

From big change to no change: discovering lean through action

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Abstract

This paper describes the processes and actions undertaken by one University Library in South Australia that lead to significant change through the implementation of best-practice approaches including quality assurance, lean principles and a team approach to service delivery. The University of South Australia Library has reengineered reference, lending, and external and document delivery services into multi-skilled, client focussed teams across five campus libraries. The focus of the Teams in **Access and Enquiry Services** is on facilitating access to resources and services and responding consistently across all locations and service points, and within agreed performance measures. This presentation will demonstrate how strategies more usually applied in a business and/or industry environment have enabled the University of South Australia Library's Access and Enquiry Team to quickly and efficiently respond to the diverse needs of the students and staff of the University in a rapidly changing environment.

Keywords: Change management; Australia; University libraries; organisational change; client services; lean principles; team work

Introduction

Over the last 14 years the University of South Australia Library has radically changed the way in which it delivers services to the students and staff of the University. These changes have been influenced by all of the well documented drivers impacting on libraries and information agencies world wide, including changes in structure and financial support in the higher education sector, particularly in Australia and the emergence of the World Wide Web (WWW).

However a range of internal and external factors unique to the University of South Australia has provided the opportunity to implement a diverse range of projects and change management strategies that has resulted in fundamental changes to services and a change of culture within the Library. Big changes have included closures of campuses and major building projects requiring restructures and the movement of collections and staff to new or modified locations. Smaller changes, not considered significant at the time have emerged as major influences over the way library staff respond to new challenges, ideas development and problem solving.

This paper concentrates on the operations and change management processes undertaken across lending, reference and information services during this time and how strategies, more usually applied in business and/or industry have been successfully applied in a library environment. Changes in the operations of other teams and functions of the Library have been documented elsewhere [Parnell 2005] and Doskatsch [2007]

The University of South Australia currently operates on 4 metropolitan campuses in Adelaide and at two rural campuses in Whyalla (400kms north of Adelaide) and Mt Gambier (500kms south). Since the inception of the University in 1990, two metropolitan campuses have been closed and two new campuses have been opened. One in central Adelaide (City West) and another in Mt Gambier, built without a physical library.

Early Change

In 1995 the Library undertook a restructure of the Distance Education Library Service (DELS) and the centralisation of the Interlibrary Loan (ILL) Service to establish the Flexible Delivery Service (FDS). The decision to implement this change was driven by the need to standardise performance and procedures across the ILL Service, better utilise the national online ILL utility and improve turnaround times for the delivery of all documents and loans for all delivery services, including DELS. The centralisation project also resulted in a reduction in staff, as each campus operated an ILL service. The centralised model was structured on the basis of one technician for Request and one for Supply and a team of four library assistants. This compared with 4 technicians and up to eight library assistants in the previous structure.

To assist the staff of the DELS, and the newly structured ILL Team to merge and evolve into a consolidated Team under the banner of the FDS, a number of strategies were employed by the newly appointed Flexible Delivery Librarian. These included:

- Team building, vision and mission setting workshops
- Presentation of the service model including a detailed description of the 'supply chain' across the Library to improved delivery of resources into the central location
- Describing all processes through the update and/or development of procedures
- Training and skills development to;
 - Improve confidence
 - Make optimum use of existing technology
 - Assist with ideas development
- Provide each Team member with a PC and/or timely access to a PC when required (that is, the tools required to do the work)

The challenge for the Flexible Delivery Service Librarian was to demonstrate to the DELS Team that their reputation for excellent service would not be comprised by the merge with ILL and to reassure the ILL Team that the service model would not only work, but in fact deliver a more efficient and effective service to their clients. The approach taken by the FDS Librarian drew on the principles of *kiazan* and lean manufacturing.

"The principles of *kiazen* (continual improvement) and lean manufacturing contain knowledge that can be put to work in all libraries" [Wiser, 2005]. These principles included:

- Standardized tasks are the foundation of continuous improvement and employee empowerment
- Use only reliable, thoroughly tested technology that serves your people
- Respect your partners by challenging them and helping them to improve
- Make decisions slowly by consensus, thoroughly considering all options; implement decisions quickly
- Become a learning organization through relentless reflection

Team building, vision and mission setting

During team building sessions the new team was challenged to develop a Mission that clearly described the role of FDS to their clients and a Vision Statement that demonstrated their intention, **to be the best they could be**.

Based on the outcomes of a brainstorming session the Team devised the following Mission

The Flexible Delivery Service exists to link our clients with quality and timely information resources and services regardless of physical or institutional boundaries.

