UNIVERSITY *of*
STIRLING

DIGITAL STRATEGY 2024 - 2030

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EXECUTIVE SUMMARY

The University of Stirling is embarking on a digital strategy aimed at enabling its ambitions, fostering agility, responsiveness, scalability, and safeguarding against future disruptions.

In recent times the University has made significant strides in digital transformation, including the development of online services, enhancements to the virtual learning environment, and upgrades to support hybrid teaching. As a result, the University is recognised as a leader in the education sector's digital evolution.

The digital strategy is driven by the need to stay competitive in the evolving education landscape, characterised by an ongoing "digital arms race" and the imperative to deliver an exceptional digitally enabled student experience, both on and off-campus. This strategy also aligns with the university's commitment to Mission-Oriented Research (MOR) and solving real-world problems. Throughout the digital strategy there is alignment with the University Strategy, and a shared vison focusing on delivering for our People, Place and Purpose.

The guiding principles of the strategy emphasise accessibility, information security, continuous improvement, internationalisation, simplification, digital skills development, community-centeredness, sustainability, and inclusion. These principles underpin the digital strategy's contribution to the University Strategy's five key areas of Students, Staff, Research, Engagement and Health and Well-being across the following domains:

Learning and Teaching
By 2025, we will have advanced digital's contribution to pedagogic practice and set the standard in high quality digital learning experiences across blended, hybrid and fully online provision.

Student Experience
By 2026, there will be significantly enhanced student experience through dynamic and impactful digitally enabled on and off-campus environments for all students.

Staff Experience
By 2027, we aim to modernise our systems by integrating automation and AI, creating a seamless institutional systems landscape.

Enhance staff experience across campuses with smart technologies for safer, more efficient work, fostering collaboration and skill growth to support progressive, agile work practices.

Research
By 2027, provide the infrastructure and services which enable MOR, and digitally advance the capabilities of our research community.

Smart Campus
By 2030, we will have digitally enabled and improved space utilisation and minimised our environmental impact through the application of smart technologies.

Data and Analytics
By 2030, we will transform our institutional culture, tools and approach toward data and analytics, adopting fit for purpose architecture and integrated data management systems to derive insight and a competitive edge.

The successful delivery of these themes centres on the implementation of a rigorous programme and project management framework that ensures discipline across all deliverables. A cornerstone of ongoing digital transformation is the development of advanced digital competencies in our staff and students. Further, by equipping them with knowledge in the use of Artificial Intelligence, Robotic Process Automation, and innovative methods of information discovery, we prepare them to succeed within the evolving technological landscape.

This comprehensive digital strategy underscores the University of Stirling's commitment to embracing digital innovation, ensuring the highest standards of education and research, and creating a supportive and inclusive environment for its diverse community. Through these strategic initiatives, the University aims to remain at the forefront of digital transformation in higher education, the region and globally, delivering long-term value and competitive advantage.

INTRODUCTION

The Digital Strategy is an enabler of our University's ambitions.

It is iterative and indicative of a direction of travel that achieves, through the agility of the technology, responsiveness, scalability and ultimately protection against future disruption in whatever form that takes. Meeting the aims of our Digital Strategy underpins all aspects of our future capability and growth.

In recent years, the University of Stirling has accelerated its programme of development and deployment of digital systems and resources.

We have:

- Further developed online digital services, such as virtual conferencing and digital access to business systems

- Improved the content and navigation of the virtual learning environment

- Upgraded University learning spaces to support hybrid synchronous/asynchronous on-campus and off-campus teaching

- Secured the digital services that support our staff and students to work safely anywhere and at any time

- Implemented a sector leading cloud service and upgraded WiFi infrastructure.

These were critical in the sudden pivot to off-campus operation and in support of the transition back to campus and the continuous operation in a hybrid mode brought about initially by the pandemic. The wider education sector now views the University of Stirling as a highly influential leader in its drive to protect universities from disruption and to provide a platform for future success with its blend of integrated digital and physical technologies.

Disruption can take many forms and the impact on the sector will continue to be significant. A digital 'arms race' is underway in the highly competitive education environment as universities seek to gain advantage through offering multiple modes of education delivery. Delivering an excellent and digitally enabled student experience both on and off-campus is vital to our future success as well as the adoption and resourcing of MOR aimed at solving real world challenges and problems.

