

Our Digital Transformation Strategy

2023 - 2030



Arloesedd digidol sy'n canolbwyntio ar bobl

People-centered, digital innovation

Welcome Message

With thanks to all workshop participants, contributors, authors, reviewers, and editors that have input to and participated in developing this proposed strategy.



Contents

1	Our digital opportunity	4
1.1	HE is changing fast, and new technology is creating new opportunities	5
1.2	Digital is permeating how universities educate, research, work and collaborate	5
1.3	We are well placed for digital transformation	6
1.4	Our context provides both challenges and strengths to build from	6
<hr/>		
2	Swansea University as a digital leader by 2030	7
2.1	People centred digital experiences	7
2.2	Reliable and secure technology ecosystem	9
2.3	Culture of technology adoption and digital innovation	9
<hr/>		
3	Establishing our technology readiness by 2026	10
3.1	Faculty and Student identified, urgent technology improvements	10
3.2	Data quality: everybody's responsibility	10
3.3	IT that works: renovating, securing and rebuilding our technology foundations	10
3.4	Digital confidence: for all students and all staff; and for our local community	11
3.5	Digital provider skills: for staff that need them, and for students that want them	11
3.6	Path finding pilots to lead the way for Swansea's digital transformation	11
<hr/>		
4	Providing a sector leading digital experience by 2030	12
4.1	Enable and catalyse emergence of 21st century digitally enhanced education	12
4.2	Amplify scholarly achievement with 21st century R&I support	12
4.3	Any device, anywhere, anytime people centred digital experience	13
4.4	Enable sustainable, digitised campuses	13
4.5	Digitise provision of our professional and support services	14
4.6	Develop distinctive Swansea University Digital Transformation capabilities	14
4.7	Digital models of our university as the scaffold for insight	15
4.8	Catalyse a culture of digital innovation with students and staff	15
4.9	Adjust structures, tools and ways of working to enable our transformation	15
<hr/>		
5	Investment in foundations, then in transformation	18

1. Our digital opportunity

Our university is genuinely exceptional for its place in Wales, its outstanding research, and its authentic commitment to education in partnership with our students. Custodian of Welsh capabilities and agencies, and committed to our southwest Wales communities, we have a distinctive opportunity to be leading in digital. We also have a lot of catching up to do. We are under no illusions this will be easy, and that building the culture of technology adoption and digital innovation that we need will take time and tenacity.

Fortunately, we have exceptional students, academics, and professional staff whose energy and insight will deliver the digital transformation of our university. Success will equip our students and staff with the tools and skills they need to excel in their personal endeavour, supporting our journey to zero carbon and our ambitions for Welsh language at Swansea University, and attracting the talented students and staff we need for our future success.

This digital transformation strategy sets out the goals and investments we will make to become:

- Recognised by students and graduates for outstanding digital support to their education
- Recognised by academics for enabling without forcing the digitisation of all aspects of their teaching and research
- Recognised by professional services staff for enabling digital transformation of their services
- Recognised for our success in using technology to support greater use of Welsh language across our university
- Sought by HE and public sector technology leaders for collaborations
- Recognised nationally for our digital transformation
- Benchmarked sector leading performance on value for money from investments in digital

Our OGSMI implementation plan, to be read in conjunction with this strategy document, explains in more detail how we will deliver against the goals of our Digital Transformation Strategy.

This Strategy will deliver for our students, academics, and professional staff digital experiences fit for the 21st century that:

1. Returns time to our Faculties, Schools, and our wider academic mission through:

- a. Digitised education that makes better use of student time and is easier for academics to teach and assess*
- b. Digitised research environments and tools that increase the effectiveness of scholarly activity and time available to do it (via reduced administrative loads)*
- c. Digitised dual language services that work first time and with minimal user effort*

2. Makes our data work for us, both facilitating deeper insight and creating new possibilities

3. Catalyses digital innovation across all aspects of our Swansea University mission

4. Role models and transfers digital excellence to our community, collaborators, and sector



1.1 HE is changing fast, and new technology is creating new opportunities

More swiftly than ever before technology is unlocking new opportunities for teaching, new ways of learning, amplifying our research prowess, creating novel opportunities for scholarly endeavour, and altering our academic community and how we relate to each other.

