

## Information Services - Operational Plan 2016-17

**Purpose:** Information Services (IS) provides much of the essential academic and business infrastructure required by the University and its staff and students to achieve the strategic objectives set out in Strategy 2020. Well-functioning and up-to-date IT and Library are core “givens” in what makes a successful university. Together they underpin the academic, administrative and research processes upon which a university is judged by its members, potential members, peers and the public. Publication of league tables and national survey results mean that no university can be judged in isolation and consequently the quality of the provision of its IT and Library services is increasingly subject to comparison and raised levels of expectation and may determine customer choice. This, in turn, ensures that maintaining the status quo is not an option for us and responding to the constant demand for the development of “simple, clearer, faster, personal, more reliable and more secure” is a constant but necessary challenge that requires a high level of skill and commitment from our staff backed by an appropriate level of financial investment. Information Services provides learning and research services that includes 3 academic libraries hosting 160,000 books with an increasing provision of digital books and electronic databases. We provide learning and teaching support including 8,371 hours of face-to-face literacy training for students. Our virtual learning environment (VLE) Moodle is supported by an expert team of VLE developers who provide development, management and support for around 25000 active users in 1200 courses with 7500 unique logins per week. In addition we provide hosting and management services for Edinburgh College with around 15000 active users. We host and manage 3,600 networked PCs, our client services team ensure that all our PCs host the latest tools and programmes for our customers as well as supporting over 320 applications some of which are unique to individual schools. Our campus support team handle over 80,000 support calls a year and our IT support desk handle over 52,000 IT related supports calls a year. We host a resilient tiered data storage with 120TB of managed data storage at both Merchiston and Craiglockhart. Our physical server platform utilises “stateless” technology allowing the services to be highly resilient. We have built, manage and maintain in excess of 350 virtual servers which allows us to be flexible while remaining secure.

**Vision:** IS aims to be a professionally recognised service that leads digital innovation in Library and IT as a service. IS is committed to “understanding its customers” and leading as well as influencing the transformation of Edinburgh Napier University into an organisation fit for a digital economy. To do this we will tackle formidable new systems and service integration and process improvement challenges that will inform the development of a hybrid organisation of highly distributed on-premises and cloud applications with trusted data sources. The renovation of our systems and services is already underway and IS will collaborate with its customers by listening and taking full account of their requirements to ensure its evolving target operational model is fit for purpose. From this platform of core technology IS will lead and inform the development of technology in our spaces and workplaces, wherever they might be, and help develop the skills across the University that will support getting the very best from the technologies we have. IS will lead and contribute to the University’s use of Information with highly skilled information specialists that will support learning and research through supporting and educating users in leveraging information as a resource.

The activities detailed in this Plan are committed to providing the services that will contribute to the successful delivery of Strategy 2020.

### Information Services will be:

**Professional** and skilled in their management and service provision of IT and Library.

**Ambitious** in its development of new technologies that will impact Teaching, learning and research

**Innovative** in its transformation of its library and IT functions, digitising the transactional services and evolving to a local and virtual information resource for the benefit of all its stakeholders on campus and internationally.

**Inclusive** as an employer and in the way it supports all its customers

Strategic Priority	Vision	Description	Actions				Targets and Measures
			2016/17	2017/18	2018/19	2019/20	
<b>Deliver an excellent personalised student experience</b>							
<b>Priority 1: Lead on the Digital transformation of the University</b>	Working with P&F colleagues and pedagogic leadership from DLTE transform the University learner spaces into both immersive and expansive experiences that support active learning. A super enhanced and personalised online student experience with the VLE delivering classroom, blended and integrated online learner journeys. Simpler, clearer, faster, personalised and more secure operating and transactional efficiencies through Online first for staff and e-services for students. Staff have excellent digital skills that support innovation in teaching and learning.	<b>Lead on Active Learning Technology Strategy:</b> Working closely with the Dean DLTE and Property and facilities colleagues	Design developed for multi use teaching room: equipment with movable furniture and charging points, power, group working formats, mobile device integration and access to online services.	Learning space technology can integrate with mobile technologies to allow student to contribute via their device to teaching and collaboration.	Rolling programme of space and room development to implement a standardised set of technologies and furniture across campuses	Intuitive and accessible presentation and collaboration facilities that meet and exceed the needs of our staff, students and visitors	Spaces are technology rich and integrated with online services and resources.
			Pilot 'Active Learning Spaces' established. Use feedback gathered and evaluated to inform future development				
		<b>Support and encourage changes in delivery of teaching:</b> Collaborate with Dean of LTA, Schools, SALs and the IS Learning Technologists, to	Technology immersion zone' trial area for those wishing to test new ways of using technology. Skills development through technology immersion sessions for academic colleagues.	Case studies developed and made available	Link to learner analytics established to inform development	Transformation of classrooms to active learning spaces linked to the University virtual environments	Contribution to the University 'Academic reputation'. Improved staff and student experience

