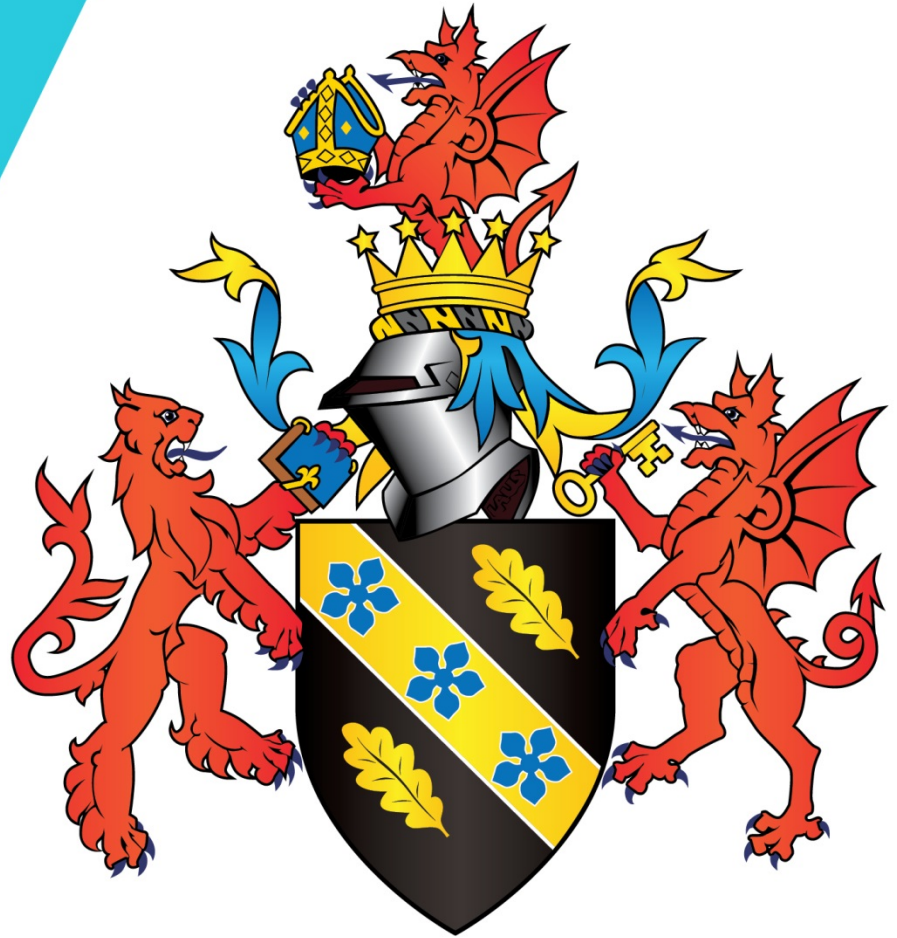




Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David



UWTSD Digital Strategy

2021-23

UWTSD Digital Strategy 2021 – 2023

People by default, technology by design

Contents

Introduction	3
Section 1.....	3
Our Journey	3
Our Purpose.....	3
Section 2.....	4
How we developed this strategy	4
Section 3.....	4
How we will monitor and review the strategy	4
UWTSD Group Impact	4
Section 4.....	5
Objectives and Action Plan	5
Section 5.....	16
Definitions and Terms	16
Section 6.....	17
References:	17
Appendix 1	18
Detailed Action Plan (Internal)	18

Introduction

This Digital Strategy aligns with our University's Strategic Plan, our Fee and Access Plans and key strategies such as the Strategic Equality Plan 2020 – 2024, and the Student Health and Wellbeing Strategy 2020 – 2024. The strategy will also look to align where possible with the FE colleges Digital Strategy 2021-2024 as part of a wider UWTSD group approach. It will also support the university's 2020 - 2022 enhancement theme of blended learning; to shift the concept of digital learning as separate to face-to-face teaching by embedding an approach that is around learning in its broadest sense and empowering our community in utilising the technology to support innovative and creative pedagogy across the university. Finally, the strategy aims to support institutional aspirations around developing deeper commercial partnerships to enable a richer university experience for our students and staff.

The strategy has a focus on our people, and we aim to support all our staff and students in the effective use of digital technology. In order to meet all the university's strategic priorities, it is essential that the University make informed decisions around the digital tools and technology it supports and then uses them effectively. It is also key that the university makes the most of the technology infrastructure already in place.

For this strategy, we have set six high-level objectives, underpinned by a strategic action plan, and a clear plan to monitor and review progress and success. We will work in partnership with staff and students on the implementation of the new Digital Strategy.

Section 1

Our Journey

In early 2020 the University was heading towards the end of two key institutional strategies, the Learning and Teaching Strategy (2017-20) and the Information Technology & Systems Strategy (2017-20). It was decided that 2020 was an opportunity for a new approach to digital within the University and to align key strategies (Library & Learning Resources, IT&S, TEL, L&T) to a new Learning & Teaching approach and to develop the institutions digital capability. A focus on developing a new Digital Strategy in 2020 was fostered and discussions had already started to take place.

COVID-19 has caused a digital shift in higher education greater than anything that has preceded it. Before March 2020, the overwhelming majority of university teaching, learning, research and administration happened in person, outside those few areas that specialised in online delivery. UWTSD moved quickly to develop solutions for the immediate periods after the COVID-19 outbreak. Academic and Professional Services collaborated to develop significant levels of digital content to support the shift in curriculum delivery. In addition, university administration, support and professional teams moved swiftly to deliver services online.

The initial approach in many areas was extremely positive, but re-active in nature, which is completely understandable given the context of COVID-19. However, there were a number of risks here, particularly around the sustainability of the approaches and digital resilience for the longer term. As a result, the institution developed several core initiatives designed to help staff and students by providing the foundations for any future approaches to digital transformation. We now aim to consolidate and build on this work with the development of a strategy that outlines a cohesive framework to enable further digital transformation across the university.