The way we work is also changing, driven by technology, in ways both exciting and uncomfortable. Information, data, and app-based services are driving extraordinary convenience in our lives and productivity in many workplaces but the scale and pace of change can be breath taking, hard to keep up with, and increasingly unsettling.

Technology has reached a point where service can be inclusively digital by default, and almost effortless at the point of consumption. Apps always in easy reach have become the norm. The best of these comprise elegantly engineered user experiences continuously improved by automated measurement of how people interact with the service and what they try to do.

Data has become a commodity, available at our fingertips from more sources than we can possibly know and trust. This offers the promise of both far ranging insight and also the pitfalls of weak or no knowable provenance: questioning the data consumes too much of our time, and then decisions lack evidence we instinctively know should be at our fingertips.

This deluge of data also provides a valuable opportunity to deploy academic skills of classification, characterisation, quantification, and research data management in the development of digital models of universities. Sometimes referred to digital twins, these models aim to house and curate all the data universities choose to hold, unlocking huge potential for insight, application and innovation.

1.2 Digital is permeating how universities educate, research, work and collaborate

Our mission is Education, Research, Civic responsibility, and supporting our university communities. Long term trends in these areas are being shaped by digital technologies including:

- 1. Education:** demand for online and hybrid learning, shifts to life-long learning, micro credentials and credit accumulation, digitally simulated realistic learning environments, self-directed asynchronous learning, technology mediated authentic assessment, learning analytics enriched with digital footprints of learners, students as partners
- 2. Research:** open access, public pre-registration, big data, digitisation of discipline archives, digitisation of production (e.g., supply chains) and of consumption (e.g., media, etc), democratisation of public data (e.g., open cities, open government), in-silica research models, acceleration of inter and trans disciplinary, tech-centric post-docs entry to careers paths in all disciplines
- 3. Workplace trends:** agile working, bring your own device, media as communication method of choice, online multi-lingual collaboration, blurring of organisational boundaries, shared service models, skills based organisational forms supplanting role-based structures, disaggregation of work, fluidity of careers, portfolio working and gamification of training
- 4. Societal trends:** app based digital consumption, conditioning to effortless digital interaction, redressing digital poverty, subscription and micro payment models, always available and always on tech, societal traction of Equality, Diversity, Inclusivity and Belonging, political traction of UN sustainable development goals, Environmental Sustainability, the Climate Emergency and finding a pathway to zero, responsible citizenship

5. Technology and management of technology trends offering new possibilities: device agnostic software as a service, cloud first, chatbots, virtualisation of everything digital, emergent usability and layout standards, mainstreaming of data science, industrialisation of cyber threats, internet of things, digitisation of physical environments, location-based services, democratisation of digital services

6. Technology originated tools creating new opportunities: applicability to education, research and our work of tools including artificial intelligence, virtual presence, geo tagging, digital simulation and gamification, process and service automation

1.3 We are well placed for digital transformation

The digital experience that our students and staff receive is demonstrably short of what they reasonably ask for, let alone what we can and should aspire to.

Consistent themes include hard to find information, fragmented data lacking quality and coverage, point systems providing wide range of user experiences spanning modern to archaic, widespread lack of joined systems, and low / no automation support for too much of our work.

Our most urgent need is to “catch up”, and because we are not hampered by poorly spent large investments over recent years, we can move relatively quickly, and have already started.

1.4 Our context provides both challenges and strengths to build from

We will do the hard work needed to leverage the distinctive strengths of our university communities. This will mean working through the policies, structures, and systems that we have inherited to build upon strengths and improve clarity and definition where digitisation needs it. We will work towards:

- Having one best way to do one thing
- Designing repeatability and reproducibility into

our outcomes for students and staff

- Applying co-creation in the way we solve problems that affect all of us
- Future proofing our technology to anticipate rather than lag need
- Adopting an agile approach and a culture of continuous digital improvement

Swansea University strengths that we will build upon include:

- Distinctively dual language for wide range of our provision
- An authentic and long-standing commitment to student partnership
- Faculties and Schools comprising sets of distinctive academic communities
- Track record of exceptional research quality and breadth
- Research groups with specifically relevant insights and expertise, including: [Cytrec](#), [Cherish-DE](#), [Computational Foundry](#), [Digital Futures](#), [Digital Humanities Projects](#), [Legal Innovation Lab](#), [Shaping the digital future with emergent users](#)
- SALT expertise supporting technology enhanced learning and digitally augmented pedagogy
- SAI expertise supporting digital inclusivity for students and staff
- SEA approach to inclusive technology employability (winner Wales Technology Awards 2022)
- Custodianship of national capabilities, agencies, and archives; for example: [Technocamps](#) and [Welsh archives](#) (e.g., Richard Burton archive, South Wales Miner’s Library)



