underpin all of IT Services' activities in support of the business needs of the University. This is particularly pertinent in the current climate as the University must respond rapidly and with agility to a changing external landscape.

We will ensure that the investment required to replace core infrastructure technology provides a solid foundation from which to deliver agile, responsive services to the University, whether current or new. We will identify, consolidate and leverage the benefits of existing investments to ensure that the right tools are used for the right purpose at the right time, improving efficiencies and reducing hidden costs.



4. Future Planning

4. Future Planning

The University's 2030 Strategy is built upon four major themes of work: Creativity, Enterprise, Talent and Enhancements, all of which are underpinned and enabled by digital services that are at once robust and secure, yet agile to evolving business needs in a constantly shifting global landscape.

Creativity:- we will develop systems and services that successfully navigate the often competing requirements of creativity and compliance, ensuring that our virtual estate is both secure and flexible to meet these needs, whether in research or the diversification of our teaching and learning portfolio.

Enterprise:- our digital campus will support the development of rich, inclusive partnerships with employers, cultural organisations, academic institutions and alumni.

Talent:- delivering our digital campus means investment in and support of our talented teams to develop and maintain the skills they need, and providing a rich framework of services and technologies that allow our staff and students to realise their talents and flourish in the digital age.

Enhancements:- our digital campus will be based on technology, systems and processes that enable us to support our academic portfolio and meet our goals of financial and environmental sustainability.

With our common values of Respect, Inclusivity, Collaboration and Sustainability as our guide, we will work with colleagues across the University to develop a Digital Strategy to guide and shape the creation of a digital campus that will empower the achievement of our ambition to embed creative enterprise at the heart of all that we do, whether responding to global challenges or local opportunities.

5. Conclusion

The next academic year presents both challenges and opportunities for Bath Spa both in the short and longer term. Uncertainty in the short term caused by Covid-19, Brexit and income pressure, combined with a record low student demographic will necessitate a sharp focus on agility, value and close alignment with evolving business needs. In contrast, it also presents an opportunity to focus on consolidating and realizing the benefits of recent investments, which will support the University in moving forward on a solid foundation of well-managed, mature services and assets. A focus on maintaining our Cyber Essentials accreditation will be paramount as we continue to improve our overall compliance position and prepare to attain Cyber Essentials Plus. This next level of compliance will allow the University to attract and renew new and existing contracts over the coming years.

We can expect that the institutional approach to project prioritisation and approval will demonstrate its value during the coming year, ensuring that at all times, the focus of IT Services is delivering maximum value to the University. Looking to the longer term, it seems certain that the needs of society and the economy in the post-Covid environment and the growing climate emergency will change irrevocably, and the positioning of Higher Education will need to adapt accordingly. As the University adapts to this new environment, the role of IT Services will be pivotal in embedding digital capabilities across all aspects of the business to enable the exploitation of new opportunities.

Authors:


Director of IT Services


Deputy Director or IT Services