UCD IT Services
Seirbhísí TF UCD

Ireland's Global University

IT Strategy
2020

Contents

Introduction from the Registrar and Deputy President 5

Introduction from the Chief Technology Officer 7

Our Vision and Mission 9

Our Principles and Values 10

Executive Overview 12

UCD IT Strategic Themes:

Supporting Research 14

Enhancing Educational Technology Services 15

Contributing to the Student Experience 16

Enabling Global Engagement 17

IT Services Strategic Themes:

Facilitating Transformation and Strategic Information Delivery 18

Enhancing IT Service Excellence 19

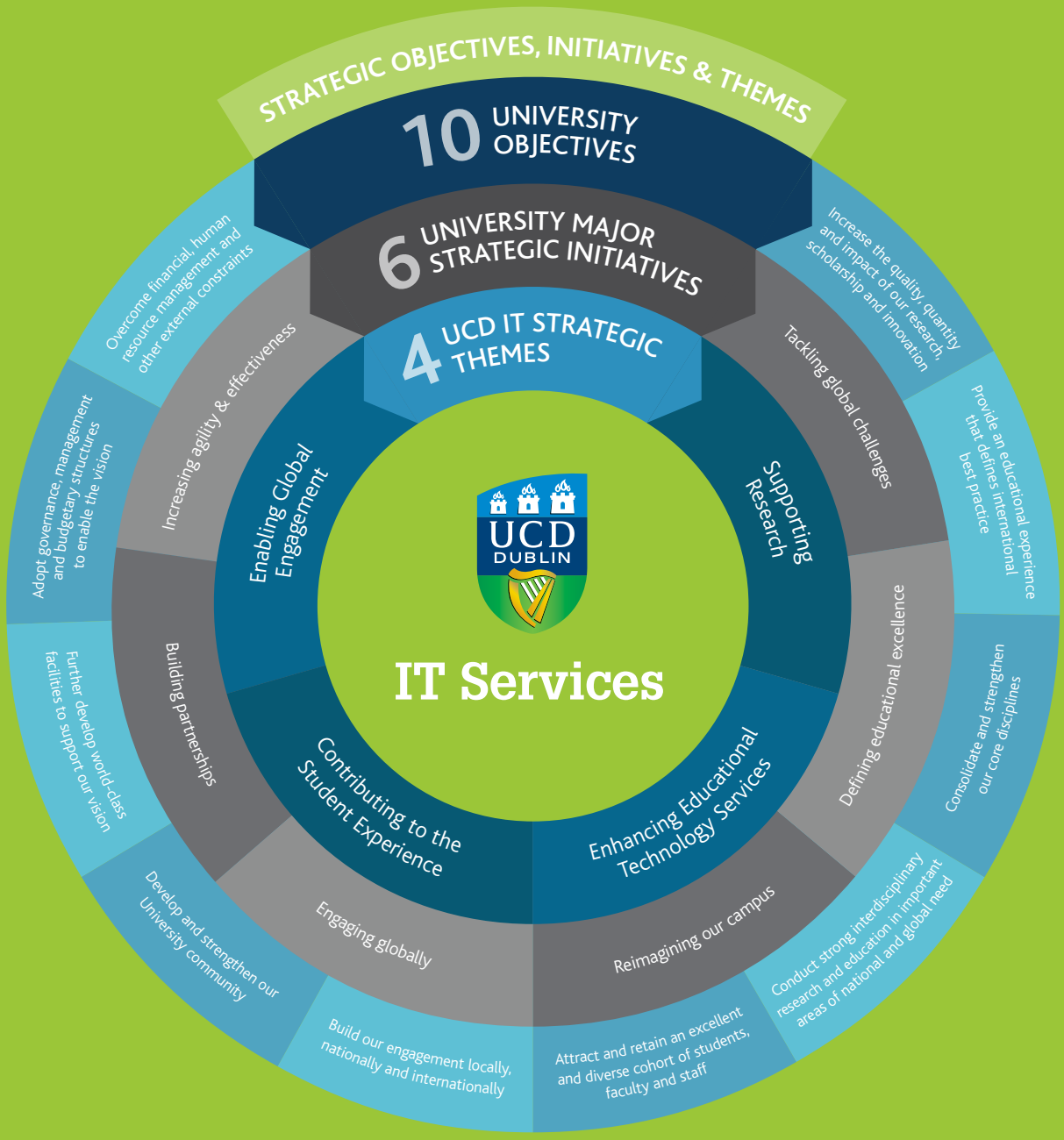
Delivering IT Platform Excellence 20

Appendices:

(I) UCD and IT Services Strategic Themes & Goals 22

(II) Stakeholder Consultation 24

(III) IT Strategy (2009-2013) Review (SWOT) 25


STRATEGIC OBJECTIVES, INITIATIVES & THEMES
10 UNIVERSITY OBJECTIVES
6 UNIVERSITY MAJOR STRATEGIC INITIATIVES
4 UCD IT STRATEGIC THEMES
UCD DUBLIN
IT Services
Enabling Global Engagement
Supporting Research
Contributing to the Student Experience
Enhancing Educational Technology Services
Increasing agility & effectiveness
Tackling global challenges
Building partnerships
Defining educational excellence
Engaging globally
Reimagining our campus
Overcome financial, human resource management and other external constraints
Increase the quality, quantity and impact of our research, scholarship and innovation
Adopt governance, management and budgetary structures to enable the vision
Provide an educational experience that defines international best practice
Further develop world-class facilities to support our vision
Consolidate and strengthen our core disciplines
Develop and strengthen our University community
Conduct strong interdisciplinary research and education in important areas of national and global need
Build our engagement locally, nationally and internationally
Attract and retain an excellent and diverse cohort of students, faculty and staff

Dear colleagues,

I am delighted to introduce the IT Strategy 2020. The overarching mission of the UCD Strategy is to enable every member of the University to achieve their full potential and in today's technology-driven society UCD's vision for IT is to empower faculty, staff and students by transforming University life with new and emerging digital technologies.

