Strategic Vision for the Information Services Group

Information Services Group (ISG) Strategy
July 2017
“I am very excited to introduce the new Strategic Vision for the Information Services Group at the University of Edinburgh. First on our agenda is the student experience. This is ingrained in everything we do and every way we think. Related to this is a key driving aim to digitally transform the University. The world itself is being radically transformed by amazing technology advances, such as Artificial Intelligence & Machine Learning, Blockchain, Virtual Reality, Data Analytics, Data Science, Cryptography, Robotics and Sensor Technology. A convergence and synergy of these technologies and others has created a world of new possibilities, as well as change on a scale never before experienced. Our vision is to ensure that students, staff and the University itself, are able to embrace, excel and be leaders in this new digital world. Everything from how educators engage with their students, how students learn, how researchers create wisdom to how professional services staff conduct their work and provide their services, will change.”

Gavin McLachlan
CIO and Librarian to the University
Introduction

Information services and technologies are core to the University and vital to the future of learning, teaching and research. They are key to the University’s mission to “discover, develop and share knowledge” while also contributing to growth in the University’s commercial business and partnerships.

Information Services has identified three key areas: Student Experience, Research & Innovation and Service Excellence. These three areas align with the University’s strategic objectives and development themes and are set in order of priority for decision making within Information Services.

In our 2016/19 plan we identified five key 10-year programmes that would enable us to deliver this vision.

1. Digital Transformation
2. Core Business Systems Programme
3. Learning, Teaching and Student Experience
4. Digital Research Services
5. Library: National and International Leadership

At the core of these programmes is a commitment to underpin excellence and transform student experience, learning & teaching and research, clear long-term planning with deep engagement, drive both internal and university wide efficiencies and quality and demonstrate benefits realisation and measurements against clear and agreed KPIs.

Strategic Vision
What guides our plan?

At a University-wide level, the ISG programme underpins some key transformation programmes occurring across the University Student Administration and Estates areas. The Transformation programmes will fundamentally transform how these are of the University are delivered.

It is the role of the ISG vision to act as a catalyst, supporter and to underpin these University professional services transformation programmes, such as Service Excellence, Digital Transformation and Core Business Systems.
Core Systems Strategy

The Core Systems Strategy Programme is the suite of core enterprise business applications (“the rock”), upon which our University and most of its processes will run.

This will include the HR, Finance, Payroll, Procurement, Estates, Research Information Management, and the Student Administration, Recruitment and Admission systems. Core systems and the University data they hold should be leveraged as a strategic asset.

Successful implementation of this programme will enable, where appropriate, the move away from older central services, processes and systems providing a modern, agile suite of systems that will serve to underpin a transformation in both how the University conducts its professional service activities and how the University leverages its data.
Digital Transformation

Digital Transformation drives the University forward in all areas of its Digital Estate and approach to digital technology. Digital Transformation is the complete application of digital technology in all aspects of a modern university.

This programme will utilise digital technology to fundamentally change the way many University services are delivered. This initiative will encourage the use of digital technology and digital literacy across the University, setting standards and principles and providing cross cutting services and platforms that underpin, enable and join all the Service Excellence programmes as well as other key University programmes such as the Estates Transformation programme and the Lecture Capture programme.

Cross-cutting services are critical for effective business or administrative services. There is a need to ensure consistent user experiences, shareable processes and re-usable data. Examples of cross-cutting services include Digital Literacy, Information Security, CRM, Business Intelligence, Enterprise Architecture, User Interface Design Services, Student Digital Experience Standards, Collaboration Tools, Web Services, Web Content Management, Web API and Data Integration Services.
Learning, Teaching and Student Experience

This will enable a more strategic use of information technology to enhance learning and teaching. It will directly improve student experience, student success and academic experience. Supporting the ‘leadership in learning’ strategic objective, it will underpin the University goal to continue as a strong leader in digital education and make every educator a digital educator and every student a digital student. New programmes proposed for 2017/18 include a pilot of ‘Distance Learning at Scale’ and an enhanced programme of support, upgrade and maintenance for AV and teaching technologies in our teaching facilities.

Digital Research Services

This programme will provide the comprehensive and coherent set of Digital Research Services that will improve the researcher experience. It will also deliver new digital services that will promote collaborative working, drive the adoption of data science and data-driven innovation as well as creating efficiencies in the research management process and reducing the time spent searching for IT tools and services. This programme will provide underpinning digital infrastructure to support the University’s strategic aspirations in ‘Leadership in Research’.

Library: National and International Leadership

The Library is at the centre of learning, teaching, research activities contributing across all of the University’s strategic objectives and development themes. The programme will provide the infrastructure that will allow all users in Edinburgh and across the globe, to engage more easily with our unique heritage collections. This will be achieved through the creation and exploitation of digital content, improvement of the student experience with the provision of electronic resource lists and the dissemination of Edinburgh research through open access publication.
Estates Transformation

The University is embarking upon a major programme of investment in the construction, refurbishment and maintenance of over 500 buildings which form its built estate. The Estates department will invest £1.2bn over a 10-year period. Through this programme, Estates will improve its capacity, processes, tools and systems. This programme will create and leverage a modern suite of capabilities, digital technologies and data in a number of areas. This includes investment in Estates Core Digital Systems, establishment of an Estates Programme Management Office and further investment in end-to-end digital data to improve communication flows.

Service Excellence

The Service Excellence Programme (SEP) is a University-wide initiative designed to review and transform the professional services provided to students and staff.

Launched in 2016, SEP is a five-year Programme focusing on the areas of Student Administration & Support, Human Resources Transformation, Student Recruitment & Admissions, and Finance Transformation. SEP works closely with the Digital Transformation Programme on the underpinning Core Systems Technology.
What will ISG look like in 2021?