The University of Stirling is already well placed to compete and lead in this environment. However, the pace of technological change is increasing exponentially and the demands from our communities require us to support agile working; ensure engagement with the University is a positive one for all through effective and efficient processes 24/7/365 and that the student experience is digitally enabled and supported whether on or off-campus.
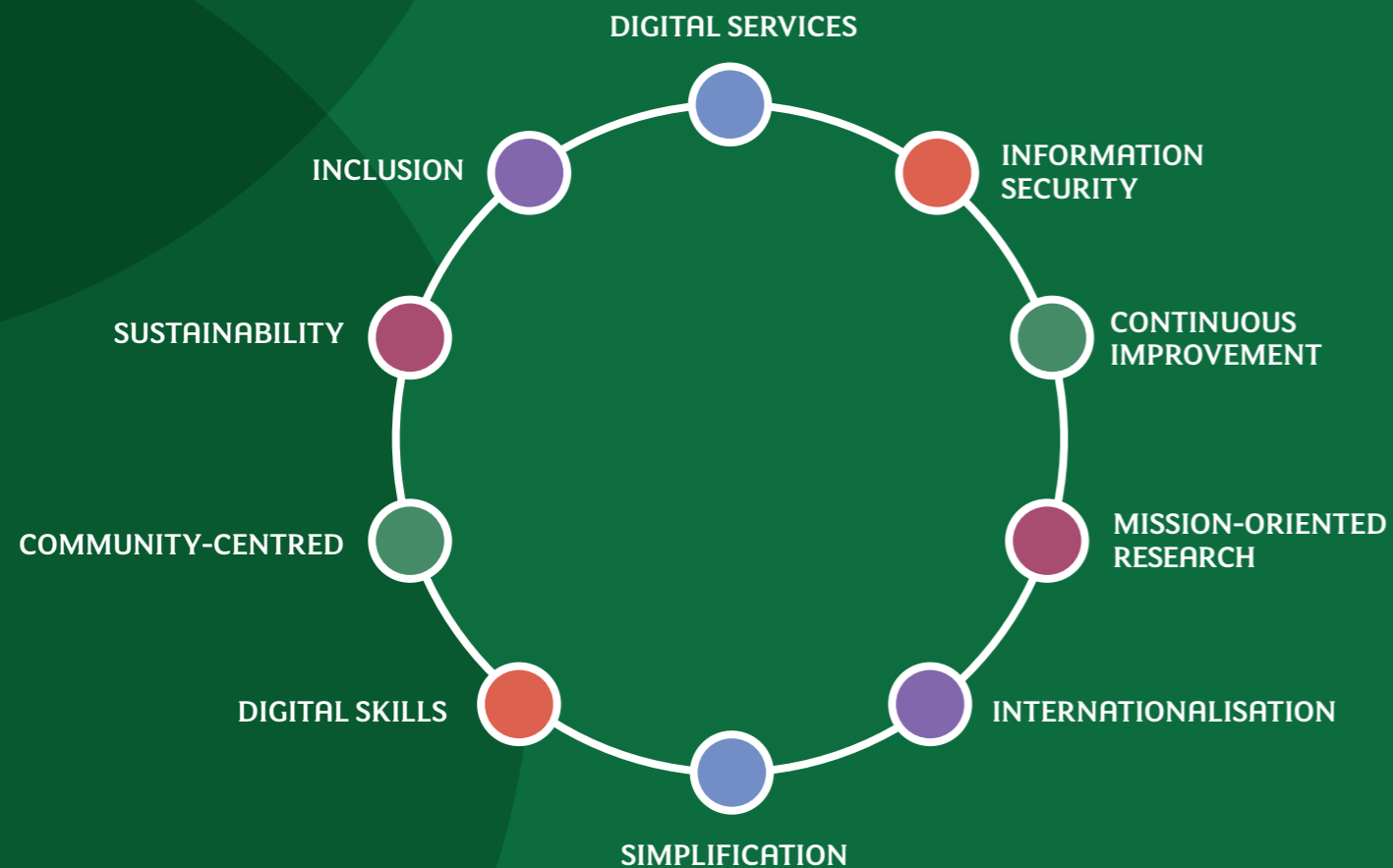
It is clear we must also exploit opportunities to engage with international cohorts; leverage expertise from around the world and promote strong and positive relationships with our regional and global communities. Digital is the connectivity and foundation at the heart of all we do, and technology underpins the systems and services that will support the ambitions of the University.

Dr David Telford
Executive Director of Information Services

OUR GUIDING PRINCIPLES

Supporting the aims of the University in delivering excellence in teaching and learning, innovative research, and business efficiency.

DIGITAL SERVICES

INCLUSION

INFORMATION SECURITY

SUSTAINABILITY

CONTINUOUS IMPROVEMENT

COMMUNITY-CENTRED

MISSION-ORIENTED RESEARCH

DIGITAL SKILLS

INTERNATIONALISATION

SIMPLIFICATION

We will achieve this through the provision of highly available, sustainable, digital technologies, services, recruitment and digital skills development.

- Our sector-leading digital services will be accessible, equitable, intuitive and developed in response to the needs of all our communities

- Information Security is at the centre of all that we do, ensuring a safe and secure university environment

- Continuous improvement and underpinning investment are targeted at delivering an excellent student experience

- Our technologies will support and enable effective MOR

- We will utilise technologies to internationalise our activities in support of cross-cultural sharing, learning and research

- Minimum Viable Process (MVP) and Lean methodologies will be adopted to simplify, rationalise and reform University business

- Digital skills are essential to our University communities, and we will work across boundaries to support the continual development of our staff and students

- Our approach to digital will deliver proven cutting-edge (not bleeding edge) technologies, with cloud-first and customer-centred design at the heart of this

- Sustainability and environmental impact will be carefully scrutinised, from procurement, through to implementation and operating practice

- Our technologies and services enable accessible, diverse and inclusive learning and working environments for all.

Engagement

Digital empowers the University of Stirling to be a force for good regionally, nationally, and internationally.

