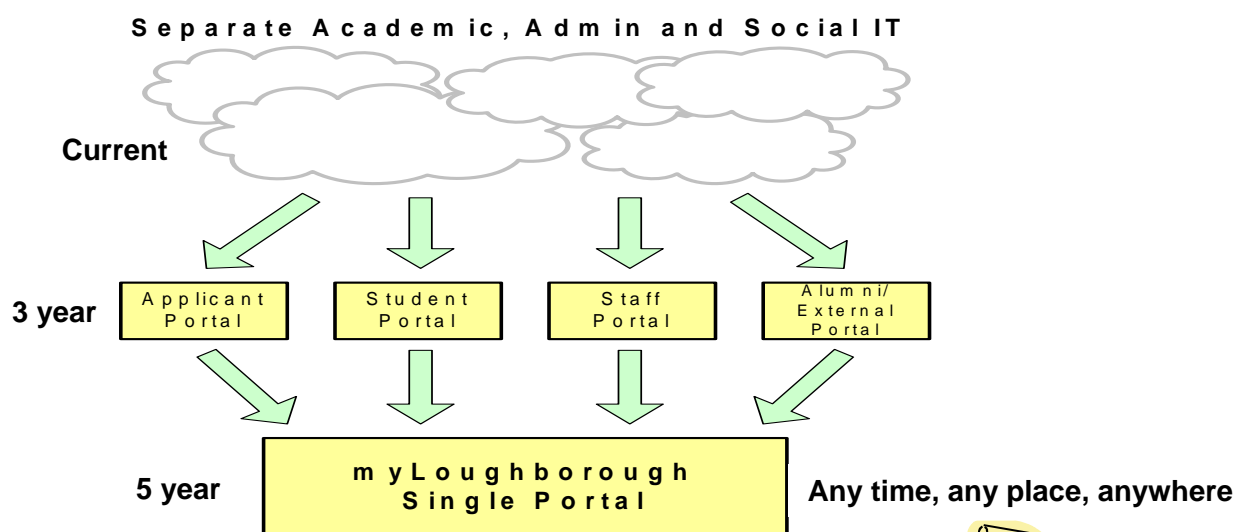


Loughborough University 5 Year IT Vision – Beta2 version

1. 5 Year IT Vision Summary



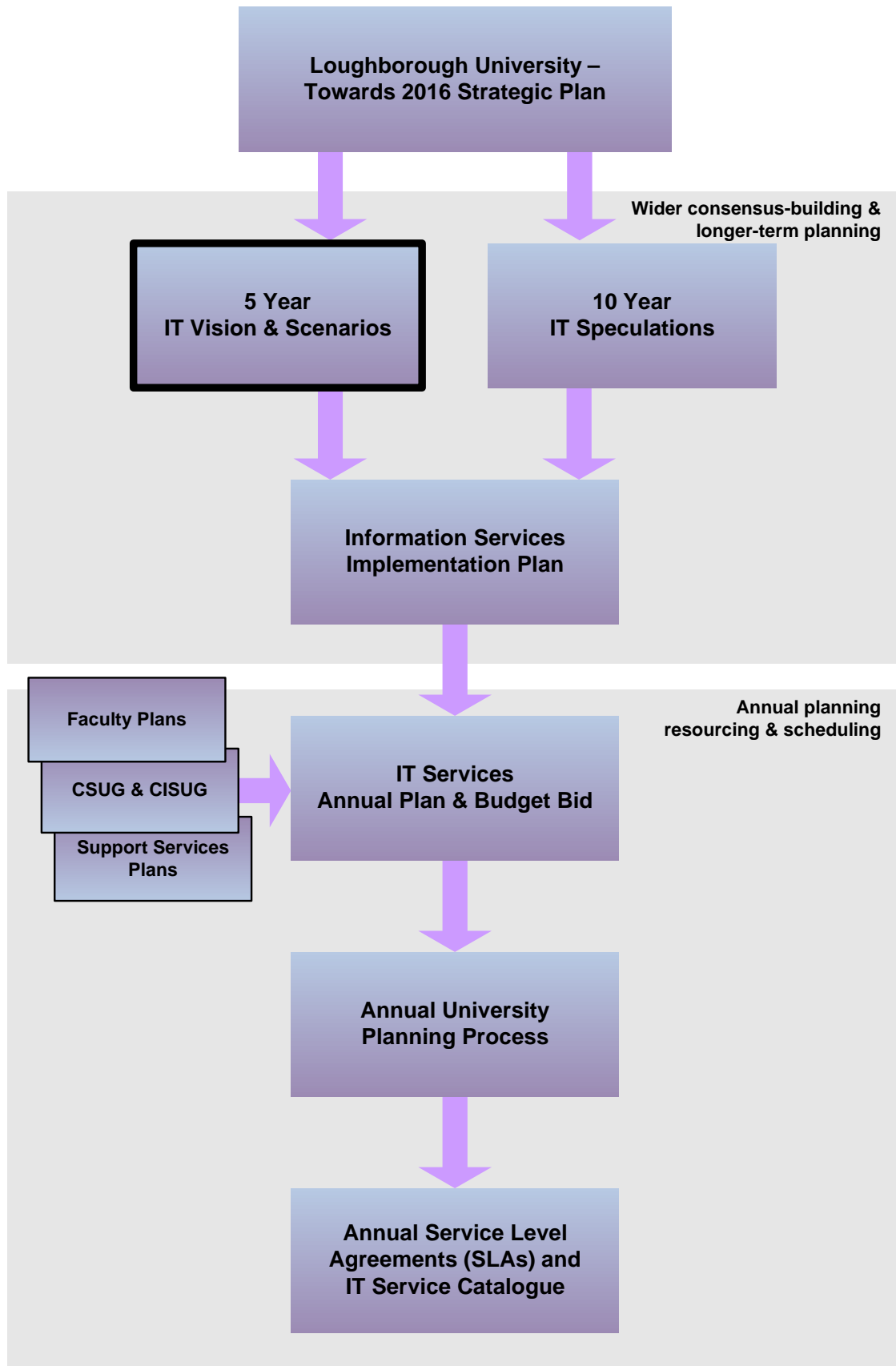
- **Personalisation of IT via portals**
Central to Loughborough's 5 year IT vision is a personalised IT portal interface, seamlessly bringing together all academic, administrative and social IT systems in one place, with information personally tailored to your needs, reflecting your roles and relationships with the University
- **IT any time, any place, anywhere**
Also core to the vision is that this portal interface will be delivered reliably, safely and securely, to anywhere in the world via a ubiquitous Internet, and accessible via the full spectrum of user devices
- **IT vision articulated via user-centred scenarios**
A series of scenarios (small personalised stories or vignettes) has been produced, which illustrate how IT adds value to the University experience across the full range of University stakeholders (from prospective student right through to Vice-Chancellor), and puts the user's experience firmly and squarely at the centre of the discourse
- **Mapping on to core University themes organised under 2016 headings**
The IT services featured in the scenarios are then mapped on to and listed under the headings of the Loughborough 2016 plan, plus other emerging University and IT themes e.g. sustainability
- **Strategic deliverables to achieve vision**
Strategic Deliverables are then distilled from the scenarios and the mapping on to themes, which themselves will form the basis of the Information Services Implementation Plan; a glossary is also provided
- **How to use this document** – it is suggested the table of contents overleaf is used to focus on those specific areas of interest to you