	Build team of Learning Technologists to support Learning and teaching from Active learning space to online learning environments and linked to programmes of digital skills development	Best practice resource developed in conjunction with Dean of Learning & Teaching.			
<b>Global Online strategy:</b> Developing new and existing programmes for online delivery	Contribute to the working group and assist in defining a consistent and quality approach to international online programme development.	A framework established for the development of new programmes that is piloted and implemented. A continuous improvement plan to ensure the framework evolves and meets the changing needs of developing online programmes while ensuring adequate attention to consistency and pedagogical requirements.	Learner analytics are developed and informing future developments.		International online strategy in place
	Business School: Support the consideration and development of potential online programmes: Years 2 of the BA (Hons) Business Management for the Caribbean, BA (Hons) Enterprise and Sport – joint programme with the School of Life & Sports Science, BA Sales Management (top-up), to be run in conjunction with ISMM, MBA/MSc Business Management Logistics specialism, MBA/MSc Business Management Project Management specialism				Increased number of online programmes
	SEBE: Support the consideration and development of potential online programmes: MSc Maritime Transportation, MSc Timber Architecture, MSc Construction Project Management				
	SoC: MSc Advanced Security and Digital Forensics (GCHQ acc)				
	SLSSS: Support the consideration and development of potential online programmes: BA Enterprise and Sports (4 year degree), Environmental biology, Careers Guidance				
<b>Digital skills development programme</b>	Review and investigate skills development required to leverage the technologies and information services on offer from IS	Review the role of skills development from IS and its role and contribution to learning, research and pedagogical development	Define the contribution IS makes to pedagogy	IS contributes more widely to pedagogy	Highly skilled University workforce and students able to leverage technology and information for teaching and research
<b>Personalising and improving the Virtual Learning Environment:</b>	Personalisation where possible, engine integrated into Moodle service. Learner analytics piloted	Collaborating with the Dean of LTA ensure the Majority of programmes are appropriately and consistently represented on the VLE	Defined set of learner analytics developed and implemented	Deep analytics available	Analytics inform Moodle development
	Deeper integration with WebEx Mahara, Turnitin, storage and new services.	Personas and user journeys are supported through automation	Reporting of VLE use to inform engagement and service improvement		Improvements in student satisfaction having addressed consistency concerns and improvement in quality