Our Purpose

This strategy will support all thematic and enabling strategies and frameworks across the organisation. This strategy aims to move beyond departmental boundaries by supporting and enabling digital transformation

across the whole of the university, for Learning & Teaching, Research, Commercialisation, Collaborative Partnerships and Professional Services. Central to the strategy are themes of change management, user engagement, partnership and collaboration and system ownership. We need to recognise and encourage good practice but acknowledge processes and practices that are not working well. These cultural elements will have a significant impact on the success of the strategy. We also need to celebrate the significant steps that we have taken over the last year that facilitate this strategy and underpin the further work that is required to digitally transform the institution.

This is a University wide strategic framework, an enabling and empowering roadmap approach that ensures that the digital will be embedded at the heart of the institution. It aims to mitigate current risks around an over reliance on individual centric processes, to move to a position of greater workflow transparency and openness. This in turn will support the wider agenda around staff and student wellbeing, while at the same time ensuring a higher level of resilience and sustainability of university infrastructure.

Section 2

How we developed this strategy

To identify objectives and shape the action plan we undertook an extensive consultation exercise with key stakeholders across the university. This engagement helped us understand the needs of our community and has ensured that we have crafted a strategy that reflects voices from across the university.

The consultation phase directly helped define a realistic set of strategic objectives, whilst at the same time capturing a level of aspiration and ambition. The strategy aims to both manage expectations as well as empower the organisation to continue to transform into a digitally enabled institution.

The feedback from the consultation process has been overwhelmingly positive and we now aim to develop a Communication Plan to run alongside the life of the strategy to enable ongoing staff and student conversations. It is key that the strategy continues to be informed by this engagement to ensure endorsement from across the institution.

Section 3

How we will monitor and review the strategy

The objective action plan sets out key priorities to support the strategy, aligned with an operational action plan that will regularly be reviewed by the Operational Leadership team and the Academic Planning Team. In addition, regular updates will be shared with both Senate and Council.

A range of internal and external benchmarking activities will be undertaken to evaluate the success of the strategy. We aim to embark on both the staff and student JISC Digital Experience Insights Surveys to measure how our students and staff are using our technology, what is making a difference and where improvements can be made.

UWTSD Group Impact

The Strategy will also look to foster engagement with the FE Colleges as part of the wider UWTSD group approach. As part of the strategy development process, we have reviewed the current UWTSD FE Colleges Digital Strategy and, working with FE colleagues, identified key high-level cross-cutting initiatives that we would look to work together on as part of a group approach.

<i>Teaching and Learning</i>	Develop engagement on digital teaching and learning through shared best practice and FE/HE approaches.
<i>Digital Skills</i>	Work closely on a consistent approach to digital skills development for both FE and HE.
<i>Cyber Security</i>	Develop engagement on Cyber Security approaches to support Digital Transformation.
<i>Systems Integration</i>	Review opportunities to align and integrate core IT Systems to facilitate future working approaches such as shared campus facilities.
<i>Building a Digital Group Community</i>	Underpin the approaches above by building a digital UWTSD group community to enhance engagement on digital transformation.

Section 4

Objectives and Action Plan

To achieve digital transformation and support the University's strategic priorities, six themes have been identified. These themes have been developed in collaboration with academic staff, professional services staff and students. They seek to address 'pain points' identified in the consultation process, but also reflect best practice internally and across the sector and aim to support the University in becoming a digital leader within the higher education community.

To ensure alignment and consistency with the wider organisational strategy each of the objectives have been mapped to the relevant institutional strategic priority, which are summarised below.

University Strategic Priorities

- Strategic Priority 1 – Putting Learners First
- Strategic Priority 2 – Excellence in Teaching, Scholarship and Applied Research
- Strategic Priority 3 – Creation of Opportunities through Partnerships
- Strategic Priority 4 – A University for Wales

Digital Strategy Objectives

1. Digital Connectivity
2. Digital Productivity
3. Digital Learning
4. Digital Inclusion
5. Digital Capabilities
6. Digital Innovation

Digital Connectivity

Digital technology is influencing almost every aspect of our lives, both personally and professionally. Without the underlying digital infrastructure that connects our computers, devices and online services, there can be no digital transformation. The COVID-19 pandemic has highlighted the need for greater connectivity speeds and broadband access, and looking beyond COVID-19, we will be increasingly dependent on digital connectivity both on and off campus to facilitate home working and flexible learning for our learners.

Objective	How we intend to do it	University Priority
To provide excellent digital infrastructure to our staff and students, including on-campus internet connectivity and remote access to relevant services	- Continued investment in the University network estate, ensuring reliable and secure networks across multiple campus locations. - Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. - Continued investment in providing staff with the relevant hardware and software to undertake their roles effectively.	SP1 SP2
To ensure the digital infrastructure facilitates innovations in pedagogy and research across the university.	- Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively. - Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. - Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward. - Continued investment in providing staff with the relevant hardware and software to undertake their duties effectively. - Ensure that digital services are scalable and factor in the International agenda as well. - Review Institutional Research Repository and invest to ensure compliance for the next Research Excellence Framework (REF)	SP1 SP2
To provide a secure, resilient and robust digital infrastructure that supports all users	- Continued investment in Information Security Systems to ensure the integrity of all our systems and data. - Prioritise cyber security as part of any digital infrastructure developments.	SP1
To continue investment plans to mitigate the heightened cyber security risks given the greater dependence on digital technologies	- Continued investment in Information Security Systems to ensure the integrity of all our systems and data. - Develop Cyber Security and Information Security Training Certificate courses, learning from existing models already in operation externally. - Work with FE colleagues to ensure a consistent group approach to cyber security fundamentals	SP1