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3. 5 Year IT Vision and the wider University strategic framework



4. IT vision consultation and discussion schedule

Date	Audience
Oct 2007-Mar 2008	1:1 discussions with Senior Managers, Deans, HoDs, HoSSes, FITCs etc.
Jan 2008	Alpha version scenarios to CSUG and IT Services staff
April 2008	ITMT CISUG
May 2008	CSUG Faculty Boards Faculty IT Committees Open meetings as required
June 2008	EMG Open meetings as required
July 2008	Senate Council

Dr Phil Richards
Director of IT
April 2008

5. Student Scenarios

5.1 A potential applicant

H had taken the virtual reality campus tour, and played the 'Virtual Healthy Eating Choices' viral game on the University Web site. The virtual reality was impressive, but only when he saw the scale of the campus and the quality of the facilities with his own eyes, while attending an open day, did he realise just how far ahead of the competition Loughborough was.

H was not an IT expert by any means, but he was impressed by the modern student workstation room facilities – it looked much better than facilities at the other Universities he visited. He was also impressed by the HallNet Student PC Shop, and the fact the University made it as easy as possible for students to own and support their own laptops, phones and other gadgets, and use them all over the campus, in hall and in the town.

During the talk he went to about life at the University, H began to see more about how these IT facilities would be used to create quite a distinct learning experience, and how many students used IT to organise their social life and cheaply keep in contact with their friends and families. No wonder Loughborough has the biggest presence on Facebook of any University! The approach and thinking was so much more joined up than in other places he had visited – and acknowledged that there was more to life than just work.



Three weeks later, just as he was making his final UCAS choices, H was pleased to get a text message from Loughborough on his phone, inviting him to visit the Loughborough Applicant Portal, to pose any more questions he might have, and linking through to phone video clips about the Loughborough student experience. Watching these videos on his phone brought it all back to H just how brilliant Loughborough life was.

There was no question the lifestyle would be great, but H just had one more question over his proposed course, over possible third year project options. He was impressed to get a full, informed reply to his query from a member of the departmental support team, via the Applicant Portal, within two days. In the end there was no hesitation or doubt: he was certain he had done the right thing by making Loughborough his first choice.

5.2 An applicant

L had found the whole on-line UCAS application process a bit impersonal, so she was pleased to receive a letter inviting her for an interview at Loughborough that was actually signed by a human being!