UCD enjoys a world-class 24/7 technologically enabled campus which supports the University to deliver and excel in teaching, learning and research. It provides the technology foundation upon which the enabling of global engagement, sharing of information and evolution of teaching technologies is possible. The IT Strategy 2020 seeks to lead us through an evolving digital landscape, supporting the technological needs of tomorrow's student and maintaining standards of excellence in the pursuit of solutions and services that best support the work of the University.

Following an extensive stakeholder consultation and research process, the goals of the IT Strategy 2020 have been designed to facilitate the delivery of the UCD strategic objectives and initiatives under the following UCD strategic themes: Supporting Research; Enhancing Education Technology Services; Contributing to the Student Experience; and Enabling Global Engagement.

Goals have also been designed to enable the operational transformation of IT services under the IT strategic thematic areas of: Facilitating transformation and strategic information; Enhancing IT Service Excellence; and Delivering IT Platform Excellence.

Professor Mark Rogers
Registrar and Deputy President

Dear colleagues and friends of UCD,

I am pleased to introduce the IT@UCD: IT Strategy 2020 – a strategic plan for information technology solutions and services 2016 to 2020. This plan is the product of over six months of analysing data gathered from within UCD; a review of the key lessons from the previous IT Strategy; our quality improvement plan; independent review of our key IT processes; technology trends in higher education and industry; and a focused consultation process both internally and externally (Appendix II, III).

We trust that this plan offers an appropriate reflection of the mission, vision, values, objectives and strategic initiatives of the UCD Strategy 2015-2020, which includes College and School plans and the supporting strategies of the UCD Strategy for Research, Innovation and Impact (2015-2020) among others.

The plan sets out how we intend to support and contribute to the UCD Strategy over the next five years. Whatever your role at UCD, we believe you will find this strategic plan relevant, comprehensive, and a useful guide to decision making, priority setting, and action.