2. Swansea University as a digital leader by 2030

Building on our strengths, we will establish digital foundations, digital capabilities and a culture of innovation to catalyse the transition to a digitally enabled university fit for the 21st century:

People centered, Digital Innovation

To achieve People Centred digital experiences, our technology teams will “renovate” and where needed rebuild our technology foundations into reliable and secure technology solutions that just work. They will do this by deploying tried and tested methods known to work for information and service rich environments with wide ranging and complex needs of the people they serve.

To make best use of our technology investment and realise our vision, we will equip all our students and staff with the confidence, skills, tools and support needed to foster a culture of Digital First in our university, and in wider society. For staff relying on technology for the delivery of their work (including module leaders, professional service heads, etc) we will equip them with additional techniques and the support needed to deliver people centred digital experiences.

In becoming sector leading on digital, we will have capabilities and agility needed for impactful and far-reaching digital innovation. Leveraging these, we will stimulate the emergence of a culture of Digital Innovation by providing time, know how, and financial support to students and staff with appetite and aptitude for digital innovation: across our university, local and regional communities.

2.1 People centred digital experiences

We will work towards all digital experiences at Swansea University becoming:

Intuitive

Our providers of information and service will contribute to, and then adhere to a set of standards covering all aspects of navigation, format and layout. Where a good standard exists for a need,

providers of information and service will use that standard by default.

Effortless

All providers of information and service will do the hard work in service and in information design to make the experience as easy as possible.

Seamless

All digital services and information will be available on any authenticated device adhering to our security standards, and available at any time and from any place – whether on campus or anywhere else. Our data and systems will be engineered to ensure the flow of information and service is predictable and consistent regardless of device used to access information and services.

Relevant

All digital services and information should be finely targeted to the known needs of our students, our staff, and of the university. To achieve this:

1. **Digital services will use information about the person accessing them to inform interactions**
2. **We will build services to meet precise needs, and not fragment our services unnecessarily**

Inclusive

All digital services and information will be inclusive by design, supporting a wide range of different personal contexts including parity of Welsh language experience, physical and learning challenges whether declared or otherwise, and conscious and unconscious biases (including gender, identity, belief, etc), differing cultural contexts, and differing socio-economic backgrounds. To achieve this, design of our digital services and information will make high use of persona-based design and user testing approaches, representative of the breadth of our university communities.

Fulfilling

All digital services and information will fulfil the expressed needs of the individual, enabling them to achieve what they are trying to do every time. To achieve this, our digital service and information design should be arranged to fulfil the entire need of each interaction in a complete end to end way.

Liberating

All digital services and information should provide opportunity for our students and staff to request additional and or different digital experiences and services, suggest improvements, and where willing to actively participate in and / or deliver improvements and innovations. To achieve this, all our digital services will incorporate mechanisms to stimulate ongoing involvement of our people in improvements to our services and our information.

Sustainable

All digital services and information will be made future ready to underpin the long-term success of our university in its mission. To achieve this, we will design in mechanisms that provide for ongoing evolution of (and in cases retirement of) digital services and data; and include total lifecycle effects into investment decisions, including playing our part in pathway to zero carbon and wider environmental sustainability of how we operate.

People-centered Digital Experiences



2.2 Reliable and secure technology ecosystem

Our technology ecosystem will evolve over time, rapidly at first and then incrementally, to provide:

1. Secure, open digital infrastructure accessible globally, engineered for safe and easy use
2. End user computing and collaboration tools that are reliable and secure on any supported device meeting security standards
3. Unified digital experience platform for finding, accessing, and receiving digital services
4. Physical spaces for collaboration, learning and research with technology on the walls, in the ceiling and in the hands
5. Automated self-service access to digital services and information via role-based permissions
6. Ecosystem of data engineered for completeness, accuracy, discoverability, and extensibility
7. Intuitive tools for data acquisition, validation, analysis, modelling, and reporting
8. Small number of university core platforms that benefit from supplier's investment, and around which specialised systems for specialised requirements can be arranged
9. Integration technologies needed to "join up" systems and data; complemented with mechanisms to incorporate secure shared service delivery across organisational boundaries
10. Supported low-code platform(s) for developing services and digital innovations
11. Information management policies and standards to protect our data and information
12. A bilingual user experience for all our communities

2.3 Culture of technology adoption and digital innovation

Staff and students will need a high level of digital confidence to ensure they can get the best digital experience possible from the digital resources, services, and tools available to them.