Just before her interview, she went to a talk explaining how the Applicant Portal would help people coming to the University do everything they needed on-line, before ever getting to the University. She could track her application, book her place in hall or private accommodation, choose her optional modules, and ask questions on line to course advisors. She would be able to link through to Facebook, take part in a forum, and chat on line with others that would be starting her course and living in her hall, and make some new friends early. She would even be able to access the Virtual Learning Environment (VLE) via the portal, look at some of the early course material, and perhaps get a head start in her course – at least that is what she would say in her interview!



L's interview later in the day was more relaxed than she had imagined, and she was really pleased, when a week later, she received a friendly text message from the University confirming that she had been made an offer, inviting her to check the details on the Applicant Portal, and fire any further questions on-line through to the course support team.

5.3 A first year undergraduate student

D held off buying his own laptop until arriving at Loughborough, because the Applicant Portal had advised him that he would be eligible for a Faculty Bursary to pay for this, provided he bought it from the HallNet Student PC Shop. He was pleasantly surprised to find a choice of modern laptop options from leading suppliers, with Microsoft Office bundled in, already set up for the Student Portal, HallNet and the wireless network, and all for less than the high street price; not to mention that he could run his own software and hook up to his game console. D's friend K was not eligible for a bursary, but took advantage of a 0% finance deal to spread the cost of his laptop evenly over the three years of his course.

D had quickly become a fan of his University smart card. As well as using it for meals in the hall, it was great to use the Student Portal to be able to load up and use it for payments in the shop, laundry, and printer credits – especially as he never seemed to have any cash left straight after a night out!

D did not realise quite how much he relied on his laptop for his studies until its hard disk developed a problem. He took it back to the PC Shop, who promised to have it all working again under guarantee within 48 hours. D was able to keep up with his emails, personal study calendar, and also the last-minute instant message postponing Dr X's lecture, on his phone, and he knew he could go to the Library to submit his essay on-line. On finding that the first computer room he went to was full, he was able to view a video clip on his mobile phone showing him directions to other rooms with free workstations. Luckily his laptop had been set to back up his work over the



wireless network to the central filestore at regular intervals, so he had only lost the last few changes when his hard disk failed. He reinstated these changes, gave the essay one last proof read, did an automatic on-line check of his bibliography, then pressed the submit button in the coursework submission section of the Portal. Deadline met, but he would much rather have done all this from his room in hall via HallNet!

5.4 A second year overseas undergraduate student

Y had enjoyed living in hall during her first year, and had used HallNet to good effect for her studies, had watched her favourite Arabic TV news channel on-line. She had enjoyed mixing with the range of nationalities in her flat and in the rest of the hall, but it was great to use Skype to keep in regular free video contact with her middle-eastern family back home. When choosing her digs for the second year, she and her friends had made sure their search of the residences database via the Portal only flagged up properties within the range of 'Community HallNet', which brought the University's wireless network to the main student residential areas in the town. Of course, she could have paid for a commercial broadband connection instead, but Community HallNet was free!

Just like the workstations in the central PC labs, Y's PC Shop laptop had been set up to ensure the fullest international support, so she could browse her favourite Arabic Web sites, and keep up with all the news back home. With her Community HallNet connection, she could do everything she needed from her digs via the Portal: check her email and study calendar, submit coursework, look at the video library of recent keynote lectures, catch up on the podcasts from her courses, and use Skype to contact her international family and friends.



Despite being able to do all this from her digs, she still continued to make her regular Sunday evening visit to the 24x7 PC lab, which almost became like an overseas common room at this time. She never got quite as much work done as she hoped to, but she always bumped into plenty of her friends, and caught up face to face with all the news of the week.

Walking back to her digs in the dark evenings was sometimes a bit intimidating – it wasn't quite the same as in hall, where the on-line smart card access system made it feel as safe as possible, but the instant message link via the portal to the community security patrols, which she could access quickly via her phone, went a good way to redressing this.

Y had heard someone saying that, now that 99% of students owned their own laptops, there would not be so much need for student labs. Y hoped this was wrong – she felt people who make the decisions need to realise the social as well as the academic importance of these student facilities, especially for students who sometimes feel a long way from home.

5.5 A disabled undergraduate student

K logged on to the Student Portal. Her multiple disabilities meant she was not always able to get to the University campus. However this did not preclude her participating in her project group's meeting this morning as she had requested that a video-conference be set up, and all the relevant papers were available via the project group's 'our-space' facility.



K was pleased to learn via the portal that her exam time requirements, which she had discussed with her support advisor in the Disabilities and Additional Needs Service (DANS), had been properly taken into account for scheduling her module exams. One less thing to worry about!

Next she needed to do some work on her assignment. She accessed the specialist environmental modelling software available via the University's specialist software library, and used her adapted keyboard to input and manipulate data. This enabled her to complete the work and she submitted her assignment on-line with a couple of hours to spare before the deadline. She finished her working day watching in real time her 4.00pm lecture from home and participating in the question and answer session at the end. Tomorrow she was due to start a virtual field trip to investigate the impact of global warming on the environment of the Amazon – a field trip that met sustainability criteria as well as being disability-friendly.

