

# IT Strategy 2015-2018

Achieving Excellence in IT





#### 1.Preface

The University of West London's strategic plan for 2013-18 *Ambition 2018*<sup>1</sup> sets out an ambitious target: **to achieve technological and IT excellence**. The overall measure for this is to achieve a score of 4 in the Dell IT maturity model<sup>2</sup> which means that IT Services at UWL has to be fully optimised, service driven (and focused on continual service improvement), efficient, collaborative and having consolidated its infrastructure.

Information technology (IT) underpins almost everything that we do in nearly all aspects of our daily lives. At university, IT is essential in enabling learning and teaching, carrying out research, engaging with partners, employers and others globally, and in the day-to-day running of the institution.

The boundaries between professional use of IT (e.g. at work or at university) and personal use of IT have blurred almost to the point that they have disappeared. The consumerisation of IT and the ready availability of smartphones (themselves now more powerful than desktop computers of only a few years ago), 'apps' and pervasive Internet connectivity means that users expect easy access to information from wherever they are. They expect to be able to use the device of their choice (or indeed several devices) in order to get things done their way.

Students expect to have easy access to all the content, applications and facilities they need for their studies both on and off campus, available 24x7. This need becomes absolute for students studying overseas either through franchised courses delivered in partnership with other institutions or those studying distance courses delivered wholly online. Staff too expect to be able to continue their work at home on their journey to and from university. Everyone on campus expects pervasive and ubiquitous high-speed wireless Internet access.

The availability of applications that readily connect people together either through communications packages like Skype or FaceTime or through social networking has set a further expectation: one of immediacy. As such, students expect tutors to be visibly "on line" and able to respond to requests for help within hours rather than days.

At the same time, IT Services has to maintain and enhance the University's core IT systems: the data network and connectivity to the Internet, the systems that support its operation (student records, finance, HR, estates etc.) as well as ensure that the services to support learning and teaching (in classrooms) are robust, fit-for-purpose, and appropriately resilient.

This new IT strategy supports and enables the realisation of *Ambition 2018*. It is the result of extensive consultation at all levels of the institution, including students, academic staff, central service departments, IT staff and with management and the Board of Governors.

<sup>1.</sup> http://www.uwl.ac.uk/about-us/how-university-works/strategic-plan

<sup>2.</sup> The Dell maturity model sets out five levels of IT Service maturity: basic (level 1), improving (2), consistent (3), optimised (4) and innovative (5). There are ten categories of assessment and UWL's ambition is to reach level 4 by 2018.

### 2. Strategic context and progress

The University's previous IT Strategy *Learning First*<sup>3</sup>, covered the period 2011 to 2014 and was updated in 2012 in response to the Dell report<sup>4</sup>, the arrival of a new Director of Information Technology, and more significantly, to take account of the University's Future Campus Project to transform the heart of the St Mary's Road site.

Learning First set out four strategic priorities and has served the University well. It saw the implementation of a pioneering and award-winning Student Portal hosted in the Cloud and based on Microsoft's Office 365 platform. It has seen a significant investment in technology to support the student experience – over 500 student PCs and Apple Macs have been replaced and 50 classrooms have been refurbished with state-of-the-art technology, including in the most recently refurbished, the Panoptobased UWL Replay lecture recording service. Students have access to the latest applications, including the entire Adobe Creative Suite available from any UWL PC. As a result of the migration to Office 365, students have received huge increases in email and Cloud-based data storage space, as well as getting the very latest Microsoft software not only on campus but for personal use on their own devices.

IT Services has improved the resilience and availability of many of its services, with a second high-speed connection to the Internet, for example. Internal processes and governance arrangements have also improved and achieved an 'adequate' (green) rating following internal audit<sup>5</sup>.

Since 2012, IT Services has also contributed significantly to the University's major change programmes, including the Future Campus Project, which apart from delivering new and refurbished buildings and services, often to tight timescales, but also the 'churn' of over 600 members of staff in the process.