<b>Provide a personalised mobile experience for students:</b> Continue the development of a range of mobilised access to key student systems and services	Design and implement a mobile personalised timetable working in collaboration with and supporting the Timetabling project.	Develop student electronic resources on a mobilised platform. Mobile services from the myNapier services; Location information, link to digital signage.	A full range of mobilised services appropriate for smart phone, tablet and laptop devices.		A full range of mobilised services appropriate for smart phone, tablet and laptop devices.
<b>Development of the myNapier Portal to improve the authenticated personalised service</b>	Improved Single Sign On (SSO) to student electronic services	Current student portal is moved to the cloud linking student SharePoint services, online storage and office 365 services	myNapier uses personalisation technology to improve experience for students and target content and services.	myNapier back end integration with all our systems to capture and utilise information.	Student services delivered from the cloud with improved experience
<b>Academic Suite of digital services:</b>	Academic Suite developed and launched. Academic digital and information suite review established.	Academic ownership and accountability established. Support materials developed and staff trained in supporting staff and students.	A sector leading suite of teaching, learning and research technologies.	Service catalogue established and annualised review	Improved academic suite promoted and reviewed with customers on an annual basis
<b>Online first programme:</b> To improve process efficiency and the staff experience of business processes and systems	Majority of key IS service requests or forms submission online.	Forms and key transactional services integrated with the new Intranet	Gateway established to provide access to all online services. 'Known' data used to provide ease of form filling.	Majority of transactions now online for staff and student processes.	Improvement in operational efficiency and effectiveness
	<b>Managing our Academic &amp; Student Records (MOAR)</b> programme and Process improvement programme	Re-architect student records system to improve data capture and management: Re-engineer key processes to improve operational efficiency	Design, develop and implement revised 'system' reporting and integrate new data structure with Cognos		
	<b>Finance System:</b> customer experience programme upgrades	Key process improvement programme to deliver benefit from the Finance system upgrades.			
	<b>HR System:</b> reporting improvement programme & online PDR service	PDR now available online.	Suite of management reports from HR		

**Grow our academic reputation**

**Priority 2: Advance the University's research capability**

**Establish new fit for purpose services for researchers to support their activities**

**Design and develop leading edge systems and tools to support research**

<b>To improve the management, reporting and promotion of research activity.</b>	Phase 2 development and implementation of Research Management System capability to support developing research in the University	A fully integrated RMS system with awards management used extensively across the University	Support RIO in a review of system information and preparedness for REF 2020	Review RMS system	RMS implemented and operational
	Support Awards management to be fully electronic	Research activity fully integrated with the University website promoting our research activity			
	RMS Integration with University website and other Business Systems	RMS integrated with the data warehouse and feeding Cognos			
	Review of e-prints repository and decisions on repository function from WorkTribe	Implement integrated eprints repository or migrate to WorkTribe repository services, review of business processes (workflows)			
<b>To improve services to Researchers:</b>	Integrated research tool Arkivum fully implemented and delivered.	Review and community engagement in place.	Storage and archiving tools delivered		Improved PTES/PRES response

		Customised storage with Remote access and mobilisation. Co-design with research community specific researcher collaboration tools.	Powerful suite of tools and services supporting research		Researcher service catalogue developed and reviewed	
		Support schools in a new approach to identifying researcher IT equipment and its provision and renewal	Library space reviewed and space identified for research specific students. Space developed and promoted	IS supports a co-ordinated approach to researcher IT provision.	Library space review and review more widely the IS spaces	
			Collaborate on PHD technology space development			
	<b>To deliver improved IT services and resources for new and existing Principal Investigators:</b>	Working closely with Principal investigators identify new resources and services to support their activity. Procedure developed and implemented for entrance/exit strategies for sensitive data.	A rich feature set in place delivering personalised communications, collaboration, storage and specialist computing.	Investment in encryption and specialised data storage.	Safe operating and extensive resources to support research.	
		Personalised data storage and database access.	Self-provisioning of temporary high performance computing or servers		Easy online and mobilised access to necessary systems and collaboration tools.	
		Investment in virtual infrastructure to provide 'self-service' capability.	Pilot Self-service on-demand server provisioning.			
		Working in collaboration with Schools identify field resources for researchers	Field resources implemented and catalogue established		Catalogue review	
	<b>Developing and improving Library Services for Schools and Researchers:</b>	Annual review of collections & subscriptions.	Value for money access to resources.	Benchmark review of services for researchers	Alignment with sector standards and support of research	Improved collection access
		Support for advanced literature. searches implemented.	School specific tailored search services developed			
		Training and skills development programmes developed for researchers	Training and skills development Programmes implemented and annualised as appropriate for Academic calendar			
		Assess established research support services and benchmark against sector				
<b>Priority 3: A library fit for the digital age</b>	<b>A "digital first" innovative library service, giving our customers a rich mix of top quality information, future ready skills, and customer oriented support for learning and research, in both physical and virtual state of the art environments</b>	<b>Continuous improvement of our Library Services:</b> Continue to innovate in Library provision and Customer Service.	Implement recommendations from the library service review: Apply the approach to on campus book and reference materials to include: archiving with a view to freeing valuable real estate for study and collaborative working; creating a balance of digital and physical texts;	Solicit feedback on new approach and embed continuous improvement.		A high performance digitally interconnected Library with a fit for purpose balance of digital and physical texts and resources.
		Transform the approach to text and journal guides by creating opportunities for text peer review.	Redesign and innovate on the mechanisms for book issue and returns, delivering a personalised and flexible student and staff experience	Wider and more prolific use of Patron Driven Acquisitions.		
		Add value through providing library and Information Services Advisors and their considerable expertise with opportunities to comment and review academic texts	Agile purchasing considered and the opportunities explored to leverage better deals.	Analytics and reporting developed to inform purchasing.		