5.6 An elite athlete undergraduate

X's phone alarm went off at 05:00. With the national swimming trials just weeks away, he did not need any motivation to get up early and head to the pool, but that had not always been so. Earlier in the year, in the cold dark mornings, he was struggling to shake off an injury. The discipline of his on-line training schedule, carefully planned to fit around his coursework, had then really helped to keep his drive high. The automated reminders and alarms from his phone had provided that extra discipline, just in case he was wavering! Now he could feel his performance was coming to a peak, just at the right time.



X's University smart card gave him access to the pool 24x7; the side door swung open automatically as he approached it. He nodded to a couple of other elite swimmers who were warming up as he headed into the water.

Later that morning, back in his room, X fired up his laptop and triggered the on-line conferencing tool to take part in his weekly performance review. His conditioning coach was on business in South Africa, and his sports psychologist at an international gathering in Beijing, but he saw them both sign

in on time, alongside the other members of his team, who were probably not so far away.

His conditioning coach had already reviewed his latest performance benchmark figures and his food tracker on-line diary confirming plenty of effort and a good diet. Through a video window on screen, the psychologist was able to look X in the eye and was reassured that he was happy and relaxed – just the frame of mind required for this critical part of the season. Everyone else around the virtual table was just as positive, which gave him a big boost as he knuckled down and got on with his extended essay project for a couple of hours, before heading back to the pool for afternoon training.

5.7 An undergraduate student on a placement year abroad

E was really enjoying the year in industry in Scandinavia, but she still felt she firmly belonged at Loughborough University thanks to the Student Portal. She was able to complete her on-line placement professional log, and to keep in touch with her course-mates on their placements all over Europe via the 'Placements Virtual Common Room'. She had asked a couple of important questions on-line of her placement co-ordinator, and was even able to watch live via a streaming Internet video as the



Loughborough rugby first XV gave Bath their traditional annual thrashing in 'the real varsity match'. Not quite as good as being there in person to cheer on the lads, but not far behind!

E had tried to stay in shape and eat sensibly, and something she definitely missed was not being able to take full advantage the Loughborough on-line food diary on the portal, and the general 'well-being culture' that was pervasive on campus. 'If only I could order and download a good healthy meal on-line' she thought, 'maybe someone will find a way eventually!'

E had decided to take the placement option right at the last minute, so there had been a change to her fees. She was so glad she could check her student account online during her lunch hour, and could see that her application for the loan had been processed and she was not in debt, at least for her tuition fees! She could see that she owed some accommodation fees and had an outstanding library fine, which she was able to pay off on-line using her credit card. She had also been able to update her change of address online, so she knew any communications from the University would be sent to the correct place. She had a change of heart about one of her module choices for next year, and so, next time she was on the portal, she would change that too.

5.8 A final year undergraduate

G had really enjoyed the first two years of his engineering course: the work was interesting, and so was the social life! But now, half way through his final year, he felt under a bit of pressure. His final year project work had gone really well – he was part of a virtual design team, with other members located in Universities in the USA and Germany. The on-line group work task-assigning system had helped to make sure every member of the team knew what they had to do and were pulling their weight. The weekly video-conferenced team meetings provided a good focus for the project work, and the project wiki and regular emails kept things on track in between. Being able to email G's Dad a URL pointing at the team's final design modelled in 3D virtual reality was a personal highlight.



In fact, G had made such a good impression on his American project supervisor that it had led to the offer of a masters place in that leading US University – provided he got a 1st or 2:1. That was where the pressure came from – he really wanted that American place.

Internet cheating in higher education had become a national issue, often in the news – it had got easier and easier to obtain content for essays, projects, etc. from the Web by paying. G felt it was not fair on students like him who wanted to do the work for themselves, and get the proper credit. He certainly did not want to miss out on his 2:1 because other people had done better than him by foul means rather than fair. G was therefore delighted when the University announced it was introducing automatic plagiarism detection across the board on the on-line coursework submission system, and widening the use of formal computer-based exams. Now if he missed out on his American masters place he would only have himself to blame!

6. Academic Scenarios

6.1 A community warden

Dr M had been quite intrigued when the role of Community Warden had been first advertised, and he had certainly had plenty of interesting experiences since taking the role. The launching of the 'Community Portal' on-line, with links stressing the good side of living close to a University (e.g. value access to excellent sporting and cultural facilities), as well as details of how to report perceived student misconduct at any time of day or night, had been a real plus.



Dr M was worried when he was tipped off by those preparing a regular 'Web 2.0 Watch' briefing for senior managers that a flame-war was breaking out on Facebook between a student house and some younger local residents. It was fairly easy to track down those involved within the University, and a 'quiet word' quickly diffused what could have escalated into a very ugly situation. Over the summer vacation he was looking forward to working with the rest of the pastoral team on some Facebook communities for new students, as part of a pre-induction – social-networking Web sites were not all bad news!