In 2013, IT Services reorganised in order to establish the capability to not only meet the University's needs of the day but also to plan for the future. Three service groups were created:

- Customer Experience, providing the front-face of IT and the source of support and remedy for ~80 % of queries
- Business Change and Development, to support and develop the University's core information systems as well as lead on IT-related business change projects
- IT Engineering, to support the back-office infrastructure, communications networks and systems.

Those three groups are supplemented by an Information Security Manager, an institutional role to help keep the University's data assets safe and secure.

<sup>3.</sup> http://www.uwl.ac.uk/sites/default/files/Departments/About-us/Web/PDF/policies/IT\_strategy.pdf

<sup>4.</sup> UWL Enterprise Architecture and Maturity Assessment (Second Review at July 2013) – a copy is available on request from IT Services.

<sup>5.</sup> Internal Audit Review: IT Governance and Strategy, KPMG, September 2013 – a copy is available through the office of the University Secretary.

The results of these initiatives have been borne out in improved satisfaction ratings. Student satisfaction, as surveyed, is now at 96% up from 92% the year before. The NSS score for question  $17^7$  hit 85% in 2013, although dropped two points in 2014 (the target is to see this rise to 86% and beyond).

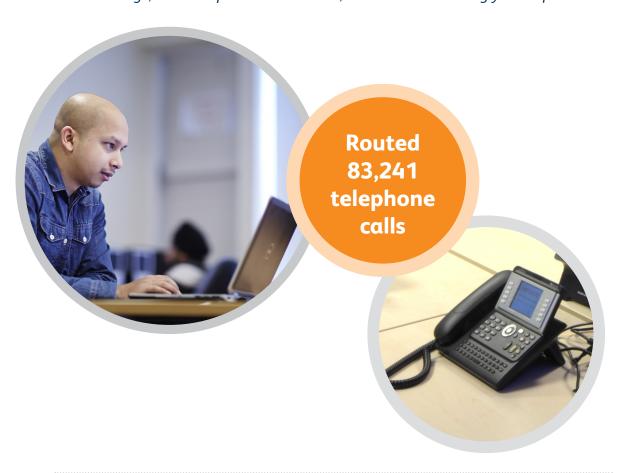
The Dell maturity rating<sup>2</sup>, has also improved. The score for IT strategy, which is the University's strategic KPI for IT Services rose from 2.41 (improving) in 2012 to 3.28 (consistent) in 2013; the target is to achieve a score of 4 (optimised).

The University set out its strategic plan for the period 2013-2018 in *Ambition 2018*. It recognises the changing landscape of technology and the significant role IT has in the University's ability to realise its wider ambitions. Achieving a high quality student experience is essential and is naturally its first priority:

"In an increasingly competitive market it is vital that we offer a unique physical and technological environment. Our estates and IT strategy is designed to align the infrastructure with the strategic goals of the transformed organisation in order to help deliver a high quality student experience with strong local business and community links."

Flexibility is also a key driver in developing the strategy:

"Our buildings, and the spaces within them, need to be increasingly multi-functional



<sup>6.</sup> IT Services Student Satisfaction Survey 2014, 96% of the 358 respondents agreed or strongly agreed with the statement "Overall, IT Services provides a good service to me."

<sup>7.</sup> Question 17 of the National Student Survey asks I have been able to access general IT resources when needed to

if we are to achieve the most intensive use of our resources and to meet the needs of the University as a dynamic learning environment. This will mean providing access to IT systems and services that support the flexible use of technology and help staff and students find the resources they need instantly."

In recognition of the changing way that students learn and with the abundance of material available online:

"Staff and students are more likely to find the applications and indeed the content that they wish to use from resources freely available on the Internet. This will mean that UWL's value proposition will have to be even higher and our role may need to include content aggregation and validation as well as creation."