From the ideas from the vision setting session, the FDS Librarian created a vision statement with a target for achievement over the next 5 years. This was:

- *The Flexible Delivery Service has an international reputation as a model university based flexible delivery agency*
- *Our highly motivated, customer focussed team anticipate and exceed expectations of our diverse client base*
- *Through innovative applications of leading edge communications and information technology we are able to provide access to information resources and databases worldwide*
- *We have created a cooperative learning environment in which team members have equal opportunity to advance their personal and professional development*
- *We have clear, easily understood performance measures which focus on customer service and encourage teamwork. The positive feedback from our customers, combined with the friendly, harmonious relations within the team result in high levels of job satisfaction.*
- *We are seen as cooperative and effective by other teams within the university library and the wider university community.*
- *Our organisation structure is made up of multi-skilled, semi-autonomous teams. Each team is empowered to make all decisions necessary for their day to day operation.*
- *The manager has a role of mentor and coach, but the principal role is external liaison and advocacy for the group*

This Vision, while accepted as the compilation of the ideas put forward by the whole Team in the workshop, was not 'allowed' to be displayed publically by the FDS Librarian as it was thought, strongly by some, that it was not achievable. One member in particular stated that '*she did not see the FDS Librarian as her mentor and coach*'.

The proposal to establish the FDS via the merge of DELS and ILL was based on three key factors. The emergence of a national online resource sharing utility implemented by the National Library of Australia (NLA), similar workflows and a co-dependency on internal and external mail services. That is, both teams were dependent on their ability to retrieve and/or locate information resources, and package and deliver those resources efficiently and effectively, locally, nationally and in some cases internationally to a diverse range of clients.

Supply chain analysis

A detailed investigation of the supply chain for internal mail services, and internal and external courier services was undertaken. Pickup and delivery times at each campus were analysed. This identified optimum times for retrieval at each campus for quick delivery to the FDS to meet the daily deadline for postal services and interstate courier deliveries. The fee structure for the mix of delivery services used by the Library was also documented. The ILL Team used the standard postal service, perceived to be cheaper than the courier service used by the DELS. This proved to be a myth, as the University had negotiated a courier contract based on volume, rather than unit cost per parcel. The courier contract offered considerable cost benefits including:

- reduction in delivery costs per unit
- reduction in staff time for processing and packaging
- reduction in consumables
- improved turnaround times for clients
- traceability and insurance against loss (quality assurance)

Using the University's contractor enabled the FDS to deliver parcels within the region and interstate, overnight. This compared to up to 7 days for the standard postal service.

Facsimile delivery of documents was accepted as routine, across the Library and when appropriate, was delivered directly to external students and to other libraries. This was later replaced by electronic delivery to the desktop (EDD). The University of South Australia Library was the first University to adopt this as the standard for external students, particularly off shore students. The FDS Librarian also campaigned for electronic delivery to be adopted as the national standard for resource sharing between libraries in Australia through her membership of the NLA, National Resource Sharing

Working Group (NRSWG) and the Expert Advisory Group on Resource Sharing. Further information on NRSWG is available at <http://www.nla.gov.au/initiatives/nrswg/>

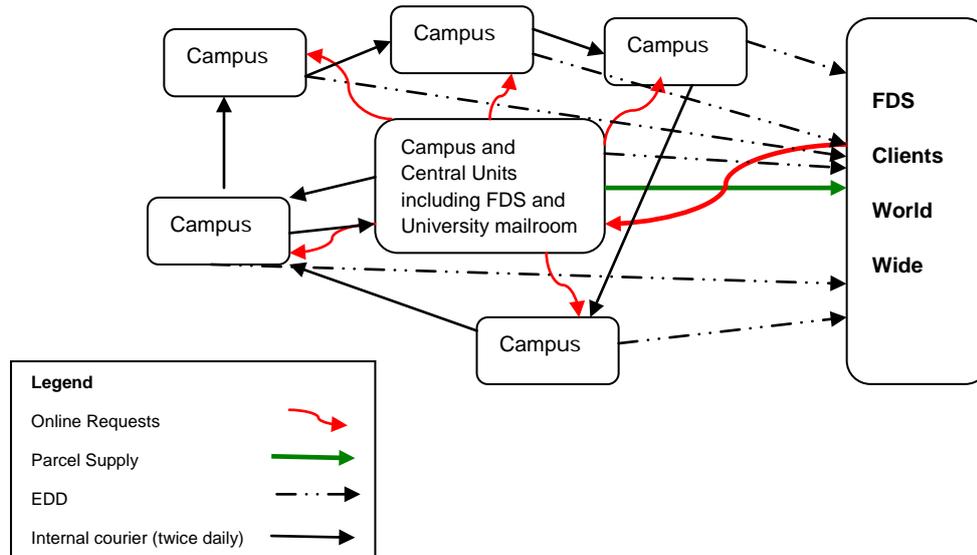


Figure 1 Supply Chain Diagram

Added benefits from this activity included improved understanding of workflows across the Team and a willingness to adopt a philosophy of continuous improvement for all workflows and processes. This shared understanding was instrumental to the University of South Australia Library's successful bid to provide the Open Learning Australia (OLA) Library Service in 1997.