		Identify and create PTES & PRES space in learning spaces. Design appropriate access to technology and available e-services				
	<b>A personalised library experience:</b> Assist Academic, students and researchers in developing their "own personalised library" of materials to support their individualised role through education	Personalised resources are available to suit individual assignment and research needs.	Availability of resources increases. "Personalising" resources becomes easier.	An explicit service catalogue that relates University resources for the specific user		A contribution to a personalised user experience for students
	<b>Researchers tools:</b>	Integrated research tool Arkivum fully implemented and delivered.	Review and community engagement in place.	Storage and archiving tools delivered		Improved PTES/PRES response
		Customised storage with Remote access and mobilisation. Co-design with research community specific researcher collaboration tools.	Powerful suite of tools and services supporting research		Researcher service catalogue developed and reviewed	
		Support schools in a new approach to identifying researcher IT equipment and its provision and renewal	Library space reviewed and space identified for research specific students. Space developed and promoted	IS supports a co-ordinated approach to researcher IT provision.	Library space review and review more widely the IS spaces	
			Collaborate on PHD technology space development			
	<b>To establish an approach to manage, maintain and promote special collections</b>	Policy developed to inform: acquisition, costs and audience.	All offered collections are assessed and approved or rejected against an agreed criteria.	Special collections available and accessible for researchers		Increased news and media engagement for a range of collections
		Marketing plan for collections and widen access.	Key role(s) established to support special collections and events	Special events run to contribute to adding value to our communities through access to collections		
		University business case developed to ensure the necessary funding, resource and support for any collections is in place	Collections are funded and maintained	Collections, events and media engagement are, where appropriate, supported and promoted through ERC		
	<b>Promotion and implementation of the Open Access Policy for the University and support Open Access through the Repository</b>	The University Repository potentially holds all University publications.	The Repository and the Open Access Policy are reviewed in line with RMS. This may result in a move of the repository to the WorkTribe system			The repository has international customers and supports academic reputation
		All Academic staff work to the policy and deposit publications in the Repository.				
<b>Priority 4: Analytics at the heart of University decision making</b>	<b>A defined and discoverable information architecture that supports learner and business analytics that are dynamically informing University decisions and improving the digital user experience</b>	<b>Redevelop the University Master Code Data set</b>	Review current data set and rebuild codebook. Collaborate on data gap analysis with SMG and Planning team. Define new data capture scheme	Inform new KPI reporting requirements and provide data for transformation into analytics to inform decision making	Conduct gap analysis and review data set	Contribution to a revised Enterprise Architecture and established business analytics
			review current change management process and improve data stewardship. Review and develop a data error reporting process.	Review enterprise data architecture		

lead on the development of learner analytics	Design develop and test a pilot set of learner analytics from known digital engagement with the VLE	Design develop and test a pilot set of learner analytics based on 'Student' learning activity	Embed learner analytics into Academic reporting	Review learner analytics	Learner journeys informed through analytics
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**Build innovation, enterprise and citizenship**

