UCISA ITIL Case Study on the University of Leicester

1. Introduction

The University of Leicester is a research and educational institution with approximately 21,000 students, including overseas students and approximately 3,000 staff. It indirectly supports the employment of another 3,000.

The structure of the University in 2009 is moving to four Colleges supported by Corporate Services. The Corporate Services division will include IT, Library, Academic and Research Services, Marketing and Communications, Finance, Student Support and Development Services, HR and Estates.

IT Services are split into three areas which are:

- Corporate Information Services (applications – VLE, Student Records, HR/Payroll, Finance, Research Support, web and multimedia etc.)
- Infrastructure Services (Data and Voice Services, Systems, Database Management, Research Computing Services etc.)
- Customer Services (Service Desk, Second Line and Desk side Support, AV Services for teaching room support, Project Support Office, Academic Liaison, Training and Communications and Change Management)

2. Using ITIL

Approximately four years ago, a review was conducted, which established a significant number of areas that needed to be improved, to ensure appropriate IT service delivery to the University. As a result, a Director of IT was appointed in September 2006, and tasked with establishing a new IT service by merging several previously fragmented functions. The new Director had a considerable background in IT service management within the HE sector and had also worked in industry.

The new organisation was designed to support IT service management. An Assistant Director was appointed in January 2008 to lead its new Customer Services division and take on specific responsibility for leading the ITIL implementation. The appointee also had significant ITIL experience within a private sector context.

The current version of ITIL being used is v2 and this has been used since late 2008. This will continue to be the version of ITIL that is used, as the advocates are v2 qualified. It is expected that the process from v2 Service Support plus Service Level Management from Service Delivery, will be implemented, and then v3 will be considered as the way to move forward.

The original drivers for choosing ITIL were:

- Maintaining stability whilst increasing the flexibility for change and meeting huge unmet demand for innovation from the business
- Reducing unplanned outages
- Implementing Service Management Best Practice to support the IT organisation's change management
- To become a process driven organisation
- Using an existing recognised framework (not *re-inventing the wheel*)
- Introduction of a service culture
- Reducing the effort of *keeping the lights on*
- Improving communication across the whole of IT services regarding outages, service launches and planned changes

Importantly, the structure within IT service is still evolving to support ITIL and service management, and a service based culture, supporting end to end service.

3. The service life cycle – service strategy

Governance and strategic direction

The governance framework at Leicester has three tiers:

Tier	Role	Body or bodies at Leicester fulfilling the role
1	A senior leadership group, which sets policy and strategic direction, and establishes prioritisation criteria for the investment of discretionary resources	Information and Communications Strategy Committee
2	An executive group, which implements policy and strategy and applies the prioritisation criteria for investment	IT Portfolio Board
3	A number of monitoring groups, each representing a different area of service delivery, which monitor compliance with policy and strategy, and provide a channel for feedback and making proposals to the IT Portfolio Board	IT Service Management Groups

The framework includes IT Service Management Groups for each of the following areas. Some of these are well established. Others are only just emerging.

- Technologies for Learning
- Academic Services (student information services)
- HR Services
- Finance Services
- Research Management Services
- Marketing and Communications Services
- Estates Services
- Student Support and Development Services

In addition, there is an *IT Forum*, which is a consultative user group for general work place computing.

The governance structure above is being extended to cover research computing interests, as part of a project to implement new high performance computing facilities. This will include a new advisory group.

Service portfolio management and project management

The IT Portfolio Board was established in March 2009. It meets every month and is beginning to be effective. Its purpose is to: act as the approval *gateway* for any new proposal that originates outside ITS, and/or requires more than 20 days of discretionary IT resource; confirm the membership of an effective project board for each funded project; monitor progress across the portfolio of projects and adjust priorities between them. It consists of Senior Managers from the Colleges and the Corporate Divisions, and is Chaired by the Registrar.

Within IT there is a Project Portfolio Review Board, which does a first pass review of any project proposals (a project is defined to be any piece of development work taking more than five days). This Board meets every fortnight and forwards its recommendations to the IT Portfolio Board.

PRINCE2 based methodology is being used for project and programme management, and there is an understanding of the difference between a project and a programme.

A service/project pipeline has been put in place through the R8QP – the Rolling 8 Quarter Plan. This is reviewed each quarter.

The status of the projects is reported to the IT Portfolio Board, but is not reported to the University in general. This is because currently the communication mechanisms are not in place to do this. Moving forward this will be part of the communications plan.

Communications

IT Services have a weekly digest *NEWS* function, which is both sent out via email and posted to a website for further reference. This is in a common standard format so that recipients learn what to expect in each section.

The IT Services website is currently under redevelopment within the structure of a user facing service catalogue. They are currently investigating how to make available live service status information.