To continue to invest in our digital infrastructure to ensure it supports the digital transformation agenda	• Improve access to resources and systems for staff and students, and develop an Access Anywhere / Single Sign On approach for all including Collaborative Partnerships (where licensing allows) • Continued investment in the University network and digital estate, ensuring reliable and secure networks across multiple campus locations. • Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. • Review and implement digital infrastructure integration opportunities with FE Colleges to facilitate cross-campus working for both HE and FE staff. • Ensure sustainability of systems and infrastructure, being mindful of technology obsolescence and aim to mitigate risks accordingly. • Ensure that digital services are scalable and factor in the International agenda as well.	SP1 SP2
To enable all staff, regardless of their location of work, to access a digital workplace that is both flexible and inclusive.	• Improve access to resources and systems for staff and students, and develop an Access Anywhere / Single Sign On approach for all including Collaborative Partnerships (where licensing allows) • Continued investment in providing staff with the relevant Hardware and Software to undertake their duties effectively. • Ensure that digital services are scalable and factor in the International agenda as well.	SP1 SP2 SP4
To explore opportunities to drive innovation through digital connectivity, including internet of things (IoT) technologies and wireless networks	• Working with Estates & Facilities colleagues, undertake research into current network data that can be used to drive innovation such as monitoring building usage and footfall. • Identify opportunities to utilise current and future network designs to accommodate Internet of Things (IoT) functionality for monitoring, reporting and remote access to key building systems and functions.	SP1 SP3

Digital Productivity

Efficient processes, accurate data and fit for purpose systems are essential in striving for a digital university. Poorly designed business processes have a direct impact on the staff and student experience, and the efficiency and effectiveness of the University. Taking a holistic view of workflows, data, systems and people is vital.

To empower the institution to critically reflect on current processes, procedures and workflows through a digital lens.	• Procure and implement a Customer Relationship Management (CRM) system • Identify governance model for procurement of all new systems, to include clarity of ownership. • Review all internal student and staff surveys through a digital lens. • Digitise processes to enable more efficient work practices and reduce impact on staff.	SP1 SP2
To enable both professional services and academic colleagues to contribute as equal partners in the development of the digital landscape across the university.	• Review the university's multiple service management systems with a view to harmonise into one Enterprise Service Management tool (ESM). • Digitise processes to enable more efficient work practices and reduce impact on staff.	SP1 SP2 SP4
To ensure the university has access to relevant business intelligence data to ensure effective data driven and evidence-based decision-making.	• Enhance the quality, value and impact of data and information through implementing the Data & Business Intelligence strategy. • Establishment of a Data Governance Group to oversee data within the institution • Establish a Records Management function within the university to ensure all digital records are systematically and appropriately managed throughout their lifecycle.	SP1 SP2 SP3 SP4
To ensure there is a coherence between any physical developments and the relevant digital space requirements across our campuses, which will better reflect the digital requirements for staff and students.	• Working with Estates & Facilities colleagues, review the university's estate through a digital lens, and to plan all developments accordingly. • Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement.	SP1 SP2
To ensure digital services delivered are provided bilingually where possible and that digital services serve to enhance the Welsh language. Where they are not, continue to work with 3 rd parties on developing bilingual content and functionality.	• Ensure that digital services consider the WG Welsh language legislative landscape as part of its digital strategic direction of travel. • To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content. • Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students. • Work with Microsoft to enhance current Welsh language provisions within their systems. • Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	SP1 SP2 SP4

Digital Learning

Digital learning is seamless, this interconnectivity enables individuals to move flexibly across multiple learning spaces, be they personal, professional or organisational. Learning is therefore not limited or bound by the university. The university must be ready to engage with new ways of teaching and learning, as well as innovations in technology.

To continue a high-quality student experience, ensuring that all students will have a consistent, personalised, seamless digital experience.	- Review the university's multiple service management systems with a view to harmonise into one Enterprise Service Management tool (ESM). - Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively.	SP1 SP2
To ensure inclusivity and accessibility are integral considerations in curriculum design / redesign	Continue to embed accessibility in software development and in the creation of learning resources, ensuring engagement of the user voice a part of this process.	SP1 SP2
To support colleagues as they continue to develop and deliver an increasingly digitally complex curriculum.	- Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively. - Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement. - Contribute so that the blended learning curriculum reflects the richness and diversity of our university community and the wider world. - Ensure that partner institutions are fully considered as part of the university's shift to a blended learning delivery model, aligning the pedagogical approach where possible. - Work with FE colleagues to enhance both FE and HE digital learning outputs	SP1 SP2
To ensure the digital infrastructure supports and motivates shifts and innovations in pedagogy and ensures a consistent approach to the academic offer across the university as well as our collaborative partnerships across the region and beyond.	- To develop a Collection Development Strategy which better supports a shift to a blended learning approach to curriculum delivery. - Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement. - Digitise processes to enable more efficient practices and reduce impact on staff. - Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward. - Review and recommend an institutional timetabling system that supports the blended learning mode of curriculum delivery.	SP1 SP2 SP3 SP4
To facilitate flexible learning delivery through both on-campus and hybrid blended learning, supporting the concept of a university without walls.	- Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. - Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	SP1 SP2

	• To develop a Collection Development Strategy which better supports a shift to a blended learning approach to curriculum delivery. • Continue to embed accessibility in software development and in the creation of learning resources. • Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. • Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	
To support colleagues as they continue to develop and deliver an increasingly digitally complex curriculum.	• Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively. • Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement. • Contribute so that the blended learning curriculum reflects the richness and diversity of our university community and the wider world. • Ensure that partner institutions are fully considered as part of the university's shift to a blended learning delivery model, aligning the pedagogical approach where possible. • Work with FE colleagues to enhance both FE and HE digital learning outputs	SP1 SP2
To ensure the digital infrastructure supports and motivates shifts and innovations in pedagogy and ensures a consistent approach to the academic offer across the university as well as our collaborative partnerships across the region and beyond.	• To develop a Collection Development Strategy which better supports a shift to a blended learning approach to curriculum delivery. • Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement. • Digitise processes to enable more efficient practices and reduce impact on staff. • Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward. • Review and recommend an institutional timetabling system that supports the blended learning mode of curriculum delivery.	SP1 SP2 SP3 SP4
To facilitate flexible learning delivery through both on-campus and hybrid blended learning, supporting the concept of a university without walls.	• Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. • Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	SP1 SP2
To ensure inclusivity and accessibility are integral considerations in curriculum design / redesign	• Continue to embed accessibility in software development and in the creation of learning resources, ensuring engagement of the user voice a part of this process.	SP1 SP2