<p><b>Priority 5: A robust, resilient, agile and secure digital operating environment</b></p> <p>An established cloud and on premise hybrid approach that delivers 99% service up time and supports digital working anywhere, anytime on any device</p>	<p><b>To improve our digital presence and provide opportunities to market the University globally:</b></p>	<p>Building on the newly established Website, implement and support the use of Integrated social media, marketing and digital engagement technologies</p>	<p>Support ERC in developing A unique and highly personalised experience for every website visitor (delivered by service delivery units). Supported by add on technologies as required on the user experience platform</p>			<p>Improved opportunities for digital marketing, promotion and enquiry generation</p>
		<p>Develop and deliver a sophisticated reporting service for SiteCore to inform website usage, campaign management and user experience</p>				
	<p><b>Improve communications and dynamic campus information:</b></p>	<p>Increased number of digital screens with tailored / location specific content.</p>	<p>Pilot live data on current room use with cancellation support.</p>	<p>Interactive support available and developed for mobile users.</p>	<p>Extend digital signage in the University to lecture theatre, classroom and meeting room provision</p>	<p>A full digital signage experience for our campus users.</p>
	<p><b>To improve integration services for systems and support advanced management information:</b></p>	<p>Enterprise Architecture (EA): Assess current documented EA and redesign to improve agility and scalability: To inform the revision of the Service orientated Architecture; that provides better integrated more secure services, whether on premise or in the cloud. To better support integrated business and academic systems that support end user developments simplifying and improving efficiency.</p>	<p>Implement improved integration technologies available to all key business systems. Reverse the original EA strategy from one of 'control' to one that supports business decisions, customer choice, employee demand and personal technology choice.</p>	<p>Development of a revised Enterprise Service Bus (ESB) to include web services for business and academic systems.</p>	<p>Re-engineered services to support co-design and co-production. Link established to portfolio review and mapped dependencies</p>	<p>More agile more responsive technology services</p>
	<p><b>Improve the provision of a safe and secure IT operating environment:</b></p>	<p>Progress the University's Information Security capability and alignment with ISO27001. Develop a new information security strategy. Cyber security essentials established to a level necessary to protect sensitive University digital assets and research data</p>	<p>Training and scenario planning for all staff and students available. Compulsory competency in Information Security for all staff.</p>	<p>Retest proximity to ISO27001. Move to partial or full certification. Widen the role of the Information Security Board and integrate with University information governance</p>	<p>Review programme established</p>	<p>Staff and students have high Information security awareness and the operating environment is secured within available resources</p>
	<p><b>To maximise and further extend the University IT infrastructure into the 'cloud' to provide dynamic on demand capacity and resilience</b></p>	<p>Extend infrastructure into the cloud. Review HE Sector and look at best practice for a hybrid model.</p>	<p>Move or extend key services to a cloud based infrastructure where applicable.</p>	<p>Deliver student and administrative services from the cloud where applicable.</p>		<p>Robust high availability, high performance of all Digital services</p>
	<p><b>Design, purchase and implement a new Storage Area network (SAN) Infrastructure</b></p>	<p>Design and re-architect San Infrastructure. Develop framework and release framework tender</p>			<p>Review current SAN provision</p>	<p>High performance data access and virtual services</p>
<p><b>Priority 6: IS will be known for its excellent customer service</b></p> <p>The top University for IT and Library experience in the UK</p> <p>The partner of choice for innovation and development within the University with Excellent customer feedback</p> <p>The customer at the heart of all IT and Library developments</p>	<p><b>maintain certification in Customer Service Excellence:</b> Embed Continuous Service Improvement (CSI) to further develop and provide excellent IT &amp; Library service support and delivery</p>	<p>Embed an exemplary Customer engagement model: Service Management System implemented.</p>	<p>Process review: incident/problem management. Introduce Change Management as core process into the SMS.</p>	<p>Evidenced improved user experience</p>	<p>Consider including/integrating more University service desks (P&amp;F). Single service desk implemented for key USG services.</p>	