Our approach has been to map out the UCD IT strategic goals which support and contribute to the delivery of the UCD strategic objectives and initiatives across the thematic areas of: Supporting Research; Enhancing Educational Technology Services; Contributing to the Student Experience; and Enabling Global Engagement. This approach ensures that a key outcome of the IT Strategy 2020 will be the delivery of end-to-end services. In order to achieve these ambitious goals, we in IT Services will also focus on facilitating transformation and strategic information delivery and how we can enhance the delivery of service and platform excellence (Appendix I).

Seamus Shaw
Chief Technology Officer

Our Vision

Empower people by transforming University life with new and emerging digital technologies.

Our Mission

Our mission is to both support and contribute to the UCD Strategy 2015 to 2020 by being the partner of choice for **information technology solutions and services.**

Our Principles

- Customer focused
- Adding value
- Secure, reliable, flexible, sustainable and accessible
- Simple and innovative solutions

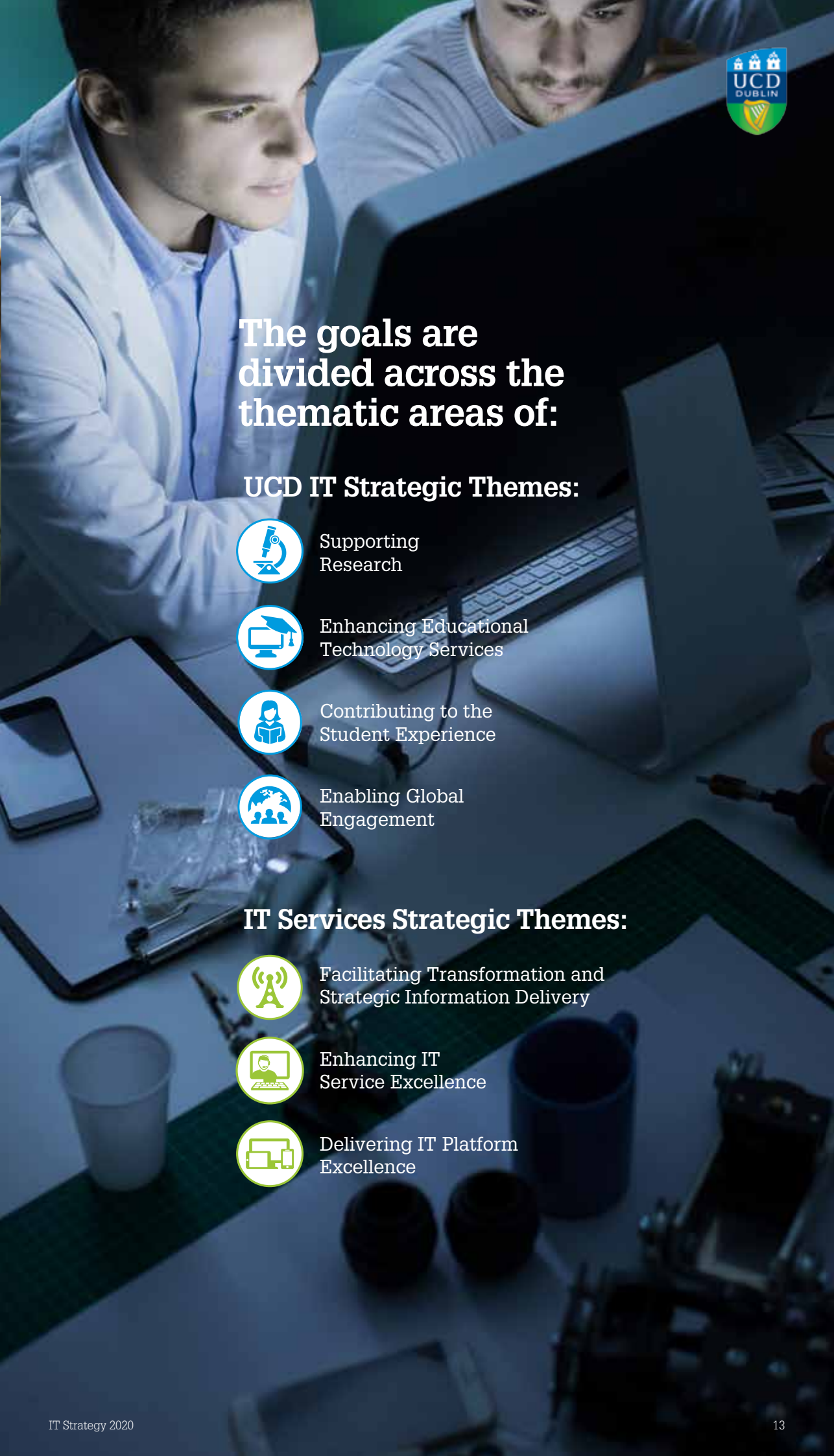
Our Values

- Empowering our staff **(Engagement)**
- Excellence in what we do **(Excellence)**
- Engaging the community in the design and delivery of services **(Collegiality)**
- Having open and honest two way conversations with the community **(Integrity and Diversity)**

Executive Overview

This strategy outlines a set of goals (Appendix I) that will ensure the successful delivery of information technology solutions and services across the UCD community in the coming years. Goals are broad based and have a three to five year horizon. They will be reviewed on an annual basis to ensure they continue to meet the needs of the UCD community and we will also assess the progress of each one. With a lean and agile approach in mind, these goals can be seen as our strategic road map which will guide our five year service plan and support our annual planning process. The key outcome of the strategy is to deliver and support a rich set of information technology solutions and services that are customer focused and which will contribute to our vision.