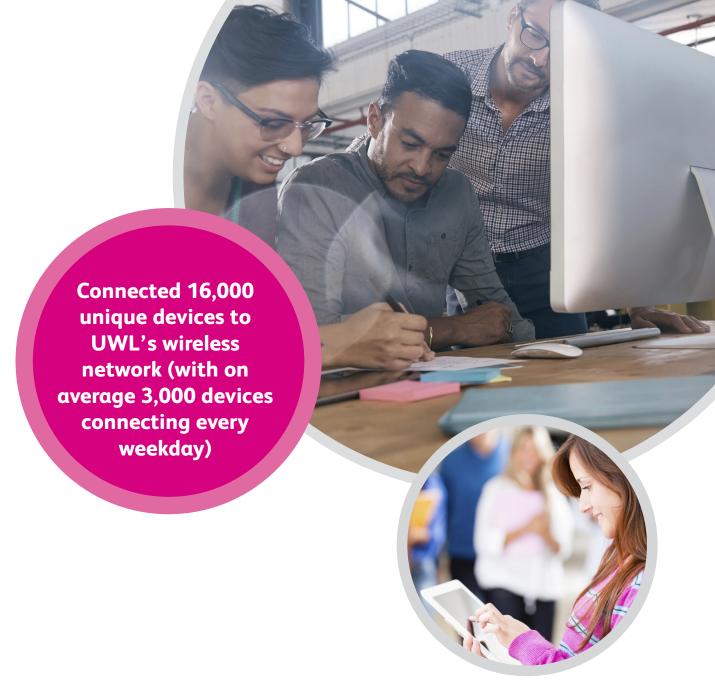
What is clear therefore, is that UWL will need to provide access to IT systems and services to support the flexible use of technology and help staff and students find the resources that they need, quickly and easily and from anywhere.

Ambition 2018 also sets out other targets and aspirations, which are reflected in this strategy:

- More flexible learning and social space and continued efficiency gains in the way we utilise space;
- Classroom technology needs to evolve to support emerging ways of learning;
- Support for distance learning students, especially those overseas;
- Strong business and community engagement, including the provision of incubation space for regional businesses, charities and voluntary organisations;
- The need to enhance the IT and digital literacy of UWL staff;
- The need to harness the power of the UK's 'silicon valley' in building partnerships with the major technology companies in the region to help the delivery of IT services, deliver best-value, sponsor and support students, enhance placement and employment support.

Achieving **Excellence in IT** sets out how IT Services will meet those growing expectations and continue to support the University's strategic ambitions. It is, therefore, closely aligned with *Ambition 2018* and needs to dovetail with other key institutional strategies, including: *CREATE Excellence* – the Learning, Teaching and Assessment Strategy; *People. Knowledge. Impact* – the Research and Scholarship Strategy; the Information Security Policy as well as the emerging Library, data management strategy and student journey lifecycle strategies.

Figures quoted are from the 2014 IT Services Annual Report.



### 3. Vision

The vision for this new IT strategy can be articulated as follows:

To achieve IT excellence through technological innovation, providing timely and pro-active support, accessible services and by keeping our promises. IT Services will be pro-active, agile, aligned, transformational, collaborative and communicative.

7

## 4. Overarching principles

The revisions to *Learning First* established some overarching principles and these are carried forward to this new strategy as they are still relevant and should underpin what IT Services does.

#### IT Services will:

- Maximise efficiency by reducing cost and increasing value for money;
- Identify revenue earning/third stream income opportunities;
- Consider alternate delivery options, including outsourcing and shared services;
- Look for exemplars and best practice (no "reinvented wheels");
- Make data accessible from any device, anywhere;
- Build upon existing investment and systems wherever possible;
- Become secure (and encrypted) by design;
- Protect the University's data assets;
- Use open standards where possible;
- Develop ways to better integrate and share data (for example by using Service Oriented Architecture<sup>8</sup> to connect systems rather than bespoke interfaces);
- Use 'out of the box' solutions rather than bespoke development;
- Consolidate our infrastructure, databases and systems;
- Keep things simple, or as simple as they can be;
- Offer visible, courteous and effective support;
- Invest in staff development, reward and performance;
- Become a dependable professional service, well managed and able to keep our promises.