The University of Stirling pioneers digital leadership, channelling substantial resources into education, research, and collaboration. By sharing our digital expertise and partnering with local organisations like the NHS, Councils, SMEs and Scotland's International Environment Centre (SIEC) we will drive digital progress in our region. We are committed to innovating in digital technologies to enhance global education, research, and stakeholder experiences.

Hearing the voice of our communities
Digital has become synonymous with change. This strategy supports our people through leading and implementing change using a community-centric approach to designing, delivering and supporting a broad portfolio of systems and services.

Technology continues to evolve faster than ever, presenting challenges and opportunities that require collaboration and coproduction at the heart of the University's approach to exploiting digital. Whilst actively listening to our communities is part of our DNA, we cannot rest on our laurels. Widening the adoption of standards such as Customer Service Excellence (CSE) will ensure that our communities are placed at the centre of our digital roadmap, and that customer engagement, satisfaction and feedback drive continuous improvement and innovation across the University.

Programme Management Office

Our Programme Management Office (PMO) deploys a proven methodology for programme and project management to successfully deliver University projects.

Effective systems analysis and the mapping and management of business processes enables us to drive continuous improvement in our digital systems and services.

To realise our future ambition, we will grow and evolve the PMO to centrally support our new University strategy, providing faculties and services with expert assistance to deliver their academic and business objectives, and by leading our community in the development and practice of standardised project management methods.

Transforming the PMO: A University PMO will enable effective resource and skills management and the realisation of benefits across our portfolio of digital projects.

The Drive to Digital

Our theme-focused strategy going forward is to build on our capability and create new and innovative opportunities for success. The journey to digital is a complex one. The primary purpose is to take this complexity and deliver excellent functional and purposeful technology in support of our People and Places.

The University of Stirling operates a modern hybrid, cloud and on-premise IT Infrastructure that is highly resilient, recoverable and efficient at its core. Fundamental to this, our sector leading Enterprise Cloud architecture approach delivers operating efficiency through Automation, shared multi-use, on demand processing, storage, and backup that operates 24/7/365. This is the transformational platform on which we build our digital success delivering a wide range of applications and services for our People.

Innovation is supported by Application Development that uses modern approaches such as ITIL and DevOps, employing version control and automated build, test, and delivery tools. The University's future is a modern digital delivery mechanism using cloud based serverless computing with robust software infrastructure to operate efficiently.

The communications network connects our people wherever their place of operation might be with digital services. It is being further modernised to deliver intelligent WiFi, Internet of Things (IoT) and personal location-based services. This network functionality is in continuous development to support modern applications and security.
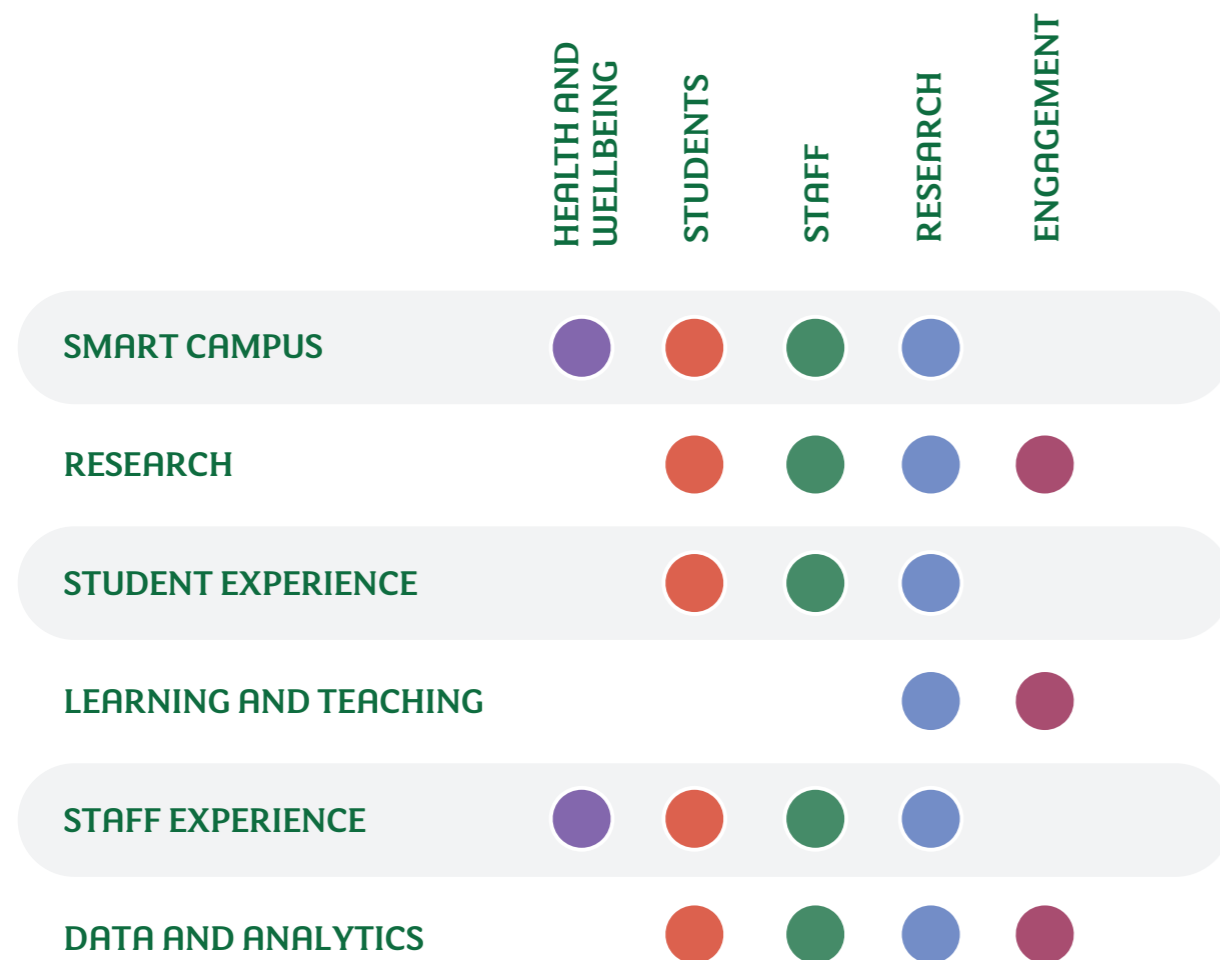
Implementing a software defined overlay across the new infrastructure will deliver benefits including segmentation for security, Agile reconfiguration and automation to operate a complex environment safely, securely and efficiently wherever our people are in the world.