	Contribute so the blended learning curriculum reflects the richness and diversity of our university community and the wider world.	
To establish where possible, research to remain in step with the changing digital preferences, expectations of prospective students and greater understanding on impact of different learning approaches	- To develop and implement the JISC Learning Analytics Tool across the university. - Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement	SP1 SP2 SP3
To ensure that digital learning content is provided bilingually	- To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content - Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students - Ensure that digital services consider the WG Welsh language legislative landscape as part of its digital strategic direction of travel. - Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward	SP1 SP2 SP4

Digital Inclusion

To equip and support all of our community to develop their skills and confidence based on their needs regardless of their background and situation. To also support our community as it addresses fundamental issues of equality, diversity and inclusion.

To ensure all staff and students can contribute and benefit from the university's digital transformation.	- Improve access to resources and systems for staff and students, and develop an Access Anywhere / Single Sign On approach for all including Collaborative Partnerships (where licensing allows) - Identify and develop digital practices that impact positively on staff and student wellbeing. - Digitise processes to enable more efficient practices and reduce impact on staff.	SP1
To empower all staff and students to challenge marginalisation and social exclusion by engaging fully in digital opportunities.	- Identify and develop digital practices that impact positively on staff and student wellbeing. - Contribute to ensure the blended learning curriculum reflects the richness and diversity of our university community and the wider world.	SP1 SP4
To increase the participation rate of the socially excluded by developing digital collaboration and	Continue to embed accessibility in software development and in the creation of learning resources, ensuring engagement with our community as part of this process.	SP1

communication tools, ensuring we are a digitally supportive university.		
To support an inclusive and diverse digital model of curriculum and assessment practices across the university.	- Identify and develop digital practices that impact positively on staff and student wellbeing - Contribute to ensure the blended learning curriculum reflects the richness and diversity of our university community and the wider world.	SP1 SP2
To facilitate a range of university communication tools to support all our existing and prospective learners.	- To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content. - Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students - Review and recommend an institutional timetabling system that supports the blended learning mode of curriculum delivery.	SP1 SP2 SP4
To prioritise user experience and the student voice as it relates to the digital and physical environment.	- Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda. - Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students	SP1 SP2
To ensure an equitable level of digital provision for staff and students regardless of location, supporting on and off campus working and learning.	Identify and develop digital practices that impact positively on staff and student wellbeing	SP1
To continue to provide additional funding or means to reduce digital poverty as a barrier to students accessing higher education.	- Ensure support to continue the current Digital Bursary support for students, to provide devices and financial support around digital connectivity off campus - Undertake research to understand better the levels of digital poverty amongst both Students and Staff.	SP1
To increase the participation levels of women in technology, and related disciplines in UWTSD.	- To support the funding of CPD opportunities for UWTSD women in tech (students and staff), engaging with external organisations to do this. - To liaise with the UWTSD staff and student Women's Networks as a point of expertise and skills in supporting and developing women and those who identify as women. - To work with Women In Tech to deliver developmental opportunities to current UWTSD students.	SP3 SP4

Digital Capabilities

In order to make the most of opportunities afforded by technology, staff and students need an understanding of how digital technology can be useful. How an individual adopts new technology and improves their digital fluency can be based on four elements; knowledge, skills, attitude, and behaviours. Investment in developing these elements is vital.

To empower university leaders, staff and students to make the most of the digital tools available to them.	• Develop a digital skills centre supporting academic and professional departments, to share good practice, and encourage a learning culture approach to professional development. • Develop a Digital Resources knowledgebase that provides a central hub for access to supporting resources, for example the Digital Skills Framework. • Embed digital skills requirement as part of the university's recruitment processes, as well as staff induction and performance review practices • Ensure provision for specialist systems training is planned for and delivered • Develop the Digital Skills Framework and promote the benefits • Embed digital skills into induction and ongoing CPD for postgraduate researchers. • Work with FE colleagues to share best practice and resources for building digital capabilities	SP1 SP2
To build the confidence of staff to enable and facilitate digital innovation across the university.	• Develop a digital skills centre supporting academic and professional departments, to share good practice, and encourage a learning culture approach to professional development. • Develop a Digital Resources knowledgebase that provides a central hub for access to supporting resources, for example the Digital Skills Framework. • Ensure provision for specialist systems training is planned for and delivered. • Embed digital skills development within the curriculum as part of the Graduate Attributes agenda. • Embed digital skills into induction and ongoing CPD for postgraduate researchers.	SP1 SP2
To ensure staff and students are aware of cyber security threats and the risk they pose	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources. • Continued development of test phishing email processes and subsequent training. • Maintain and develop standards to continue to meet the Cyber Essentials Plus accreditation.	SP2
To support all students, regardless of their location to ensure they reach their full potential and	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources	SP1 SP2