	<b>Understanding our customer and improving the service:</b>	School IT and Information requirements integrated into IS plans.	School engagement model providing a 'partner' approach to service delivery.			
			Schools receiving a personalised service and support for library and technology resources.			
	<b>Support for School of Computing</b>	Investigate with SoC their requirement for High Performance Computing (HPC) and work together to provide a solution.	Source funding to extend current IT infrastructure to accommodate HPC and ensure economies of scale	Work nationally to contribute and leverage distributed computing for research and share and contribute to national computing resources	HPC available and extensible for University use	Contribution to SoC plans and initiatives
		Initiate an IT services review with SoC on the current provision with a view to enhancing it to help give a better student experience.	Extend review beyond SOC to support ICT infrastructure provision for Schools	Information management that improves reporting and University data embedded in School plans (See Cognos and reporting development)	Agreed areas of responsibility and accountability in purchasing resources.	
	<b>Supporting SLSSS</b>	Software evaluation for Quality assurance.(Employability impact)	Design and implement solution			
		Electronic lab. books pilot for Undergraduates				
	<b>Support The Business School</b>	AACSB faculty database software solution to support and evidence accreditation:import data from HR extracts and data imports from WAM and the library repository.	Review performance and integrate, if required, with RMS			
	<b>Lead on process improvement 'As a Service' and provide support for continuous improvement for schools and departments</b>	Facilitate and provide Lean and programme expertise to strategic change projects being delivered across School and professional services	Deliver continuous improvement and process improvement workshops to facilitate support for change programmes.	Metrics for continuous improvement embedded as business as usual in planning and PDR process.	Embedding process improvement through CIPD	
<b>Priority 7: Grow information Services Income and extend its influence regionally and nationally</b>	<b>Expand shared services in which Edinburgh Napier is the lead partner</b>  <b>Look for opportunities to increase Information Services</b>	<b>Lead and collaborate on a regional shared service agenda</b>	Partner with FE institutions to host and share services.	Edinburgh Napier is a potential host for a regional Moodle hub or partners in a Scottish sector Moodle resource.	Collaborate with HE, UCSS and APUC in procuring and accessing cloud services.	
			Work with APUC and UCSS to identify shared service opportunities.	Collaborate on a shared training resource for Information Security.		
<b>Internationalise our work</b>						
<b>Priority 8: To internationalise our services</b>	<b>IS systems and services deliver an excellent experience that is comparable and appropriate experience for students locally, nationally and internationally</b>  <b>IS internationalises its support to deliver excellent service to staff and students at home and abroad</b>	<b>Improving the International student learning experience:</b>	Review of existing provision to International locations of Physical and learning technologies	Technology package developed and sourced locally or prepared for delivery into existing and new International partner locations.	Process for continually improving learning resources delivered overseas embedded as business as usual.	Alignment of local and international technologies to support peer collaboration and equivalent learning experience
		<b>Improving the student induction experience:</b>	Range of improved overseas induction plans established. (toolkits). Training and support for academics working and delivering overseas on technologies and services available for there location	Personalised experience for international students Develop and promote the use of virtual tools for learning and communication.	User analytics developed to inform development and improved user experience.	Review process in place. Academics and students well prepared for learning
		<b>Continuing to internationalise IS Support:</b>	Support materials are personalised and customised for specific cultural and country specific requirements.	Local 'in country' partnerships explored to provide local and customised IT and Library support.	Catalogue of international support services	Transnational and international students are better supported

		Review of 24/7/365 support provision developed to support international needs.	Development of advanced support materials and 'toolkits'	Develop collaboration and partnership working with institutions operating internationally	
<b>Continuing to internationalise IS resources:</b>	Equivalent Edinburgh Napier e-resources are available to transnational students. Study skills and research information embedded. Global materials in study skills and research information embedded in inductions and throughout the learner journey.	Provide international toolkits for support and information on what is available for staff and students	Proactive customer feedback and analysis to improve materials.	International on or off campus students have access to necessary materials and the skills development maximise their use	Clear guidance on international use of e-resources
<b>Supporting learning and research for our international students:</b>	Review license models for software and library e-resources. Identify country specific restrictions.	Provide clear information on any unresolved restrictions.			International student materials available

**Enabling Cultural statement**

IS is committed to "understanding its customers" and leading as well as influencing the transformation of Edinburgh Napier University to one fit for a digital economy