6.2 A lecturer working and marking from home

It was 10:15 Tuesday morning, and Dr M was working from home. She was in the middle of reading a long email on changes to policy on dealing with plagiarism when the soft-phone on her PC rang.

"Hi, it's Judy", said the familiar voice of a colleague, "is it OK if I pop round to your office now to pick up those research pre-prints I was after?"

"You could if I was in the office, but I'm working from home today", replied Dr M.

"Sorry, as soon as you answered the phone, I assumed you were in! I still haven't got used to this Internet business of diverting your phone to anywhere in the world, or whatever!"



"Yes, I can do literally everything from my Apple Mac at home now that I can in work. I'm not sure if being able to answer the phone is a blessing or a curse though! Look, if you just go on-line to the University research repository and search under my name, you'll find it all there."

"Oh yes, of course – I am still getting used to everyone putting all their research into the repository as a matter of routine – I should have just gone straight to it via the Portal!"

Now for some marking. Dr M had slowly got used to marking students' essays on the screen, which was the simplest way for a lecturer to use the on-line coursework submission system. Previously she used to have all the essays printed off centrally, then sent to her for marking through internal mail. As well as the cost and the volume of paper, the downside was she had to manually enter the marks to be fed back to LUSI (when marking work on the screen, this is automated); but then, on the other hand, she was saving carbon by working from home and not driving into work once a week.

Time did not pass quickly while marking, and at 3:00 pm Dr M was somewhat relieved to be able to leave her keyboard and mouse, and go to collect her young daughter from school. This was the one day of the week where she was able to do this herself, rather than leaving it to her child-minder, and this was something she greatly enjoyed.

Later, at 8:00 pm, and with her daughter tucked up in bed, Dr M felt like doing something other than marking, and used her Mac to log on to the University's on-line art exhibition and virtual installation space. There was a new screen-saver exhibition of photography relating to protest, and new virtual reality representations of installations that had both been recommended to her. After a refreshingly cultural hour, she went back to her marking, and in the quiet of a spring evening made excellent progress with a further two hours before finally stopping work for the day.

6.3 A lecturer engaged in teaching a post-graduate course

J got into her office and loaded her Outlook client – as well as numerous emails, she noticed a couple of interesting items from her subject specific news feeds relating to an issue she discussed in her lecture the week before. She updated the module blog, including references to the news items demonstrating the relevance of what was discussed, and to remind students of their lecture at lunchtime.

After lunch, she went to present her lecture. While she loaded up the lecture slides, she pressed the 'record' button on the lectern control panel to start videoing the lecture, streamed to a central server. After 40 minutes of lecture, she loaded up the Question and Answer system and invited students to post questions. The students used the wireless connectivity in the lecture hall to post up questions via laptops and phones, which J answered verbally and summarised via the lectern PC. At the end of the session, the Q & A transcript was posted to the module wiki for future reference. Then J clicked 'stop record' button on the lectern to stop the recording of the session. The central server coded the recording, and posted it to the module wiki for future reference.



As she returned to her office, J's mobile beeped up a text message informing her that her coursework reports had been submitted and were ready for

collection. She opened the module control panel on her PC and clicked the assessment link, which loaded the coursework report. As well as a breakdown of who had submitted, the plagiarism detection system had flagged up a couple of submissions for special attention. If only there was something that marked them automatically too...

6.4 A taught post-graduate student on the same course as above

F's phone woke him, the message said there was a lecture at lunchtime, and that J had updated the module blog. He checked the blog via his phone using the hall's wireless connectivity, saving the need to get up – useful links. He clicked through to the wiki to look at something a fellow student had posted up that would be a big help for revision. He posted back something he had found a couple of days ago that he thought would also help. He then skimmed the on-line video of last week's to refresh his memory ready prior today's lecture.



He got himself to the university in time for the lunchtime lecture, and sat in his usual spot at the back. After 40 minutes of talking, J invited questions via the Q&A system. He opened his phone and asked her to clarify a point from an earlier slide. She did so and made a note of it on the system.

A week or so later, F was revising the module prior to the exam – reviewing the material from the module blog and wiki, and playing back some of the lecture video recordings. His phone beeped again – coursework marks were back. He clicked through to see the feedback and his mark – nice to have the grade prior to the exam, it gave him more confidence in his performance.

6.5 A research post-graduate

B was the first member of his family to go to his local University in Egypt, where he achieved an outstanding result in his first degree in computer science. B's final year project involved use of a virtual research environment, working as part of a virtual research team, using on-line collaborative research and data-sharing tools and video links alongside students from Universities all over the world, including Loughborough. Contacts made during this work led to the offer of a research studentship at Loughborough.