equip them as they move on to support communication, collaboration and creativity.	• Embed digital skills into induction and ongoing CPD for postgraduate researchers.	
To empower all staff to own their individual learning and development	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources • Working with HR colleagues, identify opportunities for self-directed development and continue to promote these opportunities to staff • Undertake a review with HR to identify a dedicated professional development time during a normal week for staff and students	SP2 SP4
To encourage the university to recognise staff learning and development as a core function of their role by ensuring a framework is in place to facilitate self-directed professional development across all staff within the university.	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources • Working with HR colleagues, identify opportunities for self-directed development and continue to promote these opportunities to staff • Undertake a review with HR to identify a dedicated professional development time during a normal week for staff and students	SP2 SP4
To ensure our professional development plans include digital training, peer support mechanisms and reward and recognition incentives to encourage upskilling	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources • Working with HR colleagues, identify opportunities for self-directed development and continue to promote these opportunities to staff • Embed digital skills into induction and ongoing CPD for postgraduate researchers.	SP1 SP2 SP4
To enable staff to utilise the full range of digital infrastructures as part of their function, role and future development by becoming more digitally aware	• Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources. • Working with HR colleagues, identify opportunities for self-directed development and continue to promote these opportunities to staff. • Ensure provision for specialist systems training is planned and delivered.	SP1 SP2

Digital Innovation

Digital innovation will be key to identifying, understanding and enabling the creative ideas and collaboration opportunities available to the university from internal and external sources to help deliver differentiated digital services, build external partnerships and develop viable commercial opportunities.

To research new and emerging digital technologies and assess the potential of implementing these within UWTSD, including but not limited to immersive technologies (Virtual, Augmented and Mixed Reality), Artificial Intelligence (AI) and the latest digital technologies	• Further enhance current AI developments to enhance student experience as well as staff support. • Implement a UWTSD digital assistant for students as part of an AI development project. • Undertake research on new approaches to delivering digital solutions using technology and make recommendations on direction of travel and enhancements.	SP1 SP2 SP3 SP4
To actively research, develop and lead on new digital business opportunities within the University	• Undertake research on new approaches to delivering digital solutions using technology and make recommendations on direction of travel and enhancements. • Working with RIES colleagues, utilise digital expertise within the institution to build external relationships, support commercial opportunities and bid for research and grant funding.	SP3 SP4
To research, incubate and experiment with new digital innovation opportunities to enhance university solutions, drive partnership opportunities and recruitment.	• Undertake research on new approaches to delivering digital solutions using technology and make recommendations on direction of travel and enhancements.	SP1 SP2 SP3 SP4
To look to build external digital commercial partnerships and build strong relationships with technology vendors in order to develop digital innovation	• Identify potential partners and 3rd party providers that can work with the University to enhance its use of digital services and learning technologies. • Working with RIES colleagues, utilise digital expertise within the institution to build external relationships, support commercial opportunities and bid for research and grant funding. • Explore opportunities to work further with Schools to provide innovative bilingual digital learning opportunities and services across Wales.	SP2 SP3 SP4

Section 5

Definitions and Terms

Digital Capabilities

Digital capability is the broad term used to describe the skills, knowledge and attitudes that individuals and organisations need if they are to thrive in today's world.

Digital Exclusion

Digital exclusion is when an individual or group are digitally disadvantaged due to societal barriers to skills development, connectivity and accessibility.

Digital Literacy

Digital literacy means having the specific skills you need to live, learn, and work in a society where communication and access to information is increasingly through digital technologies like internet platforms, social media, and mobile devices.

Digital Resilience

Digital resilience can be defined as an organization's ability to maintain, change or recover technology-dependent operational capability.

Digital Skills

Digital skills are broadly defined as those needed to use digital devices, communication applications, and networks to access and manage information.

Digital Technology

Digital technologies are electronic tools, systems, devices and resources that generate, store or process data.

Digital Transformation

Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value. It is also a cultural change that requires organisations to continually challenge the status quo, experiment, and get comfortable with failure.

Section 6

References:

- [Digital at the core: a 2030 strategy framework for university leaders](#)
- [Digital Strategy for Wales 2021](#)
- FE Colleges Digital Strategy 2021-2024
- [Learning and teaching reimagined | JISC](#)
- [Student digital experience survey insights survey 2020: UK HE findings](#)
- [Teaching staff digital experience survey insights survey 2020: UK HE findings](#)
- [UWTSD Digital Framework for Blended Learning](#)
- [UWTSD Digital Skills Framework](#)
- [Well-being of Future Generations \(Wales\) Act 2015](#)

Appendix 1

Detailed Action Plan (Internal)

Action Reference	Action	Related SMART Tasks	Digital Services Stakeholder	Cost Implications	To be completed By
1.	Continued investment in the University network estate, ensuring reliable and secure networks across multiple campus locations.	- Update student halls Wi-Fi Carmarthen ABN 1-4, Lampeter LTH and Roderic Bowen - Update Carmarthen core network - Update Campus Wi-Fi, Alex Road, Carmarthen Student Village, Lampeter Student Village	EHITSI	21-22: £140K 22-23: £140K 21-22: £93K 22-23: £150K 21-22: £21K 22-23: £50K	- Q3 2022 - Q4 2022 - Q3 2023
2.	Continued investment in providing staff with the relevant hardware and software to undertake their roles effectively.	Alongside Finance, implement a fully leased endpoint device fleet.	EHITSD	21/22: approx. £600k 22/23: approx. £400k	Q3 2023
3.	Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively.	- EdTech Blended Learning Working Group to advise on university wide adoption of digital learning resources. - Establish and document learning design processes. - Identify and share best practice in digital pedagogy via training, resources and collaboration with staff. - Review digital teaching and learning standards and produce interactive digital version. - Reading List Policy review 21 / 22	EHDCL EHLR	£10k 21 / 22: tbc 22 / 23: TBC	- Q2 2021 - Q3 2021 - Q4 2021 - Q4 2021 - Student Experience Committee Work Programme 21 / 22
4.	Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda.	- Upgrade 20 – 30 Learning spaces per year that facilitates Hybrid learning. Is easy to use for staff and students and is consistent across all refurbished learning spaces - Invest in and implement digital signage content management system - Invest in and implement digital signage for libraries and learning spaces	EHDCL/EHITSD	£330k - £500K pa - TBC - TBC 21 / 22: £100K (Y Fforwm) 22 / 23: £100K (Lampeter) - TBC	- Q3 2022 - Q4 2021 - Q4 2021 - Q3 2023 - Q3 2023