Security is at the centre of all we do, from the tendering and selection process we consider, the security of our systems, insisting on SSO and MFA, proof of security standards and through practical penetration testing. These services support the University's strategic plan over its three key institutional enablers, People, Place, Purpose. Faculties and departments are supported to access available expertise in business innovation, information and process improvement capabilities.

Our digital journey is enabling cross university process improvement that will enhance efficiency and enhance the student experience. Vital to all this activity is the platform and services in support of recruitment, internationalisation, and scaleable services anywhere, anytime.

DIGITAL STRATEGIC ALIGNMENT

Our digital strategy plays a critical role in realising the University's strategic goals. The digital strategic themes closely align with the five priority areas of focus within the University strategy, as outlined below:

	HEALTH AND WELLBEING	STUDENTS	STAFF	RESEARCH	ENGAGEMENT
SMART CAMPUS	●	●	●	●	
RESEARCH		●	●	●	●
STUDENT EXPERIENCE		●	●	●	
LEARNING AND TEACHING				●	●
STAFF EXPERIENCE	●	●	●	●	
DATA AND ANALYTICS		●	●	●	●

LEARNING AND TEACHING

By 2025, we will have advanced digital's contribution to pedagogic practice and set the standard in high quality digital learning experiences across blended, hybrid and fully online provision.

Aims

1.1 To contribute to the advancement of pedagogical practice and be a sector leader in high-quality blended, hybrid and fully online learning and teaching

1.2 To develop our learning spaces: creating 'spaces for people' that support active learning, collaboration, and contemporary pedagogy

1.3 To bring together a suite of digital learning technologies into a coherent platform for learning that delivers on the University of Stirling experience whether blended, hybrid or fully online

1.4 To support faculties in internationalisation

1.5 To support international students in their access to information and technology whether they attend the Stirling campus, online, or in-country through one of the University's global partners

1.6 To integrate a coherent suite of learning technologies that enhance assessment, feedback, student engagement and skills development, providing a sector-leading student experience

Delivery

People

- Work collaboratively with faculties, professional services and students to advance pedagogical thinking and practice with particular focus on the digital elements of blended, hybrid and fully online provision

- Learning and Teaching Enhancement will deliver a comprehensive training and development programme for academic staff with particular focus on the digital elements of blended, hybrid and fully online provision

- Introduce a sector-leading Digital Teaching Award based on the Jisc Digital Capabilities Framework, ensuring all staff are confident and capable of providing students with a high-quality digital learning experience

- Design an approach with the integration of technologies to support engagement with international cohorts and solely online students

- Inform and develop staff skill in digital to advance learning, teaching and research and to fully exploit the opportunities digital offers

Place

- Further develop our blended and hybrid teaching capability through the continued design and development of high-quality technology enabled learning spaces that support instructor-led active learning, new digital services and peer collaboration, using AV over IP to connect spaces to online students and international locations

- Integrate VR, Augmented VR, and holographic technologies for teaching and skills labs, revolutionising the skills lab experience through a novel digital approach that is immersive and enhances both the in-lab and virtual learning experiences

- Build on the current virtual learning platforms and integrate the technologies that span on-campus physical and virtual learning spaces providing a uniquely University of Stirling learning experience

- Offer high-quality online provision across free short courses, micro-credentials and full programmes, supported by a coherent ecosystem of learning platforms and related technologies

Purpose

- Supporting and enabling the Learning and Teaching strategy to foster personal and academic growth, nurture creative, responsible, skilled, and resilient graduates, through the provision, training in and use of exceptional digital tools, systems, and services

- Develop and secure digital assessments suitable for University of Stirling and external accrediting bodies

- Link teaching and learning with research by providing opportunities to access High Performance Computing and other researcher-based resources

- Introduce a consistent approach to learning design for new and existing curriculum to ensure that students experience a quality digital experience in blended, hybrid and fully online courses

- Actively engage with developments in generative artificial intelligence and its application in learning, teaching, and research

STUDENT EXPERIENCE

By 2026, significantly enhance the student experience through dynamic and impactful digitally enabled on and off-campus environments for all students.