Moving to another country was hard, but B was able to keep in regular free video contact with his family back home by using Skype. B was acknowledged as exceptionally bright, but, like many, his research project was a bit slow to take shape. Things changed when B started using the central 'Condor' computing service, which worked by harnessing the unused power in desktop

PCs around the University. B solved a research problem that had been unsolved for 40 years: Condor completed a key calculation in weeks that previously would have taken years. Presenting this work at an international conference in the middle-East even allowed him to slot in an extra visit back home!

6.6 A new lecturer building a research profile

F was offered a position in Loughborough in the same theoretical area that she had previously worked in at a leading eastern European University. While she was considering whether to accept the offer, she had checked the department's areas of research on the University's publications database and repository system; it quickly confirmed to her why the department was so highly rated. F was also aware of the excellent Loughborough High Performance Computing (HPC) facility, and this was a factor in her accepting the post.



F found the move to Loughborough difficult at first, but she was able to keep in regular email and video contact with her former colleagues, and track her own progress through the on-line Personal Research Plan (PRP) system. Taking part in a pilot of new collaborative tools for a Virtual Research environment (VRE) had given her an excellent idea for a collaborative project involving her new colleagues, former University and other commercial partners, which (following considerable hard work) led on to a successful European grant application paving the way for more world-class research.

6.7 A lecturer engaged in entrepreneurship

Having decided to spin-off a start-up company to commercialise his groundbreaking patent, obtained with assistance through the University Enterprise office, Professor E rented office space in the new Science Park facility. E was pleased to note that in addition to the fully serviced office suite, IT services including an Internet connection had been provided. These were managed by the University's IT department, providing friendly local support - rather than a remote call centre.



In addition to his company's website and email hosting, the IT department also provided E with centrally managed PCs (one less headache for a new business!), storage for all his critical files (with an off-site backup), and access to key facilities on the University network. This meant that when working over in the Science Park, E had access to the same services and information as when working in his old office in department X. This was very important to E, who had decided to split his time between his old and new roles.

6.8 A Head of Department

Prof Q had set aside some time to start the budget planning for next year. He logged into the staff portal and was pleased to find all the finance, student and staff information he needed was easy to access via his personal dashboard, since it was a long time since he had last had to do this. With a quick reminder from the online training video on how to use the pivot tables, he soon had all the information he needed to start a first draft.



Q could see that spending on specialist teaching software had gone up far quicker than inflation over the last few years. Clicking through the dashboard, he was able to access application usage statistics, which showed all the most expensive packages being heavily used by students. Not the answer he wanted to help balance the books, but at least he could see the money was being well spent.

Q could see that recent research grant income was higher than projected, and clicking through to the PRP reporting tool, he could immediately see the reason: three newly recruited lecturers making more grant applications than originally agreed, and all getting a high success rate. Excellent news for the University and the department; he wondered how long would it be before all three were knocking on his door asking for promotion.

7. Management & Administration Scenarios

7.1 A Dean

The Dean had put a good deal of effort into preparing for this trip to China. She used the Portal to quickly cross-reference the invitation list for the formal dinner for alumni on the first night against the contacts management database, and took extra care to note details of two guests who had attended a Beijing seminar the previous month given by one of the Heads of Department in his Faculty. A quick scan through the print-out this data before the pre-dinner drinks made for a much smoother set of introductions, getting the whole evening off to an excellent start.



However, the main preparation was for a smaller, less formal, but possibly much more important dinner on the second night: the guest was to be a Loughborough graduate who had become an extremely successful businessman. Despite his busy schedule had made a point of keeping in touch with his former Department, and during a business trip to the UK last year had slotted in a lecture to final year students on career opportunities in far-eastern financial markets, which had proved extremely popular. After the lecture, he had told the Dean he might be interested in 'doing a bit more' for Loughborough if the right opportunity arose.

On the afternoon before this important meal, at her hotel, the Dean went back on line via the Portal and accessed the most restricted area of the contacts management system. She checked again the biographical details, and hoped that her proposal would press all the right buttons.

The meal was excellent, the atmosphere cordial, and the businessman was full of enthusiasm over his own time and Loughborough, and how the University had gone from strength to strength since then. Now, over coffee, it was time for 'the ask'....

The next morning, the Dean logged on to the portal, and updated the contacts management section with a report of an evening that had wildly exceeded any expectations, and an agreement in principle to fund a new wing of a building to house a flagship financial research grouping.

7.2 A senior administrative manager

B was very pleased that the Dean had got agreement in principle for the new Financial Research Group wing (see above), and was following it up with a formal Memorandum of Understanding. Work on the costing section was at a critical stage: B still had some concerns about exchange rate fluctuations; his sensitivity analysis depended on whether payment would be made in Hong Kong Dollars or the Yuan; and this needed to be explicit in the documentation.



Fortunately Prof K, an expert on international currency in the Department, owed B a favour. B sent Prof K an instant message: ‘Urgent currency advice needed. Please ring.’