		- Invest in Y Fforwm library space to ensure support blended and hybrid learning agenda. Develop process to review all library spaces on a 5-year cycle. - Invest in Lapsafe student loan facilities for Lampeter, Carmarthen, London and Birmingham. To replace manual loan processes.	EHLLR EHLLR / EHITSD	21 / 22: £75k 22 / 23: £75k	
5.	Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	- Implement improved Moodle user interface - Write a UWTSD VLE Policy with Terms of Reference - Setup a VLE focus group - Complete a review of hosting options	EHITSI/EHDCL	£30-60K pa for VLE cloud hosting [if deemed necessary]	- Q2 2022 - Q4 2021 - Q3 2021 - Q4 2021
6.	Ensure that digital services are scalable and factor in the international agenda as well.	- Resolve Moodle performance issues - Evaluate viability of JISC/Alibaba China VPN	EHITSI/EHDCL	£12k setup, £106k pa	- Q4 2021 - Q4 2021
7.	Review Institutional Research Repository and invest to ensure compliance for the next Research Excellence Framework (REF)	Implement new Research Repository	EHLLR	21/22: 40k (incl. implementation) 22/23: £30k	21 / 22 Research Committee Work Programme
8.	Continued investment in Information Security Systems to ensure the integrity of all our systems and data.	- Invest in SIEM solution, create systems of work so it is used pro-actively and reviewed in Security meetings. - Offer Cybersecurity apprenticeships to existing staff. - Support WISA with their implementation of a Security Operation Centre, and utilise it for Pen testing and ethical hacking - Extend cover of Monitoring Systems	EHITSI/EHITSD	£21K pa 1 day pw per member of staff - Budgeted by WISA 21-22: £5.5k 22-23: £6k	- Q2 2022 - Q3 2021 - Q1 2022 - Q3 2022
9.	Prioritise cyber security as part of any digital infrastructure developments.	- Embed Cyber Security requirements within the development and creation of all new services introduced. - Update PID template to Include Cybersecurity section and continue to undertake regular Pen Tests using Nessus software and website security	EHITSD / EHITSI		- Q3 2021 - Q3 2021

		ratings.			
10.	Develop Cyber Security and Information Security Training Certificate courses, learning from existing models already in operation externally.	- Create Cyber Security and Information Security course content - Successful completion of first course	EHITSD		- Q1 2022 - Q3 2022
11.	Work with FE colleagues to ensure a consistent group approach to cyber security fundamentals	Create a UWTSD Group Security forum	EHITS/ EHITSD		Q4 2021
12.	Improve access to resources and systems for staff and students, and develop an Access Anywhere / Single Sign On approach for all including Collaborative Partnerships (where licensing allows)	- Continue to utilise AAD for authentication for all university services. Identify services currently not authenticated using AAD and plan to migrate. Ensure that all new services introduced to the university are authenticated via AAD and accessible anywhere. - Implement Windows AoVPN and FortiGate EMS VPN. - Develop separate instance of UWTSD Library Catalogue for partner students, to enable access to library digital content (where licensing allows)	EHITSI EHLR	- n/a £10K pa - n/a	- Q4 2022 - Q4 2021 - Q3 2022
13.	Review and implement digital infrastructure integration opportunities with FE Colleges to facilitate cross-campus working for both HE and FE staff.	Explore integrated approach to Wi-Fi for joint provision and management on Carmarthen campus	EHITS/ EHITSD	£30k investment (Aruba Mobility Masters)	Q3 2022
14.	Ensure sustainability of systems and infrastructure, being mindful of technology obsolescence and aim to mitigate risks accordingly.	- Write Halls Wi-Fi, Campus Wi-Fi and IT Strategies, update Network Standards document - Update asset Inventory - Replace aging network switches - Upgrade SITS and Data Warehouse servers - Upgrade UWTSD Storage Area Network and backup devices	EHITSI	21/22: £76k (CAWCS & UoW, Alex Rd) 22/23: £60K (Carm/ Lamp) 21/22: 11k 22/23: £330k (SAN, Hypervisors, Backup Devices)	- Q2 2022 - Q4 2021 - Q4 2023 - Q3 2022 - Q4 2023
15.	Working with Estates & Facilities colleagues, undertake research into current network data that can be used to drive innovation such as monitoring building usage and footfall.	Develop business case for room and building utilisation analysis using Wi-Fi footfall data	EHITSI	£30k pa (estimate)	Q1 2022
16.	Identify opportunities to utilise current and future	Support Estates CCTV update project	EHITS/ EHDCL	21/22: £25k, 22/23:	Q2 2023