> **Empower people** by transforming University life with new and emerging digital technologies.



The goals are divided across the thematic areas of:

UCD IT Strategic Themes:

- Supporting Research
- Enhancing Educational Technology Services
- Contributing to the Student Experience
- Enabling Global Engagement

IT Services Strategic Themes:

- Facilitating Transformation and Strategic Information Delivery
- Enhancing IT Service Excellence
- Delivering IT Platform Excellence

Supporting Research

All research activities in the main rely on some form of information technology solutions and services. IT now pervades research across all the major research themes: Agri-Food; Culture; Economy & Society; Health; ICT; Energy and Environment. The majority of this research is done through interdisciplinary teams working with colleagues across institutions globally and relying on advanced networking and other core technologies to pursue discovery.

Research teams generate vast amounts of new data from the internet of things, social media, digital content and other technology platforms every second of the day. This is commonly known as "big data" and requires information technology solutions and services that integrate activities within UCD as well as national and global domains and partners.

Our challenge is to identify the infrastructure, services, and support structures that can provide the most value in the areas of greatest need for the UCD research community.

The following goals contribute and support the objectives of the UCD Strategy for Research, Innovation and Impact (2015-2020).

Goals

- Enabling easy access by researchers in all disciplines to infrastructure, tools, services and support.
- In partnership with key stakeholders, designing and implementing a Research Data Management policy and plan.
- Enhancing the UCD High Performance Computing service.
- In partnership with key stakeholders, implementing a new research information management system.