Aims

2.1 To integrate a range of technologies that enhance assessment, feedback, student engagement and skills development

2.2 To personalise the 'digital' student journey and enhance the student experience from enquiry to graduation and beyond

2.3 To improve the experience of students who seek help or require to engage with faculties and services

2.4 To blend and integrate social and learning spaces, traditionally thought of as being separate entities

2.5 To bring together a suite of digital learning technologies into a coherent platform for learning that delivers on the University of Stirling experience

2.6 Internationalise our services to ensure a welcoming and supportive environment for all

2.7 To support international students in their access to information and technology on-campus or in-country

Delivery

People

- Develop digital engagement approaches for web and social media that brings personalisation to the experience

- Mitigate the impacts of digital poverty and ensure all can connect to university services anywhere, anytime

- Bring coherence to the experience of students engaging with the university by exploiting automation, simplification and 24/7/365 access to services and support

- Design and implement a digital skills element for the curriculum for adoption into all programmes

Place

- Build on the current virtual learning platforms through integrating technologies that span on-campus and virtual learning spaces, providing a uniquely 'University of Stirling' learning experience

- Internationalise through digital translation and multi-language digital texts and journals

- Focus the pedagogical and practice skills development to deliver a transformative learning experience through a well-designed physical and virtual integrated learning experience

- Integrate digital and on-campus induction into a coherent extended induction to assist all students

Purpose

- Deliver on a programme of Customer Service Excellence (CSE) and evidence a positive, quality experience for students

- Design and integrate a package of applications and services to support on-campus and online learning, teaching and research

- Design an integrated approach toward technologies to support engagement with international cohorts and those studying wholly online

- Introduce automated or holographic personal assistance to extend online help and service

STAFF EXPERIENCE

By 2027, we aim to modernise our systems by integrating automation and AI, creating a seamless institutional systems landscape. Enhance staff experience across campuses with smart technologies for safer, more efficient work, fostering collaboration and skills growth to support progressive, agile work practices.

Aims

3.1 To transform our operational and academic infrastructure through strategic investment in an integrated ecosystem, combining Enterprise Resource Planning (ERP) with 'best of breed' business and academic software. This synergy will unify core systems into a single, smoothly operating platform. This overhaul is set to empower advanced automation and robotics, dramatically improving transactional efficiency and effectiveness

3.2 To embrace further a digital-first strategy that leverages the security, elasticity, and efficiency of cloud services, while concurrently maintaining a robust on-campus presence for complex systems and services, ensuring a powerful hybrid approach

3.3 To enhance student engagement with the University, both for potential and current students

3.4 To pioneer innovative administrative practices by optimizing the synergy between people, processes, and systems, resulting in a highly efficient and effective administration service with the capacity to operate at scale

3.5 Investing and embedding digital technologies that attract, engage and retain talented staff and students to our University

3.6 Contribute to the transformation of the academic and administrative workspaces into a digital operating environment to support anyspace = workspace

3.7 Provide an agile digitally enabled and integrated cross-service approach to staff and student support

3.8 To internationalise our activity through leveraging our experience of contract and vendor management and technological solutions to become the preferred university and external partner

3.9 To deploy digital preservation technologies to support streamlined information governance, protecting business continuity and institutional memory

Delivery

People

- Deliver enhanced digital services in support of student recruitment through to enrolment by integrating automated processes, digital personal assistants and automated decision making and payment functionality

- Develop a Digital skills hub for staff that enables and empowers the use of digital that underpins all activities

- Design, develop and implement a new People system to deliver efficiency and effectiveness across business processes, improving staff experience and leadership oversight of people related functions, integrating successfully with the Finance applications to reduce complexity

- Extend the use of digital collaboration tools and mobile working technologies to support agile working and in support of work anytime, anywhere

Place

- Re-imagine our physical and virtual infrastructure and storage as a hybrid on-premise and in-cloud virtualised service. To deliver an expandable, elastic, hybrid, integrated, and secure infrastructure that supports agility and growing business and research data requirements

- Contribute to the redesigning of campus space so that all space is social, learning or touch down space

- Design and deliver a one-team multi-channel administration support model for staff and student support to include SACS, IS, IT, Finance and Estates

- Continually invest in our Business Systems to expand their support to the University, providing the agility to adopt new practices that simplifies and improves existing and new Minimum Viable Processes. This will reduce the cost of complexity

Purpose

- Create digital opportunities to support the People strategy, facilitating colleagues in developing and sustaining fulfilling careers, while utilising collaborative tools, data, scenario planning capability and analytical technologies as the foundation for achieving our ambitions

- Building on our Programme and Project management methodology, collaborate on a Minimum Viable Process (MVP) approach to process redesign and deploy Artificial Intelligence and Robotic Process Automation into areas where the user experience can be enhanced and accelerate the performance of our processes and engagement

- Where possible move existing large scale standard application services to a highly available and resilient University of Stirling cloud platform

RESEARCH

By 2027, provide the infrastructure and services which enable Mission-Orientated Research, and digitally advance the capabilities of our research community.