Two minutes later, B was speaking to Prof K on the phone.

‘I’m just on the train heading down to London. That grant proposal that you helped me work up a few months back looks like it is coming good – I have just been invited up to give some final clarifications on the details.’

‘Excellent. Now I’ve got a big favour to ask. We’re working up a Chinese philanthropy memo, and I need some help on exchange rates.’

‘You’re in luck – I’ve been doing some consultancy on that very thing recently. Just wait while I pop open my laptop...’

Five minutes later, Prof K had connected his laptop securely through via the fast phone network from the train, and was using Portal collaborative tools to work directly on the memorandum document. B looked quietly satisfied as he watched Prof K’s typing appear on the document in front of his eyes, resolving the uncertainties, and showing clearly how the exchange rates should be handled.

7.3 A member of the Vice-Chancellor’s Office

The draft Internal Audit report on IT directions landed on J’s desk. There were no red or amber traffic lights flagged, which was always a good start! The summary made excellent reading: evidence of clear alignment of IT Strategy with institutional goals; distinctive in-house developments such LUSI and the Staff and Student Portals delivering clear competitive advantage; evidence of high user satisfaction, particularly for services under the HallNet brand; implementation the IT Infrastructure Library (ITIL) ensuring sound IT governance; and benchmarking of IT Total Cost of Ownership (TCO) demonstrating value for money.



Further on in the report, the new regular ‘Web 2.0 Watch’ briefing for managers was commended. J had

already seen the University's own outward-facing Web presence improve dramatically as a result of the new content management system. Now it was good to track how arts were getting 'up there' alongside sport in terms of Loughborough's presence on Facebook, and see how some of the on-line discussions that really did not go down well in the town had been removed by consent. The 'low key' approach of dealing with social-networking Web site issues via the Wardens and Community Wardens was clearly paying off.

Later in the week, at a UUK strategic briefing day, K had had lunch with a couple of counterparts from other Universities; they had both told her some horror stories about IT incidents in their own institutions that had dragged on for months, and ground their institutions to a halt. One of them told her, in strict confidence, that auditors had estimated the cost to the University of the disruption, based on impact on productivity and reputation, as being over £20M. On her return, just to be on the safe side, J asked to be briefed on Loughborough's IT Disaster Recovery plan, and was reassured when she discovered that, since the new second machine room had been fully commissioned and fully equipped, Loughborough's IT systems would recover fully from a major fire in a machine room in a matter of minutes, not months, and business continuity was assured.

7.4 A departmental administrator

N had just come back after a week's holiday and knew he'd have plenty to catch up on. At least he'd been able to take a week off in the summer. It was so much easier now the programme regulations were on the system, as so much more was automated. The students could register online for their re-assessments without having to come to see him individually, as most of them didn't understand the complex rules. Most of the module registrations would be done automatically too, so he'd just need to check those, and sort out any problems. He knew that the requests for Leave of Absence, Transfers and Withdrawal applications would have been automatically forwarded in his absence. The new students had already got access to the portal, so he could give them access to all the information they needed electronically. He knew the first week of term would be hectic, but he was looking forward to the students being back. He was also looking forward to using the Staff Portal to put in his next annual leave request!



N was still struggling to remember his new password – the system had forced him to change it to a more secure one the week before. Still, since the Single Sign-On (SSO) system had been applied to all the core corporate systems, there was only one password he needed to remember. He had immediately volunteered to take part in the new 'biometrics' pilot – using his fingerprint to log into SSO. "The greatly improved data security sounds good," he thought, "but the main reason I am doing it is that I won't have to remember any more long passwords..."

7.5 An Assistant Academic Registrar

S was checking everything was in place for Registration. Now that students registered online, and updated their own addresses and other details, her main job was dealing with changes such as programme transfers which students couldn't do themselves. She had dealt with as many as possible already so he was confident the early statistics would indicate the University was well on target to meet the increased numbers required by the funding council.



7.6 A Finance Clerk

Z knew that the student invoices had just been sent out and so he was expecting the queries desk would be busy. There had been considerably fewer queries since the students had been able to view their account online, and that online payments went automatically to the student account so there was less of a delay. Improved reporting from the finance system meant there were fewer queries and requests for information from staff to his colleagues as well, so there was more time to deal with the problems which needed individual attention.



8. External & Other Scenarios

8.1 An iconic new building (allegory)

I am an iconic new building. I am the ideal base for a flagship research group or high profile external tenant.

The IT building management system keeps me warm and saves money and carbon – I automatically open my windows during the day to let out hot air, but at the same time the sun is soaking into my thick walls to keep me warm in the night.