Enhancing Educational Technology Services

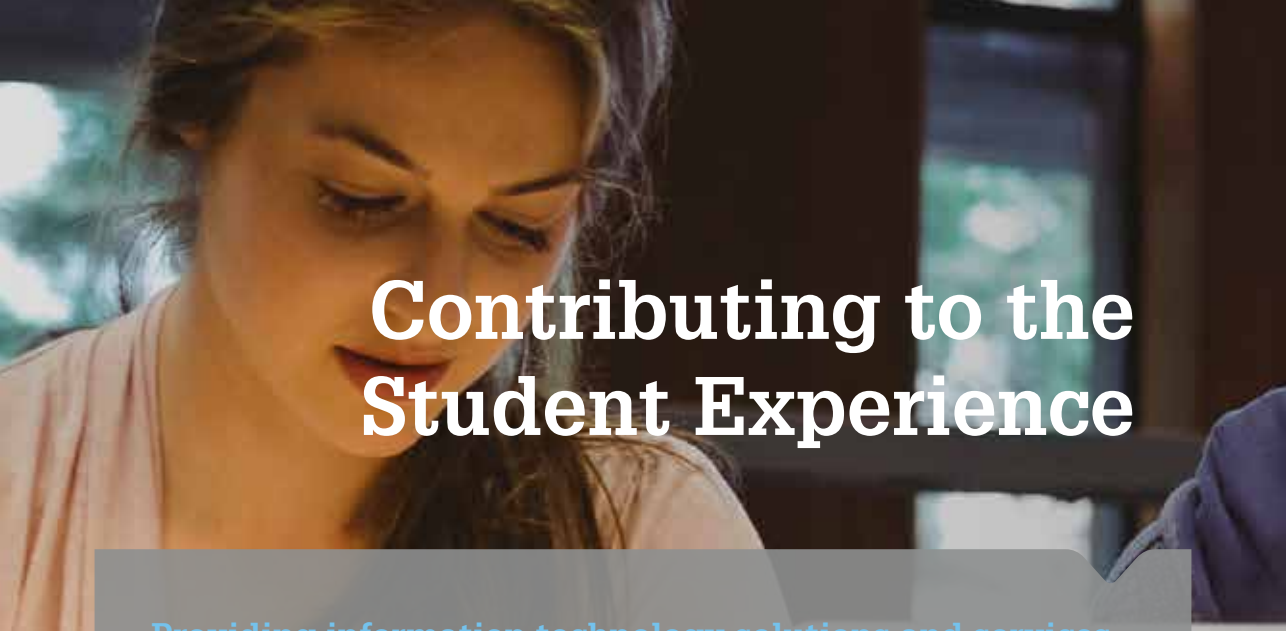
Educational technologies can help to enhance teaching and learning across UCD and leverage UCD's core strengths as a research and educational institution. Harnessing technology to collaborate and create digital content can provide a bridge between teaching and research, thus enabling the dissemination of research both in the classroom and across the community.

The impact of technology and globalisation on higher education is significant. Faculty and students are using more and more IT every day, whether we are talking about technology-aided interaction in the classroom, video capture for later consumption, or online assessment/simulations to augment hands on activities. Technology provides the infrastructure to allow new ways of reaching students – in some cases far beyond the campus classroom, such as in "massive open online classes" (MOOCs). These applications of technology in education must be explored so that our faculty have the knowledge and capability to take full advantage of the most appropriate technologies.

The following goals serve to support the University's objectives and initiatives in providing an educational experience that defines international best practice. These goals will provide easier access to learning technologies, establish a core baseline of educational technologies, support innovation and most importantly empower faculty, staff and students.

Goals

- Facilitating the exploration, development, and adoption of new teaching tools and technologies. Focusing on supporting Colleges, Schools and educational technologists through this process.
- Establishing a Learning Hub platform that incorporates a virtual learning technology environment with forward-looking learning systems and tools to support educational excellence across the UCD community.
- Supporting faculty in the development of academic content and use of learning technologies through training, consultancy and guidance. Additionally, offering opportunities to showcase achievements in TEL (technology enhanced learning) through local and national events and conferences.
- Providing new teaching, learning and advising tools that support the delivery of a personalised learning experience to students who are highly mobile learners.
- Designing and implementing a set of technology solutions that will support formative and summative assessment methods in UCD.