	network designs to accommodate Internet of Things (IoT) functionality for monitoring, reporting and remote access to key building systems and functions.	Support Estates Door Access Systems standardisation project Review whether Estates and Facilities have a IoT policy		£25k	
17.	Procure and implement a Customer Relationship Management (CRM) system	Implement CRM for Enquiries to Application with consideration for the Enterprise Service Management System.	EHITSI	£30kpa for software (estimate), potential additional staffing/ consultancy costs	Q4 2023
18.	Identify governance model for procurement of all new systems, to include clarity of ownership.	- Expand IS Development request process to accommodate new systems requests - Create UWTSD policy for Software Procurement	EHITSI		- Q4 2021 - Q2 2022
19.	Review all internal student and staff surveys through a digital lens.	Create unit analysis and response plan to each survey	ALL		Within 4 weeks of each survey completion.
20.	Digitise processes to enable more efficient work practices and reduce impact on staff.	Successfully implement developments as per IS Development plan prioritisation	EHITSI		Q3 2023
21.	Enhance the quality, value and impact of data and information through implementing the Data & Business Intelligence strategy.	Write Data & Business Intelligence strategy	EHITSI		Q4 2021
22.	Establishment of a Data Governance Group to oversee data within the institution	Establishment of Data Governance group meeting regularly	EHITSI		Q4 2021
23.	Establish a Records management function within the university to ensure all digital records are systematically and appropriately managed throughout their lifecycle.	Create new team within the LLR to lead and maintain this function for UWTSD	EHLLR	21/22: £130K 22 / 23: £130K+annual increases in salaries	Q4 2022: To establish
24.	Ensure that digital services consider the WG Welsh language legislative landscape as part of its digital strategic direction of travel.	- Embed Welsh language legislation into all new projects & captured within PID. - Review existing services compliance, creating a plan for each service currently not in compliance	ALL		- Q3 2021 - Q3 2022
25.	To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content.	- Implement a web users' group - Use Site improve governance tool weekly to check for errors on site - Develop a Power BI dashboard to provide easy access to data - Develop website content policy	EHDCL		- Q1 2022 - Q3 2022 - Q2 2022 - Q1 2022

26.	Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students.	- Setup a Digital Services Task & Finish Group to look at a DS communications strategy - Develop a Digital Services Communications strategy	DoDS		- Q4 2021 - Q2 2022
27.	Work with Microsoft to enhance current Welsh language provisions within their systems.	- Setup regular Microsoft account manager meetings - Setup institutional meetings with Welsh Government and Microsoft to discuss Welsh Language Provision	DoDS		- Q3 2021 - Q1 2022
28.	Review the university's multiple service management systems with a view to harmonise into one Enterprise Service Management tool (ESM).	Implement single Enterprise Service Management System for all relevant professional services, with consideration for the CRM	EHITSD	21/22: £60k - tbc with ongoing maintenance	Q2 2022
29.	Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively.	Reading List Policy Review	EHLLR	21/22: TBC 22/23: TBC	21 / 22 Student Experience Committee Work Programme
30.	To develop a Collection Development Strategy which better supports a shift to a blended learning approach to curriculum delivery.	Ensure LLR budget 21 / 22 reflects the new agreed strategic approach to collection development.	EHLLR		Q2 2022
31.	Review and invest in learning technologies and infrastructure across the university to ensure it supports the digital agenda.	<u>Reference point 4</u>			
32.	Review our Virtual Learning Environment (Moodle) and establish a governance model and developmental plan moving forward.	Implement improved Moodle user interface, write a UWTSD VLE Policy with Terms of Reference, setup a focus group. Review hosting options	EHITSI/EHDCL	£30-60K pa for cloud hosting [if deemed necessary]	Q3 2022
33.	Investment in digital learning resources in order to support a sustainable blended learning model of curriculum delivery more effectively.	Reading List Policy Review	EHLLR	21/22: TBC 22/23: TBC	21 / 22 Student Experience Committee Work Programme
34.	Utilise JISC Digital Experience Surveys for staff and students to track progress and identify areas for improvement.	Create relevant unit surveys then analyse and create a response plan to each survey	ALL		Response plan created with 4 weeks of each survey completion.
35.	Ensure that partner institutions are fully considered as part of the university's shift to a blended learning	Ensure FE colleagues are included in the UWTSD Blended Learning Groups			- Q2 2021 - Q1 2022

	delivery model, aligning the pedagogical approach where possible. Work with FE colleagues to enhance both FE and HE digital learning outputs	- As per reference point 57, work with FE colleagues on Digital Skills - Support the LTEB (Learning & Teaching Enhancement Board) as part of L&T excellence and being part of programme development processes.			Q2 2022
36.	Review and recommend an institutional timetabling system that supports the blended learning mode of curriculum delivery.	- Implement Skooler Moodle Teams integration - Implement Celcat Calendar module for easy review of room, staff or student timetables - Implement Celcat Outlook calendar integration with Teams enabled events/appointments	EHITSI	£13K pa £2.2K pa £17.5K pa	- Q2 2021 - Q3 2021 - Q4 2021
37.	Continue to embed accessibility in software development and in the creation of learning resources, ensuring engagement of the user voice a part of this process.	Implement specific processes within existing software and learning resources development processes to ensure accessibility continues to be included in quality assurance.	EHITSI / EHDCL		Q1 2022
38.	Contribute so the blended learning curriculum reflects the richness and diversity of our university community and the wider world.	Reading List Policy Review Work with Academic Office as they develop a new model of curriculum development and validation	EHLLR	21/22: TBC 22/23: TBC	21 / 22 Student Experience Committee Work Programme
39.	To develop and implement the JISC Learning Analytics Tool across the university.	- JISC Analytics app in use by Tutors and Learning Support staff to flag students at risk. - Engagement reports available to review students at risk.	EHITSI/EHITSD	21/22: £9.5K, 22/23: £19k (currently paid by Academic Office)	- Q3 2021 - Q2 2022
40.	To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content	<u>Reference point 25</u>			
41.	Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students	<u>Reference point 26</u>			
42.	Ensure that digital services consider the WG Welsh language legislative landscape as part of its digital strategic direction of travel.	<u>Reference point 24</u>			
43.	Improve access to resources and systems for staff and	Identify services currently not	EHITSI/EHITSD		Q3 2021