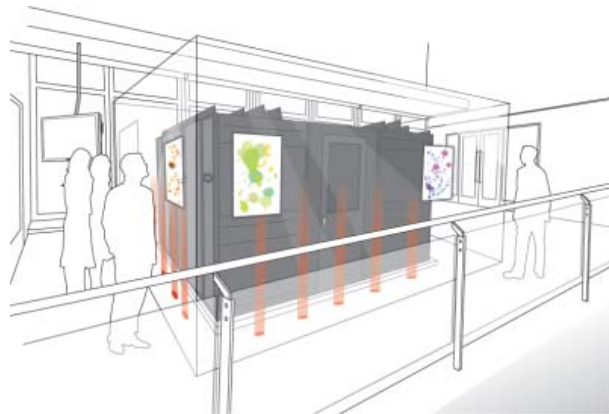


The data flowing through my data network is like the blood in my veins – all the academic IT data goes through here of course, but so does telephones, CCTV, security systems, access control and green building management – it all hangs off the one network, saving a small fortune compared to separate systems – and to think at one stage they argued about the cost of putting in resilient data network ducts into my foundations!

8.2 A green virtualised data centre (allegory)

I am a green virtualised data centre. I live in an imaginatively lit glass case in the atrium of an iconic new building. I am a showcase for green IT technologies, and I double up as an art installation in my spare time.

I am nationally famous, the first of my kind, but the real reason my masters like me is that I was paid for by a large IT infrastructure company's philanthropy fund, and I am now saving the University £250K per annum in electricity, plus the associated 25K tonnes of carbon. Before that my masters did not even know we spent that much on power for IT!



The other reason my masters like me is that the virtualisation technology I use has reduced the time the University would take to recover from a major IT disaster from 3 months to 3 minutes. Plus they can do all the maintenance on me during the normal working day without disrupting service to users – which was starting to get a bit tricky before I arrived!

8.3 An alumnus

C had really enjoyed his time as an engineering student at Loughborough in the 1970s, and while he had been to a couple of hall reunions soon after he had left, he began to lose touch with the old crowd as he settled down, got married, and developed his career in industry. With his youngest son at University (not Loughborough, alas!), he found himself with more time on his hands, not just for recreation, but (and he hated the phrase mid-life crisis) to reflect on the direction of his life.



It was around this time that C received a letter from Loughborough saying that they were making a new effort to contact former student with whom they had lost touch, and inviting him to log into the 'Alumni Portal'. Going to his personal area, he quickly spotted that one of his old mates, whom he had not met for years, lived just half an hour away, and worked for a rival engineering firm. After updating his own personal details, and supplying a brief CV (only allowed to be read by fellow 70s engineers), he left an on-line message, and a couple of weeks later with meeting up with his old mate for a drink and a good chat. His mate had kept in touch with Loughborough for longer, and had even donated money to the alma mater – now there was a thought! He also passed on details of an interesting engineering vacancy, which was not quite right for C, but he appreciated the thought. From that point on he attended a number of reunion events, caught up with many old friends, became a donor himself, and even watched the live streaming video of the Real Varsity Match on line.

8.4 A parent

A couple of weeks after she had waved goodbye to her son Tim, Mrs L was pleased to see the latest parents' email circular newsletter from the University. They managed to keep parents involved and informed, whilst making it absolutely clear that they were obliged to deal with the students as adults, rather than with their parents! That suited her, but there was a fine line between encouraging independence and providing a touch of support where needed. She also appreciated the 'Parents Portal' link on the Web site which gathered together the various pieces of information that she found useful, such as term dates, plus allowed her to directly top up Tim's Diners+ account, making sure she knew exactly what her money was being spent on! The email bulletins sent out during the meningitis scare had really helped reassure her too.



Tim was not the best at keeping in touch, so Mrs L had to employ a variety of methods, including things like instant messaging which she had never used before, as well as email and txt. Looking forward to Timmy's second year, Mrs L noted that the HallNet extended out into town, so he would enjoy the same sort of communication facilities and support next year when he was in a student house, and not be able to use that as an excuse for failing to keep in touch!

8.5 A member of Council

Sir P checked his diary for the next two weeks – Loughborough Audit Committee had come round again, so soon! Sir P logged into the External Portal, and reviewed the papers. Was there anything about IT this time?

At first he had been a bit sceptical about the sums being spent on IT in the University, but an independent Total Cost of Ownership (TCO) analysis and comparison with benchmarks had convinced him that the service was value for money after all. It was at that point that he suggested that all Council papers be put on line (in a secure section of the Portal), so that busy people like himself could catch up when it suited them, without having to carry round reams of documentation.



Sir P had got particularly enthusiastic about the new ePayments service on the Portal – it was a handy way for students (or their parents if they were lucky) to pay their fees etc., saving on overheads, but also for potential benefactors, alumni and otherwise, to make a one-off donation or schedule a regular gift. He had even tried that part of the system out himself!

9. Acknowledgements

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Web Links to Appendices

[Appendix 1 – Mapping the IT vision on to Loughborough 2016 themes](#)

[Appendix 2 – IT strategic deliverables to achieve 5 year vision](#)

[Appendix 3 – Glossary](#)

Dr Phil Richards

Director of IT

April 2008