We will therefore invest in our students and in our staff to:

1. Equip our students and staff with knowledge and skills needed to confidently make the most of the digital environments and services at their disposal
2. Equip our providers of digital experiences – mostly academics that teach and professional support staff, sometimes students – with skills and experience to co-ideate, co-develop, and then provide people centred digital experiences

We will additionally provide infrastructure, know-how and funded opportunities for all staff and students to pursue digital innovation:

3. Fund micro projects aimed at "frugal innovation", open to bids from all students and all staff
4. Strategic investment in a series of high impact digital innovation programmes

3. Establishing our technology readiness by 2026

To achieve our 2030 vision, we first need to improve the basic things that currently frustrate students and staff, build robust and secure technology foundations, and establish the know-how, and capacity for our longer-term digital transformation. We will establish this readiness by 2026, investing to:

1. Initiate and embed Faculty and Student identified continuous improvement of technology
2. Improve the quality of our current data, via comprehensive audit and remediation
3. Supplement the Digital Foundations programme in preparation for digital transformation
4. Develop digital skills and confidence for all students and all staff
5. Develop digital provider skills for staff that need them, and students that want them
6. Deliver path finding pilots to lead the way for Swansea's digital transformation
7. Standardise digital methods and governance across the university in line with this strategy

3.1 Faculty and Student identified, urgent technology improvements

We will urgently address the immediate issues that students and staff are facing as identified by them through engagement, ongoing programmes, and analysis of survey and service desk data. We will regularise this by establishing mechanisms for gathering ideas and acting on them.

3.2 Data quality: everybody's responsibility

We have very good quality data in isolated pockets that lack completeness and joining up. We also have a wealth of data out of reach in spreadsheets and isolated systems that, once connected to our core data sets, will improve our insights and our ability to make data informed decisions.

We will therefore invest in making data quality everybody's responsibility by:

- Inventorying and mapping all our current data sets and how they flow and join
- Developing a vision for the complete set of data that we should have at our fingertips
- Identifying and remediating sources of data weakness and incompleteness
- Establishing data quality standards and methods for assessing and improving data quality
- Implement a data quality remediation programme for our core data sets
- Establish and implement an institutional Business Intelligence strategy
- Establish an institution wide framework of data stewardship

3.3 IT that works: renovating, securing and rebuilding our technology foundations

The Digital Foundations programme that is modernising our networks and strengthening our cyber security will be supplemented by investments in the tools, data infrastructure and platform consolidation needed for our digital transformation.

We **will** invest in new data capabilities needed to establish a high integrity, high performance ecosystem of data stores, backup solutions, data management and intuitive tools.

We **will** consolidate our fragmented applications and digital services onto a small number of core platforms integrated with specialist systems matched to specialist requirements.

We **will** continue to upgrade our IT infrastructure so that end user computing just works.

We **will** invest in the tools needed to govern our information efficiently and effectively within a regulatory compliant framework across the whole information lifecycle.

We will continue to invest to engineer cyber security into the entirety of our digital footprint.

We will adjust our architecture to be device agnostic, dual language, app enabled, simplified, cloud.

3.4 Digital confidence: for all students and all staff; and for our local community

To ensure that all students and staff have a parity of digital opportunity, we will: establish a capability for providing comprehensive Digital Skills and Confidence development.

Fundamental to our vision of people centred digital experiences is that the individual, not the technology determine what is right for them. To that end, we will not impose any minimum level of digital confidence on any current members of our university communities; rather we will provide opportunities to gain confidence and support in doing so whenever and wherever needed. We will, however, require a good level of digital skills for all new appointments and for all promotions.

As part of our Civic Mission and working with local partners we will additionally make available to our regional Swansea community our digital skills training, working with other regional providers, and learning from the model pioneered by Technocamps.