Contributing to the Student Experience

Providing information technology solutions and services that meet student needs is a key goal for IT Services in UCD. Their needs are diverse and students are generally early adopters of new technologies, which challenges the IT landscape in UCD. They are constantly "on" smartphones and social media software that allows them to be in continuous contact with friends and family regardless of their location. The IT Strategy 2020 acknowledges this lifestyle, and also supports students' effective use of UCD information technology solutions and services in the pursuit of their educational ambitions. Ensuring positive outcomes from this use of technology solutions and services requires regular interaction with the UCD student community throughout their relationship with UCD, from prospective to alumni.

IT Services will set out to enhance the provision of information solutions and services that support the student journey through UCD. This will include all student groups both on and off the main campus in Belfield.

The following goals serve to support the objectives and strategic initiatives as outlined in the UCD Strategy 2015-2020.

Goals

- Providing the essential information technology solutions and services across the UCD community to achieve best practices for interacting with students.
- Engaging with our students, prospective students and alumni regularly to understand their needs and identify opportunities for collaboration.
- Providing new teaching, learning and advising tools that support the delivery of a personalised learning experience to students who are highly mobile learners (linked to same goal under Enhancing Educational Technology Services).
- Deploying new and enhanced online processes to help drive change and increase efficiency and effectiveness across the UCD community (with a student focus under this goal).

Enabling Global Engagement

Globalisation is one of UCD's key strategic initiatives. To deliver on this initiative, the Global Engagement Strategy sets out to further enhance our international culture, grow our global reputation and to increase the impact of our excellence in scholarship, research and innovation on key global issues. The realisation of UCD's global ambitions will be supported by our global centres and our extensive network of partners worldwide. The design and implementation of information technology solutions and services will be a key enabler to delivering on these goals.

As our vision states we want to **Empower People:** by transforming University life with new and emerging digital technologies. This best places us and this strategic plan to deliver on Objective 5: Create an enabling environment for UCD's global activities and more specifically by enhancing the faculty and staff experience.

The following goals support the Enabling of Global Engagement activities.

Goals

- Enabling easy access to infrastructure, tools, services and support, which will contribute to the successful implementation of the Global Engagement Strategy.
- Further developing the integrated systems that support the full lifecycle of student recruitment from enquiry through to offer and acceptance. (Linked to same goal under Facilitating Transformation and Strategic Information Delivery)
- Delivering analytics to support the implementation of the Global Engagement Strategy and enabling data driven decision-making.
- Designing and implementing a new IT platform to support the Global Partnerships initiative.

Facilitating Transformation and Strategic Information Delivery

IT Services has always played a pivotal role in facilitating transformation in the way the University is run – from the implementation of integrated enterprise applications to the development of online services and portals and the delivery of operational and management information. Our work in this area over the period of the IT strategy will focus on further deepening and strengthening the services we offer.

Over the coming five year period we will look to meet the following major goals:

Goals

- Further developing the integrated systems that support the full lifecycle of student recruitment from enquiry through to offer and acceptance across the UCD community.
- In collaboration with other support units, ensuring that the portfolio of enterprise applications meets the needs of our users in the University and offers the highest standards of usability.
- Delivering analytics to support the implementation of the UCD Strategy 2015-2020 and enabling data driven decision-making.
- Deploying new and enhanced online processes to help drive change and increase efficiency and effectiveness across the UCD community, in collaboration with other support units.
- In collaboration with key stakeholders, enhancing the services and platforms we use to communicate and deliver online services and information to staff, students, alumni and external audiences.

Enhancing IT Service Excellence

IT Service Excellence describes the processes and methods currently in use, or which will be developed and applied to the definition, description, development and management of information technology solutions and services across the UCD community. The effectiveness of the practices and methodologies used will affect all parts of the UCD community that rely on IT Services as UCD requires information technology solutions and services that are secure, reliable, flexible, sustainable and accessible.

IT Services staff are key to the delivery of this strategic plan so we need to ensure that we have a strong talent management system, with appropriate mechanisms in place for recruitment, competency management, training and development, succession planning, retention, and reward. A key outcome from this strategic theme is to enhance the learning culture that is currently taking root in IT Services.