8. Service Oriented Architecture (SOA for short) is a standards-based technology used to better integrate the flow of data between different and disparate systems.

### 5. Strategic Priorities

**Excellence in IT** will be achieved through the realisation of **four strategic priorities** underpinned by an effective and flexible IT delivery team and a robust, resilient and efficient technology platform.

## 5.1 PRIORITY ONE: Continue to improve the student experience, both within and outside of the classroom

Students expect state-of-the-art facilities when they come to University that will enable them to develop their creative potential, engage fully with their course and collaborate with tutors, fellow students and their friends and family back home. Lecturers and tutors expect reliable and consistent classroom technology that they can depend upon. They need systems and services that will engage with students and help them maximise student potential.

#### IT Services will:

- P1.1 Take the application beyond the desktop by better supporting 'bring your own devices', using virtualised applications and enabling wireless printing
- P1.2 Continue to provide high-quality PCs and Apple Macs in classrooms and open areas with a full suite of up-to-date applications and optimise usage for all
- P.13 Explore loan devices (in the new Library and at other locations)
- P1.4 Continue to refurbish classrooms to a new consistent specification to include Panopto lecture recording (UWL Replay)
- P1.5 Deliver more applications to mobile platforms
- P1.6 Update and enhance the Student Portal and maximise the use of Office 365 (providing OneDrive storage to students, for example)
- P1.7 Improve the delivery of timetable data and notifications of timetable changes
- P1.8 Provide accurate and timely attendance data
- P1.9 Provide real-time feedback capability in the classroom (using Poll Everywhere)
- P1.10 Provide better student support integrated with Student Services in the Street, supplemented by roving support, enhanced training, 'how to' guides and online courses (through Lynda.com)
- P1.11 Deliver the Higher Education Achievement Record (HEAR)

# 5.2 PRIORITY TWO: Support staff in their endeavour to teach, carry out research, enterprise activity and collaborate

#### IT Services will:

- P2.1 Develop and implement a policy for the supply of IT equipment, so that everyone has the appropriate technology to do their job and ensure that all PCs and Macs are warranted and less than five years old
- P2.2 Explore 'bring your own device' and how that might benefit both the University and individuals
- P2.3 Work with colleagues in INSTIL and HR to improve IT literacy, so that all staff get the maximum benefit from IT at UWL
- P2.4 Migrate staff email/calendars to the Office365 Cloud and maximise its use
- P2.5 Upgrade the Intranet so that it provides not only a single entry point for information but also enables collaboration and streamlines workflows
- P2.6 Prioritise the needs of those Schools aspiring to be internationally recognised
- P2.7 Support other School and CSD initiatives, especially where these are directly aligned to Ambition 2018 or related to enterprise activity
- P2.8 Develop an IT plan to support *People. Impact. Knowledge* the Research and Scholarship Strategy by providing fit-for-purpose technology, specialist software and partnering with Reserach and Enterprise to support bids
- P2.9 Work with academic colleagues, suppliers and other partners to harness the power of the UK's "silicon valley" to help realise the University's strategic aims for enterprise, employability and value for money.



Maintained and backed up 1000TB of data (equivalent to 1 billion floppy disks)

# 5.3 PRIORITY THREE: Transform the IT and processes supporting the student lifecycle (quality and exchange of data to support recruitment, retention and better decision making overall)

#### Working with colleagues across UWL, IT Services will:

- P3.1 Map out the 'as is' and 'to be' of the whole student lifecycle (but focused initially on recruitment, admissions, curriculum management and enrolment)
- P3.2 Review the student record system and its fitness-for-purpose
- P3.3 Embed and build on SAM and other learning analytics to ensure compliance, drive achievement and retention
- P3.4 Integrate Blackboard with UNIT-e to enable e-assessment
- P3.5 Work with the Timetabling Unit to upgrade CMIS, to improve the accuracy and timeliness of the timetable, and to automatically be able to populate personal (Outlook) calendars with timetable information
- P3.6 Look to identify and implement systems and processes to specifically aid in the recruitment and retention of students
- P3.7 Switch to a Service Oriented Architecture (Enterprise Service Bus) instead of point-to-point interfaces/links and data exchanges
- P3.8 Develop a data warehouse to enable 'cross-systems' reporting, trend analysis and reporting.