3.5 Digital provider skills: for staff that need them, and for students that want them

Arguably, the most valuable part of our digital transformation will be the work needed by:

1. Our educators to, over time, digitise our education and our delivery of education
2. Our researchers to, over time, amplify their research efficacy and impact via digitisation
3. Our leaders of professional service to, over time, digitise their services and service delivery

To ensure that our educators, researchers, and service heads have the support they need we will make available the tools, time and support for Digital Providers needed to support them digitising the information and services that they provide. Fundamental to how we will approach digitisation is applying "students and staff as partners" principles to the co-creation of digital solutions. Those students who participate in projects will have access to and receive the same level of support that our staff receive. The methods and tools that we develop will additionally be made available to all students for self-directed application into any projects of their own that would benefit from digital provider skills and expertise.

3.6 Path finding pilots to lead the way for Swansea's digital transformation

To inform our transformation, we will initiate pilots in the following priority areas:

- Education: digitally transform existing module(s), and develop new fully online module(s); and at least one TNE offer with fully hybridised teaching and 24/7 student support
- Research: digitally transform a full cycle of research from pre-registration through impact with one research group / department
- Campus: multi location fully interactive hybrid teaching room; data enrichment of campuses; at least one digitally activated teacher centred classroom / campus
- Student Experience: Student (as partner) designed Canvas layout of at least 1 year group / Faculty; and digitise at least one student facing process to be completely people centred
- Academic Staff Experience: Digitise one process / PSU to provide a completely people centred digital experience

These pilots will target topics in which we need to develop experience and will work with team(s) and technology closest to readiness for a digital transformation.

4. Providing a sector leading digital experience by 2030

To achieve a sector leading digital experience for students and staff by 2030, and informed by our path finding pilots, we will invest methodically in digitally transforming all aspects of our university.

4.1 Enable and catalyse emergence of 21st century digitally enhanced education

To support the fullest exploration of possible new education patterns, we will invest to enable and catalyse the emergence of a 21st century digitally enhanced education that is more flexible, and on which our current education is one of many digitally supported and enhanced patterns:

- Digitally informed curriculum re-design, including for micro credentials and CPD
- Students learning at their own pace, supplemented by digitally augmented pedagogies
- Digital assessment methods underpinned by platforms supporting academic integrity
- Availability of hybrid learning environments and support
- Enabling international reach and virtual mobility for our education (c.f., TNE)

These investments will in all cases support our education leaders as they develop our education offering, enabling them with digital and online capabilities needed to compete effectively for the students of the future.

Outcomes

1. Greater opportunities for self-directed personalisation of learning by students, underpinned by clear signposts and safeguards to improve engagement
2. Release of time to our academics through deployment of productivity tools to reduce day-to-day admin load of their teaching activity
3. Improved attainment for all students through

immersive, digitally augmented learning

4. Reusable digital learning components that will allow our education leaders to conceive, compose and launch new education offers to follow fast the evolving demands for education

5. Easy to operate classrooms – real and virtual – that support wide range of pedagogies

6. International reach through systems and secure infrastructure that allows us to project and deliver our education in other country and legal contexts

4.2 Amplify scholarly achievement with 21st century R&I support

The breadth of our academic disciplines means our research base is not only intense but also very diverse: ranging from world leading research into the impact of technology on society and novel computational architectures, to disciplines with little or no near-term technology needs other than general research tools that work with minimal effort.

To properly support all our researchers and the breadth of their research activity with technology, we will invest to amplify our scholarly achievement with 21st century research and innovation support and tools comprising:

- Research support that just works: open access, citation support, scholarly search, grant management, reproducibility of research data (RDM) and of research methods (RMM)
- Edgeless, cybersafe collaboration support for research, partnerships, knowledge exchange and entrepreneurship
- Institution wide High Performance Computing (HPC) as a managed service
- Support for academics to get started with digital enrichment of research
- Digitised university as a research environment

These investments will in all cases support our researchers and research leaders in their work, and prioritise the research technologies, support and digitisation needed to support our research and enterprise strategies.

Outcomes

1. Significantly easier to use, lower effort, research information system for all researchers
2. Wider access to scarce research resources via directories and technology enabled sharing
3. Release of time to our academics to spend on their research through deployment of productivity tools to reduce day-to-day admin load of personal research activity
4. Secure and cyber safe exchange and sharing of knowledge, data sets and research methods with extra institutional partners and collaborators
5. More opportunities for academic entrepreneurship and knowledge exchange
6. Enrichment of individual's research with new technologies and digital techniques
7. International reach through sharing research data securely and safely

4.3 Any device, anywhere, anytime people centred digital experience

Our students and staff have increasingly high expectations that their university experiences be convenient and personally time efficient, with effortless switching of language, location and device.