Best practice in governance, customer engagement and customer focused activities will guide us along the way so we are ready and able to contribute to and support the objectives & initiatives of the UCD Strategy 2015-2020 and IT Strategy 2020.

The following goals will support the delivery of Service Excellence.

Goals

- Designing and implementing internal and UCD IT wide governance structures.
- Promoting and developing excellence in our IT Relationship Management model across the University, enabling the IT function to further empower and inspire our customers.
- Enhancing our existing IT Support model in line with recognised best practice to ensure all customers – faculty, staff, students – receive a consistent premium service in every contact with IT@UCD.
- Empowering our staff through a talent management initiative.
- Managing change. Providing leadership to those affected by technology and organisational change (internal and external).
- Designing and implementing a service quality management function, which includes measurement, into IT processes for service development and management.
- Enhancing our internal and external communications, which clearly outline the information technology solutions and services we deliver and support.
- Managing the lifecycle of IT services and projects to ensure there is a focus on quality improvement and value for money.

Delivering IT Platform Excellence

The delivery of all information technology solutions and systems are dependent on the secure and reliable infrastructure and platforms that are in place today. We need to continue to deliver and enhance this level of service and assess emerging new technologies that may be fit for purpose in delivering on this theme e.g. Cloud, Mobile.

The University faces ever increasing levels of cyber threats which pose major risks to the reputation and operations of UCD. We will design and implement a strategic IT Security plan to assist in addressing these threats.

The University's web presence is becoming the gateway to the physical campus and the experience that students and parents have in that space contributes to their view of the University as a whole. There is a real power to be tapped into by leveraging a range of digital media channels to communicate a message or reinforce UCD's brand. We will provide a framework – together with the necessary skillsets – to enable the UCD community to effectively use digital media across various channels to engage with their target audiences – anytime, anywhere and on any device.

The following goals will support the delivery of Platform Excellence.

Goals

- Providing world-class platforms to support the information technology solutions and systems we deliver.
- Providing platforms and services to support a vibrant and dynamic web and mobile presence that enables easy management of content and are secure, reliable, flexible, sustainable and accessible.
- Designing and implementing a strategic IT Security plan that includes adherence to EU General Data Protection Regulations.

Appendix I

UCD and IT Services
Strategic Themes & Goals

Supporting Research

- Enabling easy access by researchers in all disciplines to infrastructure, tools, services and support.
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IT Services
Strategic Themes & Goals