Aims

4.1 To empower the researcher whether in the field or on-campus with the tools to collaborate, record and analyse

4.2 To deliver high quality local and international collaboration technologies to support peer collaboration, skills sharing, research practice and research resources

4.3 To provide High Performance Computing (HPC) for advanced processing and analysis of complex and big data

4.4 To have HPC available anywhere, anytime in support of fieldwork and real time data analysis

4.5 To provide opportunities to share lab activity and outputs locally and internationally with collaborative partners and research students

4.6 To develop and grow the University's digital archive collection for future research purposes, through continuous programmes of digitisation and the digital preservation of born-digital information, media and other materials created by the University

Delivery

People

- Transform researcher digital services, developing a researcher focused online suite of research tools and advanced collaboration capability

- Design, develop and implement self-service, on-demand digital services for researchers

Place

- Support field work with virtualised research services capable of running HPC services remotely on any device

- Develop skills labs with integrated AV and collaborative working technologies to deliver lab work experience

Purpose

- We are committed to co-production in support of the Research strategy delivering world-class digital systems that empower our research community, integrating cutting-edge digital infrastructure as a key enabler. Through this initiative, our University aims to establish itself as a leader in digital-enabled research excellence, setting new standards in academic and practical innovation

- Develop and implement on-demand virtualised HPC and a virtualised research digital lab concept

- Create on-demand, self-service research computing and storage in support of funded projects

- Develop certified digital security services to protect commercially sensitive research applications, datasets and sensitive data items

SMART CAMPUS

By 2030, we will have Digitally enabled and improved space utilisation and minimised our environmental impact through the application of smart technologies.

Aims

5.1	To see all space as touch down space	5.6	To go contactless for access control to accommodation, labs and key resources
5.2	To implement digital to operate all spaces as social, learning and office environments and when not scheduled for teaching can be used 'on demand'	5.7	To maximise space management where information is gathered on room heating, lighting and occupancy and services dynamically allocated
5.3	To combine technology and space to offer immersive experiences of the curriculum, research, administration, and the campus	5.8	To provide security to those working on-campus
5.4	To support wayfinding for all our communities. From your position find locations, resources, and services	5.9	To detect failing services and report
		5.10	To use digital to support an intuitive navigation and view of the campus
5.5	To improve space utilisation through informed space usage and dynamic selection and allocation of space	5.11	To contribute to the promotion of a healthy campus

Delivery

People

- Use integrated digital technologies to inform users and communities on how to use the campus, proactively offer choice and interaction with the campus and its services
- Capture data to inform and develop inclusive and equitable access to the campus
- Design and deliver using IoT comfortable, warm, light, safe and connected spaces with technology enabled energy management
- Develop reporting on service usage via IoT data gathering and transform our thinking on sustainable space utilisation and service requirements

Place

- Digitally enabled IoT devices that report on use, activity, and performance
- Implement connected IoT for all building services
- Interconnect spaces via AVoIP to support flexible space use
- Implement on location room scheduling and booking system
- Connect all rooms using an integrated 'At door' information screen and booking system
- Design digitally enabled spaces for multipurpose use offering work, study, collaboration and sharing technologies across all spaces
- Consider biometric access control to support lone working, safe working, and access to controlled environments cultivating a sense of safety
- Develop and implement beacon capability to support emergency scenarios and lockdown capability
- Ensure space is open, accessible, and digitally enabled to be 'frictionless by design' in support of a vibrant campus

Purpose

- Champion the integration of digital solutions for monitoring, reporting, and controlling University spaces, in alignment with the Estates strategy and sustainability goals
- Adopt a 'living lab' approach to the campus that gathers non-personalised data, informs on usage patterns and uses AI to inform improvements

DATA AND ANALYTICS

By 2030, we will transform our institutional culture, tools and approach toward data and analytics, adopting fit for purpose architecture and integrated data management systems to derive insight and a competitive edge.

Aims

6.1 Evolve the institutional culture associated with our data landscape, empowering users to engage with data in a progressive manner, developing skills in data management, data analysis, and data modelling

6.2 To establish a disciplined Information Architecture that ensures an improvement in data governance, quality and consistency across all academic and business systems

6.3 To establish an Enterprise Architecture (EA) that creates a unified enterprise-wide digital environment and user experience in which the core systems are integrated across the University

6.4 To deliver a future-proofed reporting and analytics approach to inform University business decisions, academic support of students and research opportunities

Delivery

People

- Adopt a role-based approach to information dissemination to ensure that the right users have access to the right data sets

- Establish a community of best practice to foster collaboration and knowledge sharing around good data use and presentation standards

- Implement a progressive training and development approach to raise data and information literacy and stewardship standards, empowering users to maintain, interpret and use data to drive informed business decision making

Place

- Differentiate between system-based operational reporting and Management Information through building an integrated reporting hub serving as a one-stop-shop for system level data outputs, correlated management information and modelling tools

- Enable easy access to and sharing of reports, dashboards, and visualisations in a controlled and secure manner