# 5.4 PRIORITY FOUR: Support the University to engage more with its local community

#### IT Services will:

- P4.1 Make the wireless network easier for guests and visitors to use
- P4.2 Install a separate Internet connection for commercial/visitor/conference use
- P4.3 Provide a portal for Community access to systems/services which they are entitled to use
- P4.4 Providing support for institutionally supported lectures and other events (i.e. those typically in Categories A and B).



#### 5.5 UNDERPINNING

Core to becoming an efficient and optimised IT service delivery function is the need to set out what users can expect from us (and indeed what we need from them). To that end, IT Services will develop a Customer Charter. It will also continue to deliver against (and look to improve upon) its published Service Standards, namely:

- IT Services will respond to 93% of incidents/requests within 1 working day (or within 4 hours for a priority incident). Follow-up messages will be sent every 2 working days until the issue/request has been closed (or as needed for a priority incident). IT Services will respond to all other general enquiries within 3 working days of their receipt and give a likely timescale within this period for any response which cannot be provided within that timescale. Although we aim to resolve most requests at first point of contact, it may be necessary to pass on a call to a specialist engineer
- The availability of core IT services will not fall below 97%. Where possible, planned maintenance will take place outside the core supported time of 08:00 to 20:00 Monday-Friday. When a core system is down a communication will be issued within an hour explaining what the problem is and a likely time for service restoration.
- IT Services will procure 70% of IT goods and services within 20 days of the request being received, provided that the request complies with the Financial Regulations, funds exist in the relevant budget and the order is approved as necessary.
- All live IT projects will have an approved mandate and fortnightly highlight reports (showing expected completion dates, 'RAG score' and relative priority).
   An overview 'portfolio report' of live projects will be published monthly.



#### A robust, resilient and efficient technology platform will be delivered by:

- Adopting a "Cloud first" strategy for new applications (ensuring always that security and value for money remain paramount)
- Delivering web-first and across all devices
- Consolidating systems, wherever possible, to one virtualised platform and database
- Wherever possible, migrate from an on-premise to a hosted environment
- Overhauling our user account policy (one "attribute for life")
- Improving Business Continuity planning and DR capability 'IT Statement of Recovery'
- Reducing downtime at pre-defined 'at risk' periods
- Developing (and implementing) an Enterprise Architecture<sup>9</sup> to simplify the IT systems estate so that it is clear as how we will design and build services aligned to business need.

IT Services will build and maintain an effective and flexible IT delivery team by recruiting and retaining an optimum level of resilient and adaptable in-house expertise and by supplementing that with specialist consultancy when needed.



9. An Enterprise Architecture is a well-defined practice for conducting enterprise analysis, design, planning, and implementation, using a holistic approach at all times, for the successful development and execution of strategy. Enterprise architecture applies architecture principles and practices to guide organisations through the business, information, process, and technology changes necessary to execute their strategies. (http://en.wikipedia.org/wiki/Enterprise\_architecture)

## 6. Review and Monitoring

This strategy was approved by Academic Board at its meeting of 29 April 2015. It will form the basis of the prioritisation of IT projects and the formation of detailed annual plans. The strategy and its implementation will be overseen by the IT Steering Group (ISG).

Change in IT is inevitable as are changes in the University's own priorities, either as a result of changing compliance, new policy or the development of other strategies. This document is therefore fluid and will be reviewed annually. Members of the University will have input into revisions of this strategy through the IT Consultative Group (ICG).

Adrian Ellison Director of Information Technology April 2015



Transmitted
121TB of data over the
JANET connection to
the Internet
(double the amount
of data transmitted in
2012/13)







# Maintained 1500km of networking cable

(this is almost twice as much as in the previous year and demonstrates the impact that the Future Campus Project (FCP) project is having on the IT infrastructure)