In an outage situation, IT Services use a *burst message* intercept on the Service Desk telephony system to inform callers of the service outage, to prevent them from holding needlessly.

4. The service life cycle – service design

Service catalogue management

There is little concept of what services are at the moment but this is beginning to change.

Currently, there is no service catalogue, but ITIL v3 Service Catalogue Management has been helpful in helping define what this will look like in the future. IT Services are documented and will form the basis of the service catalogue technical view, but the information does need to be reviewed and additional detail added. A user facing service catalogue is under active development and will be used to drive the structure of the website redevelopment project. However, there is currently no business view of the service catalogue, but this will be addressed in the next few months.

Currently, Service Owners are not in place from an ITIL perspective, but again this will be reviewed in the context of producing the service catalogue.

There has been no service costing exercise to date, but this a potential long term activity (24+ months time) to ensure all the services are cost effective, given the current financial environment and the changes to university funding. The only area where costs are clearer is in the area of high performance computing for research, as this is supported by research grants.

Business relationship management/service level management

The role

This role currently resides within the Customer Services part of IT and is currently called Academic Liaison. It is probable that this name will change to incorporate Corporate Services. There are now two individuals in place, one focussing on Corporate Services and one on the academic areas. The demand for this function is insatiable and they are already clearly overloaded.

Academic Liaison is the Service Level Manager role defined by ITIL, which covers developing service requirements for new and changing services, Service Level Agreements, Project Proposals and being the IT representative into the University as an escalation point. The organisation that will support service level management across the University is currently being reviewed. It is recognised that this role needs more senior staff that have both IT and university facing skills. Communication and relationship management is going to be key to the success of this role – as this role is the *bridge* between the organisation and IT.

The process and documents

Service Level Agreements are not in place at the moment.

The service level management process is emerging, and it is a long term view that Service Level Agreements should be in place.

Currently, there are some Service Level Statements in place, but these are not reported against.

Measuring service

Some service monitoring is being carried out, but this is not sufficient, and will be reviewed and a plan put in place to improve this and the measures being produced from both an IT perspective and a University perspective.

There are some operational metrics in place, but there are currently no key performance indicators.

Capacity management

Capacity management is ad hoc. This is an emerging process.

Availability management

The underpinning network and Infrastructure are reasonably resilient. There is currently no availability process in place.

Information security management

There is an Information Security Office within IT Services. IT security, with supporting policies and procedures, is an emerging process and is being reviewed. There is little effective dissemination or training to support the policies.

Supplier management

Supplier management is an emerging process. There is little segmentation of suppliers or strategic management of them. This is a next step.

Procurement looks after the purchasing and contract negotiation, agreement and management, but do not manage the day to day relationship with the suppliers; the day to day raising and resolution of issues is undertaken by individuals within IT Services.

5. The service life cycle – service transition

Change management

A change management process is in place.

There is a Change Manager in place, and the plan is that this role will probably be a combined Change, Release and Configuration Manager role.

A scheduled weekly Change Advisory Board (CAB) meeting is held to discuss and schedule changes and to look at the overall release schedule. Changes that are not successful are also reviewed in detail. There are three levels of change identified which give the level of authorisation, and only significant/major changes will be authorised by the CAB.

There is an understanding of the relationship between projects and changes. How these interact and are documented and agreed is being considered at the moment.

There is also a Change Management Working Group, which meets every two months and reviews the effectiveness and efficiency of the process and which will drive the change process moving forward.

A major incident process has been launched, and this includes an emergency change process, but this is still new.

Currently there is no forward schedule of change – so consideration is only given to changes in the next three weeks, but IT are aware of Red Zones – when changes should not take place because of impact to the University, i.e. start of the academic year and clearing etc. This is being reviewed and will be put in place.

Release management

There is no formal release process.

Testing is managed for the major applications like SITs and SAP by Corporate Information Services, but this is specific to this type of application, which is critical to the University.

Configuration management

Capture of configuration management data at asset level only is available in a number of different locations within IT Services, but there is currently no configuration management process in place and no concept of a Configuration Management Database (CMBD) with relationships.

Configuration management being implemented as a process is planned for the next 12–24 months. It was looked at for the first phase of ITIL process implementation, but it proved so complex that it has been put in the next phase of processes, as it was holding back the ITIL/service management implementation.

6. The service life cycle – service operation

The Service Desk

There is a Service Desk, which takes calls and emails, but there is also an additional Service Desk, which manages *drop in* in the Library. The Library Service Desk is usually staffed by students, who are supported during business hours by a full time Service Desk Analyst.

Staffing of the Service Desk is five agents, one supervisor and the Service Desk Manager for the closed Service Desk and two FTE (divided between a number of students) for the *drop in* Service Desk, which operates until 21.00 and over the weekends to mirror the availability of library support staff.

Incident management

Incident management is in place and is being developed.