We will invest to create any device, anywhere, anytime people centred digital experiences for all members of our Swansea University communities:

- App-based, social media facilitated student engagement
- App-based staff portal for accessing university services
- BYOD policy, safeguards, and enablers
- Channel and language of choice for engagement with university information and services
- Digitally supported hybrid and flexible working for all students and staff, tailored to need

We are committed to achieving parity of digital opportunity for all students and staff, regardless of background. This includes providing differentiated levels of technical support based on need and each individuals own unique context, and also financial support where necessary.

Outcomes

1. Parity of digital opportunity for all students and all staff regardless of their background
2. Higher student and staff reported advocacy for their digital experiences at Swansea
3. Lower total cost of ownership of end user computing devices provided by Swansea as more staff and students take advantage of BYOD
4. Lower overall environmental impact as more staff and students take advantage of BYOD opportunity (via fewer overall devices / person)
5. Improved guest and visitor access to university services

4.4 Enable sustainable, digitised campuses

Technology has for many years been shaping new possibilities for how universities use physical spaces including augmenting spaces with a wide range of different technologies. Similarly, data about our campuses, buildings, and rooms is proliferating as is information about how we use them.

We will invest to systematically digitise our campuses and physical environment in order to make all of our physical space more useful to our students and staff, and contribute to de-intensifying the environmental impact of our activities on the physical environment:

- Technology enabled inclusive and accessible global classrooms
- AV upgrades to support wide range hybrid usage of teaching and meeting rooms

- Dual language user interfaces for any device casting of content to any screen
- Dual language digital signage, geofences, and location-based services
- RFID based identity management and access control (e.g., student card on smart phone)
- Selective deployment of Internet of Things technologies
- Data led carbon reduction and deintensification of our operations

These investments will in all cases improve the consistency and digital usability of physical spaces regardless of Department, School, and Campus.

Outcomes

1. High quality digitally augmented hybrid teaching and meeting spaces
2. Visitor friendly dual language digital signage and location-based services for navigating our campuses
3. Improved operational management of campuses via more comprehensive usage data
4. Reduced energy usage via digitally enabled optimisation of heating, ventilation, and cooling
5. Net reduction in environmental impact through targeted deintensification of operations

4.5 Digitise provision of our professional and support services

Technology has rapidly altered both the demands on professional and support services, and also the possibilities for digitisation and then automation of the provision of services.

Our opportunity is to build on the experiences and practices of existing pockets of excellence and extend these across our university. To realise the full potential of our support functions we will invest to digitise our services and the work that we do, to achieve repeatable high quality user centred dual language digital service delivery. Specific work will vary across functions, and common features will be:

- People centred service architecture for ease of service discovery and access
- Policy harmonisation and development where needed to enable digitisation
- Service digitisation and process automation
- Person centred service design and continuous service improvement
- Services channel integration (as enabler for channel of choice and seamless dual language digital experiences)

These investments will in all cases support our providers of support functions to improve the consistency and usability of their digital services.

Outcomes

1. People centred, digitally provided support and administrative services
2. More interesting and fulfilling work for our professional services and support staff
3. Personal development (digital provider skills) for students and staff digitising each service
4. Data quality improvements through validation at input, and system generated outputs
5. Service management improvements through automated service level measurement
6. Substantial cost and service quality benefits

4.6 Develop distinctive Swansea University Digital Transformation capabilities

Practically, the scale of work we need to do exceeds our current capacity, and the jobs market for digital transformation skills is not going to be able to fulfil our needs. This challenge is also an opportunity: the latent potential in our students and staff can, given the opportunity and with development, provide the capacity that we need to deliver our digital transformation:

- Digitisation readiness: preparing our education, research, and services for digitisation

- Digitisation implementation: co-creation of digitised services, education, and research

To grow the skills and capacity that we need to deliver this work, we will invest to develop distinctive Swansea University Digital Transformation capabilities comprising:

- Dual Language digital transformation training and development programme
- Range of entry paths including for Swansea University recent graduates and post docs
- Future SU digital leaders' development track

These investments will create cohorts of talented, motivated, and skilled people committed to the digital growth and transformation of our university.