- Provide a single platform for Management Information with integrated scenario planning, using a consistent and intuitive data set for agile use

Purpose

- Ensure secure, accessible, understood, and trusted data that is consistently and responsibly used to enhance interoperability, reliability, and informed decision making within our community

- Raise awareness of EA and begin the work to establish the University approach in support of agility

- Standardising the data between systems, and developing a centralised integration hub and associated technologies that significantly improves access to timely, robust and consistent information

- Implement social media tracking and analytics to inform on reach and performance

- Implement and develop Master Data Management to reduce duplication, standardise data and improve data quality

- Map and define the University of Stirling information architecture and then progress to assessing the University EA capability model

Digital Skills

Digital skills are fundamental to the successful implementation of this strategy and in responding to a world where technological change is accelerating.

Staff and student expectations are changing as they demand more from our applications and systems in support of their learning, teaching, research, and work. In partnership with colleagues across the University we will respond to any digital skills gap across our staff and student journeys. Digital skills development will be supported through staff induction, annual review and investing in ongoing skills growth.

"The rapid alteration in the role of technology in education and everyday lives was one of the stark features of the pandemic, accelerating trends already under way. Digital skills will thus be ever more vital in the coming years for all the activities of the University and the wider economy and society. It is critical therefore that we enhance the digital skills of all our staff and students and deploy these across our learning and teaching and other activities."

PROFESSOR LEIGH SPARKS

Digitally fluent workforce

- For our community, we will invest and prioritise skills growth; embedding digital skills across our core activity, ensuring our graduates and staff are equipped to succeed in a competitive digital world

- An agile digital culture

- An academic digital skills programme to ensure the skills to exploit digital

  - Enabling staff to identify their own digital skills gaps and take ownership to develop their own skills

- Empowering staff to be vigilant and remain safe across digital environments with access to digital and information security development and awareness

- Encouragement and support for digital innovation

- Digital learning embedded as part of our approach to People Planning

Digitally fluent students

- Digital skills programmes for learning and study

- Digital skills as part of the curriculum; preparing students for future careers through pathway specific digital learning

- Exposure to technologies related to career paths

- Managing the risks and threats of internet and social media

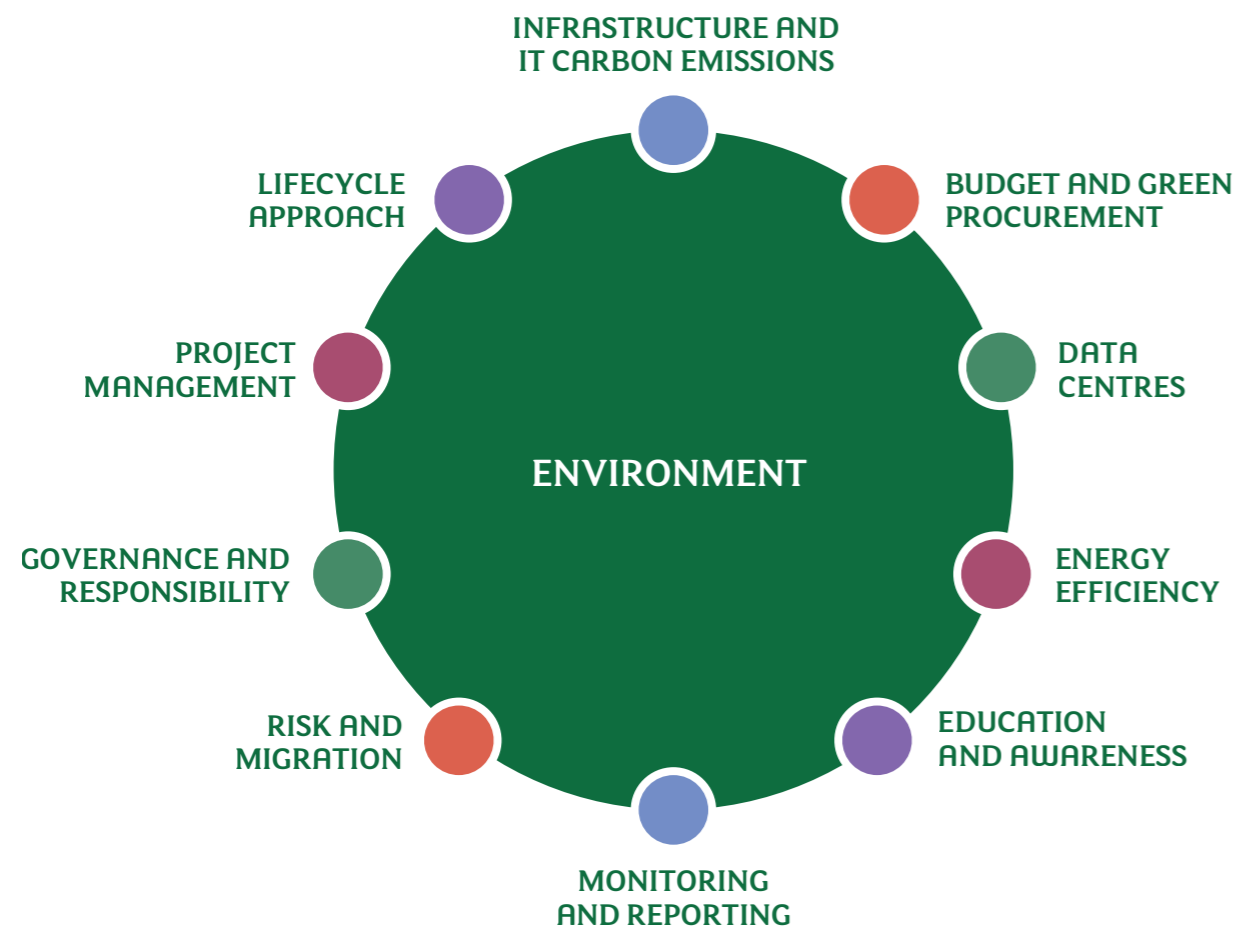# Sustainability and Greener ways of working