There is a distinction between incidents, problems and service requests, but this is not yet inherent in the language being used by IT staff. The tool can and does manage these separately, but the supporting procedures are currently paper based. Work is underway to put these online with the supporting workflow.

Service requests/request fulfilment

Service requests are currently handled separately to incidents, although this is under review, with a view to moving towards a combined system.

Access management

An identity management project is in place, which will also be redesigning processes for managing identities, account provisioning etc. It will provide for staff being able to change their own passwords (which students can do). Access management is mainly carried out at the Service Desk.

Problem management

There is an owner for problem management identified, but the process of problem management is not in place yet. This process will be put in place once incident management and change management are more mature.

7. The service life cycle – continual service improvement

Continual service improvement is an emerging process.

There is work being carried out to establish what needs to be measured to establish baselines, and to demonstrate where services and processes have improved.

8. Service management software

BMC Service Desk Express is the application currently being used to support the ITIL processes augmented by the BMC APM.

This has been in place since November 2008, although the licences had been bought two years earlier. The implementation was completed in four months.

The reason that this product was chosen is that the licences had been bought, so the investment had already been made. There was little point looking at other products as there were no real processes in place.

The only aspects of BMC Service Desk that are being used are the Service Desk, incident management and change management functionality.

There is knowledge base with the product, but this is not currently being used. It is not expected that this will be implemented, but it may be considered as part of the implementation of the problem management process.

The system is used by 110 IT staff. There are approximately five other staff who use it, who are outside IT. A self service web front end is currently being implemented to allow non-IT staff to have access in order to log and track their own iIncidents and service requests.

The best feature of BMC Service Express is the APM process facility, which speeded up the deployment of the toolset, where process knowledge and experience was very limited. It has also provided the opportunity to improve management information.

Recommendations on purchasing a software tool

- If the tool is bought first – ensure that it is a cheap option that might be thrown away once the experience has been gained and the processes are in place.
- Look at feedback/support groups/Yahoo groups to see what they say about the products and ask questions.
- Reference sites inside and outside the HE sector.

9. ITIL development and qualifications

The original PRINCE2 Foundation training was not successful, as it was carried out too early. Without people gaining a wider understanding of what project management was all about, they struggled to *hook* this into their current day to day work, and so did not understand what they were being told. Further PM training is currently being made available.

Far more successful was ITSM awareness training carried out through HP using an IT service management simulation game called Race for Results. This was interactive and gave staff the opportunity to see processes in action rather experience a PowerPoint led overview.

ITIL certification is currently being carried out under v2 with some more experienced staff starting to take the appropriate v3 bridging courses.

Service Level Management Workshops management training was carried out through ITIL Works.

Training is currently mostly at Foundation level, but other levels are currently being investigated. We are looking at Practitioner levels for the required areas, or taking the Practitioner Courses, and adapting them in workshops, and making them more appropriate to the University. There are two ITIL Manager's level qualified staff in senior positions leading the implementation and two Practitioners in their particular process specialties.

10. ITIL conclusions and recommendations

Leicester University would recommend ITIL as a service management framework based on:

- The fact that this is Global Best Practice
- It is a Framework that can be appropriately adapted
- It forces IT *to throw a torch into the dark corners*
- Provides facts and data to support IT service delivery
- Changes behaviour

11. ITIL lessons learned

- Every member of the Senior Management Team must be totally committed. This needs to be evidenced all the time – e.g. they all must attend the CAB.
- Ensure you have appropriate training and communication in place to support moving forward with IT service management.
- Foundation training is not the starting point – overviews/workshops with simulation are a far more appropriate starting point – the Foundation is based around a syllabus for the exam!
- Manage the organisational change – e.g. an initial *tell us all the things that won't work about this* workshop was helpful and cathartic for the whole management team.

12. Significant areas of experience

- Organisational change management to support the ITIL framework
- Service level management
- ITIL Workshops

13. Contact information

Liz Bailey – Assistant Director of Customer Services

emb25@leicester.ac.uk

0116 2522248

Table of ITIL Processes and The Service Desk[1]

The University of Leicester ITIL Process Maturity Matrix				
Process name	**Implemented/ being improved**	**Partially implemented/ emerging**	**Planned**	Not planned
Service strategy				
Financial management for IT services				
Service portfolio management				
Demand management				
Service design				
Service catalogue management				
Service level management				
Capacity management				
Availability management				
IT service continuity management				
Information security management				
Supplier management				
Service transition				
Knowledge management				
Change management				
Release management				
Deployment management				
Service asset management				
Configuration management				
Service validation and service testing				
Service operation				
The Service Desk				
Incident management				
Request fulfillment				
Problem management				
Access management				
Event management				
Continual service improvement				
The 7 Step Improvement Process				

[1] Subjective rather than objective assessment.