It is clear that over the next few years there will be significant challenges as we move forward in a post-EU era. Against this backdrop, the Information Services Group and the wider University will look very different by 2021.

ISG staff will work in innovative and collaborative spaces. We will have extended our use of contractors and student workers so at least one in 10 will be non-staff. We will have built on our 2020 success of at least 500 students working in ISG per year and our working relationship with the student body, student satisfaction, innovation and student employability will all be positive. The NSS scores for both Library and IT will be at least 93%.

We will continue to progress towards a digital first University. The new HR system will be in place and we will be underway with the replacement of the Finance system, after a comprehensive review of finance processes. We will have driven the digital first agenda forward with all processes and new records or information ‘born digital’.

We will have implemented digital processes for feedback and assessment, student analytics will be pervasive and data analytics will be used in decision making across the University. By 2022, we will have consolidated to 90% of all courses using a centrally supported VLE. The uptake of digital skills training in schools and planning units will be at least 75%.

ISG will support fully support all three strands of our Digital Education programme with a significant addition to our Distance Learning at Scale programme – with at least three successful large-scale programmes enrolling over 10,000 students annually.

Digital Research support will be coherent. Delivered by a coalition of partners across the University with our research community having easy access to a wide range of digital services that support every stage of the research journey from concept to impact.
These services will be well sign-posted and supported. Digital Research Services will be used by every school. Through clear services costing and well-understood processes, a culture of cost recovery will be embedded across the research community and direct service income will underpin the revenue required for delivery of these services. Our services will act as an attractor to industrial partnerships, joint ventures and large research collaborations, recognised for their scale and breadth and trusted by our commercial partners to hold their sensitive data. We will be working to a clear and agreed Digital Research Services and Research Data Strategy that is integrated with the overall University Research Strategy.

Information protection will be pervasive with widespread awareness of information security responsibilities and requirements. Best practice will be implemented across both student and staff communities and our Information Security Accreditation on core services and systems, underscores our role as a trusted partner for NHS, industry and translational partners.

The Main Library will provide vibrant, attractive accommodation at the heart of the campus, where students will find the variety of comfortable and secure spaces they need to support their studies. 1,600 new spaces will have been created in the Main Library and other buildings, where learners and researchers can interact easily with library and museum collections through exhibitions and the use of new technologies.

We will be midway through creating a large library, student study and collaboration complex on the central campus. Investment in the King’s Buildings and Holyrood campuses will have delivered more, higher quality library and study space to meet the growing student demand.

At least 15% of the Library and Museum Collections unique material will have been digitised. New services to support the approaches used to interpret and understand the content will be available. As a result of the programme to digitise and catalogue the University’s unique collections, demand for access to items in the collections will have doubled and more items will be loaned to exhibitions in global institutions, increasing awareness of the University of Edinburgh as a major research leader.
The Library conservation studio will support an enhanced student placement scheme delivering training and research into new conservation techniques for six students. Library fundraising will have increased to over £1.6m per annum.

All essential resources on reading lists will be available from the Library, with over 60% of courses having a full electronic resource list. Student satisfaction with the Library Service will increase. The Library will have supported the publication of an initial batch of 10 monographs and will increase the number of OA journals supported to 20, allowing high quality Edinburgh academic research to be made freely available to the wider world.

Underpinning these strategies is the ISG Change Programme which will see ISG organised from a service perspective with a strong service-based culture. There will be a complete and detailed service catalogue with Service Owners and Service Operations Managers accountable for each service. Services will be measured against agreed KPIs and targets.

A continuous programme of reinvestment within IT will be fully implemented using the concepts of Bimodal IT and shift left. There will be an agreed annual target for the internal re-prioritisation of revenue and posts, which will extend to IT in the Colleges, Schools and other Support Groups.

Supported by a growing investment in an expanding collection of digital skills training materials for all, every member of ISG staff will have an agreed training and development plan. ISG will also focus on building strong, effective partnerships both within and external to the University to support professional development.

Robust, all-inclusive project management will be in place supporting University-wide programmes such as Service Excellence, Digital Transformation and the Core Systems Strategy. This will include best practice training, project management office services, standardised project management processes and project support services.

EDINA and the Digital Curation Centre will be engaging with and undertaking intrapreneurial ventures and initiatives across the University, providing new services and supporting industry engagement partnerships with the University. Outward-facing entrepreneurial activities will see growth and development of services and markets with other universities as well as increasing private and public sector customers worldwide. The Digital Curation Centre will enhance and increase its reputation and impact as the world leading authority on Digital Curation and Research Data Management.

EDINA will continue to grow UK and international markets for its services and reimagine its flagship Digimap service. The Digimap service will enable data science learning, increasing the data literacy of students from primary school through to researchers, across the broadest range of disciplines.
Critical Success Factor: Information Security

There are a number of challenges to managing the information security risk profile, countering new and increasingly complex threats and navigating safely through the incidents and events that are an ever changing part of our normal operations.

Cyber-attacks on the University such as the DHL, O2, Vodafone and UPS emails containing dangerous viruses and the release of high-end CIA hacking tools by WikiLeaks demonstrate the information security dangers facing the University.

Beyond 2017/18, it is clear that we will need to improve controls to mitigate the information security risk facing the University. Some of this will be folded into the existing work packages for the Digital Transformation and Service Excellence programmes. However, if we are to succeed in reducing the cyber threat to the University as a whole, we will need to invest strongly to increase our capacity, skills and knowledge base.
How will we measure our success?

The use of Key Performance Indicators (KPIs) will help us sense-check that we are on track to reach our 10-year strategic programme goals. By asking ourselves what ISG needs to look like in 2026, we can identify the steps necessary to get us to this vision. Our new KPIs will make it easier to understand what our investment means and where we need to deliver throughout our journey to 2026.