Outcomes

1. Digital transformation skills in the quantities that we need to deliver our transformation
2. Significantly lower cost of acquisition of digital skills and capabilities we need
3. Improved employability for graduates taking part in the programme
4. Export of digital talent to our regional and national economy
5. Future potential to establish a distinctive new centre for Digital Transformation

4.7 Digital models of our university as the scaffold for insight

Our university is already a very data rich place. As digitisation progresses, the data at our disposal present an extraordinary opportunity for insight via the creation of digital models representing most aspects of our university.

To access this opportunity, we will establish, extend and maintain digital models of our university as the scaffold for insight. We will use these models to organise all our digital information: Education, Research, Student and Staff experience, Campuses and physical environment, Work, potential students, students, staff, community partners, collaborators, suppliers, and alumni.

Outcomes

1. Enhanced data analytics and insights via automated measurement of digital interactions
2. Reduction in time elapsed and cost incurred to provide new digital solutions
3. Lower total cost of digital solutions via "future proofed" data constructs and models

4.8 Catalyse a culture of digital innovation with students and staff

The distinctive breadth and depth of our academic, professional, and student expertise provides a real opportunity to translate insights and perspectives into valuable digital innovations. We will promote this by establishing conditions for emergence of a culture of digital innovation through:

- Seeding now our future digital innovation culture
- Establishing secure windows onto university data sets
- Funding strategically directed digital innovation

Outcomes

Specific outcomes will be determined by each initiative, and contribute to:

1. Emergence of a culture of digital innovation
2. Commercialisation opportunities from digital innovations
3. Staff and student fulfilment through the achievements of their innovations

4.9 Adjust structures, tools and ways of working to enable our transformation

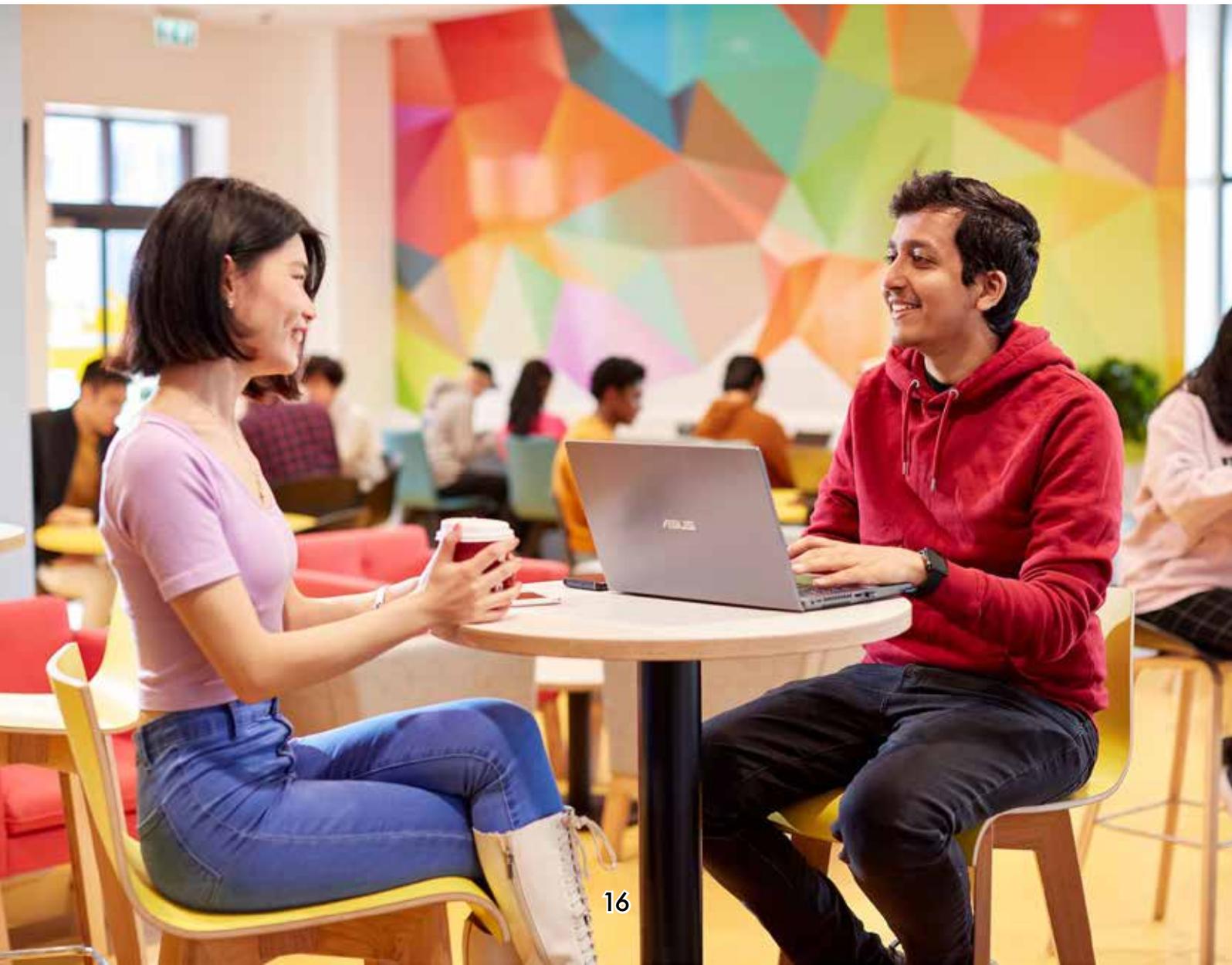
Our digital transformation will move our information and our work into a digital medium, securely accessible from a wide range of devices, and arranged for the ease of our students and staff.