	students, and develop an Access Anywhere / Single Sign On approach for all including Collaborative Partnerships (where licensing allows)	authenticated using AAD and plan to migrate. Ensure that all new services introduced to the university are authenticated via AAD and accessible anywhere. Implement Windows Always on VPN (AoVPN) and FortiGate EMS VPN.			Q4 2021
44.	Identify and develop digital practices that impact positively on staff and student wellbeing.	Develop Staff Wellbeing Strategy for Digital Services & WISA	EHLLR		Q2 2022
45.	Continue to embed accessibility in software development and in the creation of learning resources, ensuring engagement with our community as part of this process.	<u>Reference point 37</u>			
46.	To ensure the effectiveness of the university website and develop a governance model to ensure consistency of structure, design, branding and content.	<u>Reference point 25</u>			
47.	Plan more effective communication of the digital technologies, services, systems and hardware available to staff and students	<u>Reference point 26</u>			
48.	Ensure support to continue the current Digital Bursary support for students, to provide devices and financial support around digital connectivity off campus	Working with Student Services create a review report of the success of the first year including feedback of the bursary followed by a response paper to propose and secure funding for future requirements.	EHITSD	22/23: Predicted costs £600k	Q1 2022
49.	Undertake research to understand better the levels of digital poverty amongst both Students and Staff.	Liaise with Doctoral College to look at a joint funded student research post to undertake this process.	EHLLR		Q1 2022
50.	To support funding CPD opportunities for UWTSD women in tech (students and staff), engaging with external organisations to do this.	To develop sustainable CPD opportunities for the women of UWTSD, in liaison with Women in Tech and / or similar organisations and the relevant networks of UWTSD.	EHLLR	21/22: £5k 22/23:£5k	Q1 2022
51.	Develop a digital skills centre supporting academic and professional departments, to share good practice, and encourage a learning culture approach to professional development.	Establish appropriate staff, management and leadership structure within LLR to develop this area of work.	EHLLR		Q3 2021
52.	Embed digital skills requirement as part of the university's recruitment processes, as well as staff	Meet with HR to discuss	DoDS/EHLLR		Q4 2021

	induction and performance review practices	implementation • Embed digital skills into induction and ongoing CPD for postgraduate researchers.			• Q3 2022
53.	Ensure provision for specialist systems training is planned for and delivered	• Build CPD into new developments (learning technologies/Software) linked to action point 18. • Research – scope requirements from staff on skills gaps	ALL		• Q4 2021 • Q3 2022
54.	Work with FE colleagues to share best practice and resources for building digital capabilities	Ensure Digital Skills and Capabilities is an agenda item on the Blended Learning Working Groups.	EHLLR		Q3 2021
55.	Embed digital skills development within the curriculum as part of the Graduate Attributes agenda.	Develop structured framework for LLR / SU engagement, communication and feedback.	EHLLR		Q1 2022
56.	Continued development of test phishing email processes and subsequent training.	• Plan quarterly phishing exercises using existing technology. • Review and develop areas for personalised training based on provision tailored to individuals and embed cyber awareness training for staff and students to be compulsory.	EHITSD		• Q3 2021 • Q4 2021
57.	Maintain and develop standards to continue to meet the Cyber Essentials Plus accreditation.	Setup recurring regular Cybersecurity meetings	EHITSI/EHITSD		Q2 2021
58.	Develop the Digital Skills Framework and promote the benefits of the Jisc Discovery Tool, Role Profiles, Structured Learning and institutional digital resources	• Working with HR colleagues, identify opportunities for self-directed development and continue to promote these opportunities to staff • Undertake a review with HR to identify a dedicated professional development time during a normal week for staff and students • Develop a Digital Resources knowledgebase that provides a central hub for access to supporting resources, for example the Digital Skills Framework • Develop the Digital Skills Framework and promote the benefits.	EHLLR		• TBC • TBC • TBC • TBC

59.	Further enhance current AI developments to enhance student experience as well as staff support.	Implement a fully integrated University wide AI self-service chat bot with our ESM service.	EHITS/EHITSD	21/22: £40k with ongoing subscription costs to be confirmed	Q3 2022
60.	Implement a UWTSD digital assistant for students as part of an AI development project.	- Develop an AI strategy which automates delivery of student specific data on request, captures ideas and requirements for the new SA1 Innovation Matrix, and other Estates and Facilities developments involving Internet of things. - Explore opportunities for joint development of automation with WISA research students.	EHISI/EHDCL	£5k annual commitment	- Q3 2021 - Q4 2021
61.	Undertake research on new approaches to delivering digital solutions using technology and make recommendations on direction of travel and enhancements.	- Attend events such as BETT, ISE, SCHOMS, Digifest & InfoComm - Engage with companies involved in the research, design and development of digital solutions relevant to HE - Arrange for suppliers and manufacturers to demonstrate latest and in-development solutions to digital services colleagues, staff and students.	DBIM	£5K pa	- Q4 2022 - Q4 2021 - Q1 2022
62.	Working with RIES colleagues, utilise digital expertise within the institution to build external relationships, support commercial opportunities and bid for research and grant funding.	- Attend events such as BETT, ISE, SCHOMS, Digifest & InfoComm - Engage with companies involved in the research, design and development of digital solutions relevant to HE - Engage with staff to identify ideas for digital commercial opportunities. - Identify university and external third-party requirements for research and development in digital technologies.	DBIM		- Q4 2022 - Q4 2021 - Q3 2021 - Q1 2022
63.	Identify potential partners and 3rd party providers that can work with the University to enhance its use of digital services and learning technologies.	- Attend events such as BETT, ISE, SCHOMS, Digifest & InfoComm - Engage with companies involved in the research, design and development of digital solutions relevant to HE - Arrange for suppliers and	DBIM	£100K	- Q4 2022 - Q4 2021 - Q3 2021 - Q1 2022

		manufacturers to demonstrate latest and in-development solutions to digital services colleagues, staff and students. • Develop a relationship with manufacturers and suppliers to allow UWTSD to feed into their development process			
64.	Explore opportunities to work further with Schools to provide innovative bilingual digital learning opportunities and services across Wales.	• Arrange set of meetings with relevant contacts to start engagement • Identify and document opportunities and produce an action plan	DBIM		• Q4 2021 • Q1 2022