The University of Stirling is working hard to lower our institutional carbon footprint and support cleaner, greener ways of work.

Digital supports the University's Strategy, through sustainable IT, with the aim to drive the reduction of environmental impact, using smart technologies to improve the environment for our staff and students.

All new digital implementations will adopt best practice within their projects, whilst embedding knowledge of sustainability and increasing awareness of the impact of digital on the environment. Procurement of hardware, software, and systems plays a critical role in embedding sustainability, and ensures that the environmental impact of the decisions we take are understood and evidenced. We will strive to reduce our overall power consumption through careful resource

management and implementation of a carbon accounting system to help the University measure its CO_2 emissions.

Our staff are equipped with fit for purpose devices to suit their workstyle. This will support a reduction in the overall carbon footprint of our staff by reducing the need for travel as meetings and collaboration are possible through the provision of software. We will ensure through the procurement process that new systems and services are available remotely and 24/7/365 to support the needs of our staff and students. For those based on-campus, we also drive a paperless workplace approach with staff making use of appropriate technologies to replace the need for printing.

INFRASTRUCTURE AND
IT CARBON EMISSIONS

BUDGET AND GREEN
PROCUREMENT

LIFECYCLE
APPROACH

DATA
CENTRES

PROJECT
MANAGEMENT

ENVIRONMENT

ENERGY
EFFICIENCY

GOVERNANCE AND
RESPONSIBILITY

EDUCATION
AND AWARENESS

RISK AND
MIGRATION

MONITORING
AND REPORTING

GLOSSARY

Artificial Intelligence (AI): the development of computer systems capable of performing tasks that typically require human intelligence. These tasks include learning, reasoning, problem-solving, perception, and language understanding.

AVoIP: Audio-Visual over Internet Protocol (AVoIP) refers to the transmission of audio and video signals over a network using Internet Protocol (IP). This technology allows for the sending and receiving of high-quality audio and video content over existing network infrastructures like LANs or the internet.

Best of Breed: When referring to software this typically means best in class and/or best fit for the organisation. They are individual software solutions that require manually created integrations to share data and some limited functions between them.

Cloud infrastructure: Cloud infrastructure refers to the virtualised and scalable resources delivered over the internet as a service, enabling the storage, management, and processing of data in third-party data centers.

Enterprise Architecture (EA): is a conceptual blueprint that defines the structure and operation of an organisation. The goal of EA is to determine how an organisation can effectively achieve its current and future objectives. It involves the analysis, design, planning, and implementation of strategy, processes, information systems, and technology infrastructure.

ERP: Enterprise Resource Planning (ERP) is a type of software used by organisations to manage and integrate important parts of their businesses. An ERP system integrates various functions into one complete service, typically HR, Finance and CRM.

Generative AI: This is a subset of artificial intelligence focused on creating new content, be it text, images, audio, or video. This technology utilises machine learning algorithms, particularly to analyse and learn from vast datasets. Once trained, these models can generate new, original outputs.

HPC: High-Performance Computing (HPC) involves the use of powerful processors, systems, and networks to solve advanced computation problems.

IoT: The Internet of Things (IoT) refers to the network of physical objects ("things") that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet.

MFA: Multi Factor Authentication is the method of confirming your sign on to digital services by using more than one method. As an example, you may input your username and password and then receive a text or use an authentication app to confirm its you.

Robotic process automation: Is a technology used for automating routine, repetitive, and rule-based tasks in business processes. It involves using software robots, or "bots", to mimic the actions that a human would take to complete tasks within digital systems. These bots can interact with software applications, manage data, process transactions, and communicate with other digital systems.

SSO: Single Sign On refers to the ability of putting in your credentials to a software or service, once only, to access a range of digital services

Virtual Reality (VR) and Augmented Reality (AR): are immersive technologies. Virtual Reality (VR) creates an artificial digital environment that users can perceive and interact with using VR headsets. Augmented Reality (AR) overlays digital information onto the real world. Unlike VR, which creates a totally artificial environment, AR uses the existing environment and overlays new information on top of it. This could be through smartphones, tablets, or AR glasses.

Virtualised: Virtualisation is the process of creating virtual versions of servers, storage devices, networks, or even an operating system where the framework divides the physical resource into one or more environments. Key benefits include improved resource utilization, reduced hardware costs, greater efficiency, and scalability.

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