To clarify and recognise new skills needed to work in a dual language digitised way, we will invest to adjust structures, tools, and ways of working to enable our digital transformation, including:

- Swansea University dual language digital experience and service interoperability standards
- Competency framework for providers of digitised information and services
- Adjustments to recruitment and promotion policy to select for needed digital competencies
- Adjustments to talent management policy to stimulate emergence of digital leaders

Outcomes

1. Clarity for all staff about digital skills that will help them progress their careers at Swansea
2. Managers and leaders with increased capability and confidence for digital transformation
3. Better retention of staff with highly transferable and marketable digital skills
4. Recognition and reward for those staff that choose to increase their abilities to provide digitised information and services that are people centric





Digital Leadership by 2030

IT that works by 2026

1. Faculty and Student identified urgent technology improvements
2. Data quality: Everybody's responsibility
3. IT that works: renovating and building our technology foundations

Digital Confidence for all students and all staff

4. Digital confidence: for all students and all staff; and for our local community
5. Digital provider skills: for staff that need them, and for students that want them

Pathfinding pilots to inform Digital Tx

6. Education, Research, Campus, Services

Building our future digital culture

7. Swansea University Digital Tx capability (incl. trainee scheme)
8. Digital models of our university as scaffold for insight
9. Catalyse culture of innovation with students & staff
10. Adjust structures, tools and ways of working to enable our transformation

Sector leading digital experience by 2030

11. Enable and catalyse emergence of 21st century digitally enhanced education
12. Amplify scholarly achievement with 21st century R&I support
13. Any device, anywhere, anytime user centred digital experience
14. Digitise our campuses and physical environment
15. Digitise provision of our professional and support services



People-centered,
digital innovation

5. Investment in foundations, then in transformation

Achieving a sector leading digital experience by 2030 is aspirational, challenging, and is also achievable. A key pillar of our approach to digital transformation is to make a strength of the academic diversity of our Faculty communities, of the talent of our students, of our academic culture, and areas of academic expertise that can contribute to our digital vision and achieving it.

We will adopt and formalise Students as partners and Staff as partners approaches to delivering projects, including the support arrangements needed to make this work in practice: time, money, training, coordination, oversight, and governance.

Our transformation plan will be arranged in two broad phases:

1. A wider based Digital Foundations phase
2. Digital Transformation of Education, Research, Services, Campus, and Student and Staff Experiences

We will make wide use of pilots working with Faculties and Schools to learn what works, and to ensure that solutions fit needs. Wherever possible, we will adopt a “one best way” for processes and policies that can be harmonised and where local variations don’t add institutional value.

Our implementation plan will reflect different digital start points, as well as different Faculty, School, and Department trajectories. We will align our plan to a common aspiration that is high.

In practice, this means that we will originate and deliver hundreds of projects over coming years, only a small handful being traditional large scale IT projects. Many will be local projects in Faculties, Schools, and Departments, some of which will scale more widely. Our implementation plan sets out our initial projects and a longer-term roadmap.





digitalstrategy@swansea.ac.uk