Facilitating Transformation and Strategic Information Delivery

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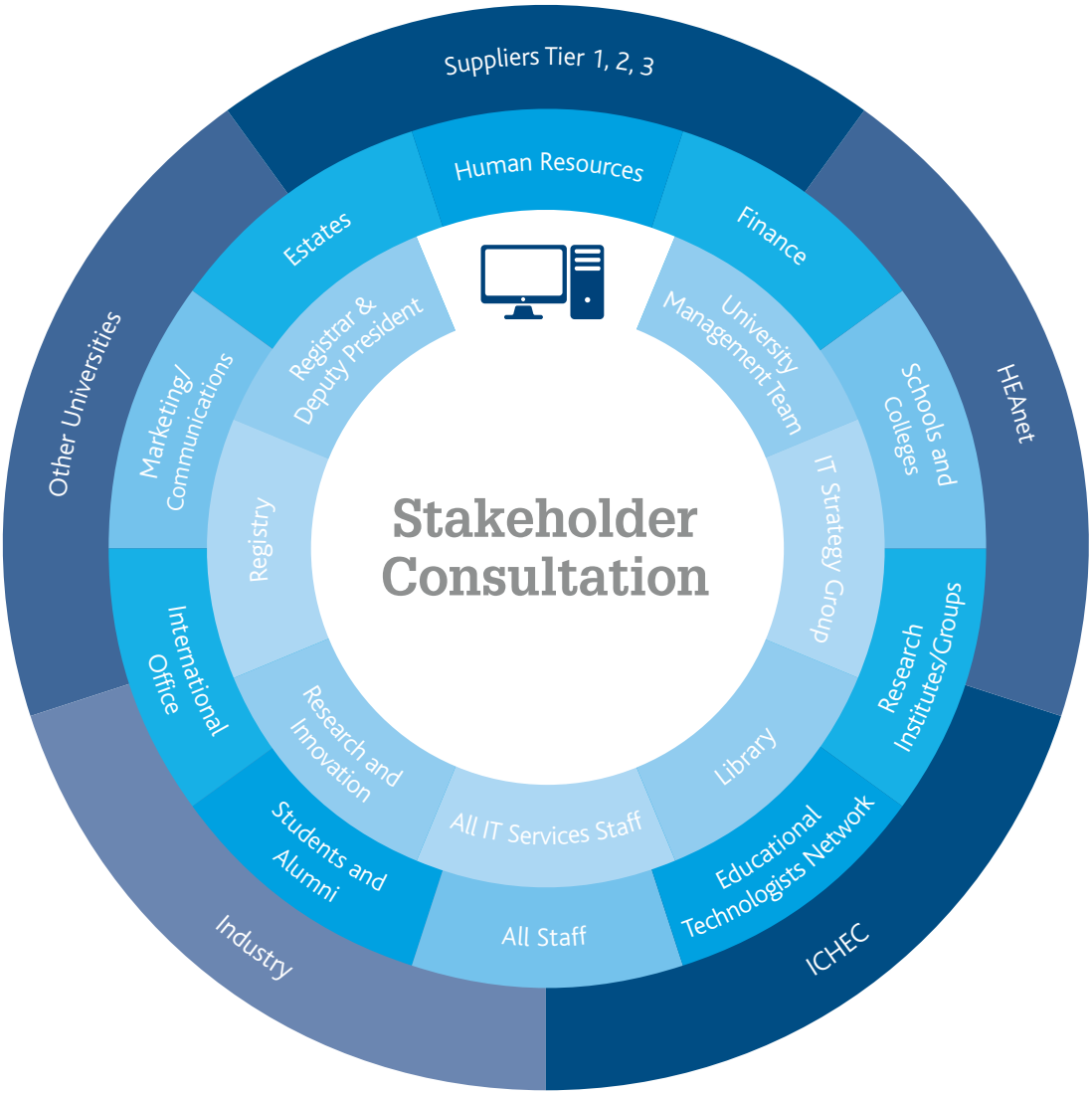
Appendix II

The diagram below outlines the stakeholders consulted during our strategy development.



Appendix III

IT Strategy (2009-2013) Review (SWOT)

Strengths

- Very high user adoption of services
- Very strong customer satisfaction
- Flexible "anywhere" access (60/40)
- Good infrastructure base – robust, scalable
- Shared application standards – BlackBoard, Connect, Gmail, CMS, InfoHub
- Good research capacity – storage/compute
- Wireless network and support for mobile

Weaknesses

- Next stage Data Centre infrastructure, not yet in place – off/on campus (high risk)
- eContent & data management – initial model in place, development required
- 24/7 support model & higher availability needed to meet future demand
- Complexity in wider application base

Opportunities

- Build on high user satisfaction to broaden services and enable UCD initiatives
- UCD online and public Teaching & Learning delivery models
- Transition to Cloud model and brokered services for greater agility
- Initiatives and incentives for eLearning
- Shared initiatives for Research IT

Threats

- Attrition of technical staff
- Research requirements for more advanced services need to be met to retain users
- Under-investment in IT
- Explosion in devices and internet of things – access risk exposure, even greater wireless capacity requirements

No.1 for education
No.1 for global community
No.1 for research
No.1 for international student care
No.1 for staff
No.1 for global connections
No.1 for students
No.1 for sport
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