By mid 1998, the FDS had developed a reputation within the Library for innovation and the ability to react positively to requests for new services from internal and external clients. The range of services offered included:

- Reference, information and delivery services to external students
- Services for students with disabilities
- Interlibrary loans and document delivery request and supply services
- OLA Library Service
- A cost recovery document supply service to secondary schools Australia wide
- A document supply service to a state government department

Income derived from fee for service contracts totalled over K300 per year by 2002. Work that could not be absorbed within existing workflows and staff allocation was supplement by contract and casual staff employed for the period of each contract. All workflows were supported by adopting a philosophy of multi-skilling and movement of individuals across functional teams to achieve the agreed performance standards for each service. The ILL turnaround time for delivery of books had been reduced from up to 28 working days to less than 7 working days. The ILL Team also won a Vice Chancellor's Award for General Staff Excellence in 1999.

Storyboarding and brainstorming

In 1999, the FDS Librarian was asked to host and project manage a telephone call centre. The Call Centre Team was to be made up of library assistants from within the FDS, supplemented by other library staff and casual staff.

A Project Team Leader was seconded from another area of the Library. SWOT analysis, brainstorming and storyboard activities were utilised to identify the strengths, weaknesses, opportunity and threats of a call centre model in a library setting.

Storyboards have more traditionally been used in the film and media industry to develop concepts and design production schedules. However in recent times storyboarding has been adopted by business as a product development diagnostic tool.

'Storyboarding is a structured process, which enables a small team of participants to explore a topic and arrive at a consensus view on a course of action or a set of conclusions. The process uses pin boards and cards as the principle means of collecting, sorting and editing ideas.' [Cothier, R. F.1998]

These processes provided the FDS Team with a 'threat free' environment to express their concerns about the added workload, training needs and occupational health and welfare issues. Storyboards, in particular, allow more timid, less confident individuals to express their ideas as 'all ideas are good ideas' during the brainstorming stage. The sorting/editing stage is undertaken in silence. This stage is complete when a consensus is reached. In this case, it also provided a platform for the FDS Team to display their skills and ability to each other, and demonstrate how they could contribute to the project.

The hypothesis to be tested during the pilot was that up to 80% of calls received at the call centre would be service related or directional or non reference (other) and could be resolved by the call centre team at the time of the call. and on that basis, the team could consist of library assistants or library technicians.

Concerns were raised from outside the unit about the use of library assistants to staff the service. The FDS library assistants had been routinely responding to telephone, letter post and email enquiries for several years. The implication was that the call centre team would not have sufficient in-depth knowledge of Library resources and services or reference skills; and that the reputation of the library would be harmed by a poor service response. However, there was a positive response to removing telephone calls from the 'busy' information and lending desks.

The call centre consisted of a desk, PC, digital telephone and headset. Before the launch of the pilot, procedures and guidelines were developed by the Project Team Leader and tested by the FDS Team. Staff from other units of the Library were then invited to join the team. Three casual staff were also employed for the duration of the pilot. A final team of 13 staff were selected who worked across a two (2) week roster for four (4) hours per shift per day between 9:00AM and 5:00PM. Telephones from all information and lending desks were diverted to the Call Centre during those hours.

The pilot was conducted over a 4 month period between August and November 1999.

Table 1 illustrates results from three surveys conducted in **1996** (29 Mar-4 April), **1999** (3 Aug-27 Nov), and **2008** (13-26 Oct). The 1996 results describe calls received at information and lending desks across the Library during opening hours, including evenings and weekends. The 1999 results describe calls diverted from information and lending desks between 9:00am and 5:00pm Monday to Friday to the Call Centre. The 2008 results describe all enquiries, including telephone calls received by all units in the Library with the exception of the Director's Office. The 2008 figures also included data from the *Ask the Library*, Telephone Enquiry Service, a centralised service established in 2006.

Enquiries included in the categories other than Information/Reference have varied from survey to survey. For example in 1996 *services* included activities such as requests for renewals, now available on line. 2008 data for *other* includes library IT enquiries for consistency with 1996 and 1999 data.

The results of all surveys clearly indicate that information/reference enquiries (deemed professional level work) constituted less than 25% percent of all calls, and since 1999 less than 20%. Thus, more than 80% of calls received by the Call Centre were resolved at the time of the call, as hypothesized. The pilot was deemed a success, however, funding for new initiatives was not available in 2000.

Category	1996			1999 (Call Centre Pilot)			2008		
	No. of calls	Cat. %		No. of calls	Cat. %	Resolved Call Centre	No. of calls	Cat. %	
Information/Reference	227	22.2		460	16.0		648	19.0	
Services	352	34.4		1089	38.0		1638	47.8	
Directional	221	21.6		198	7.0		612	17.9	
Other	222	21.7	78%	1114	40.0	84%	530	15.5	81%
Total	1022	100		2861	100		3428	100	

Table1. Enquires Surveys

Evidenced based *small change*

In 2000, the FDS Librarian, was appointed an Acting Campus Librarian and Manager FDS at the Underdale Campus. As a contribution to a University wide requirement to reduce costs she undertook to deliver a 10% salary saving by reducing the number of staff required to support 2 service points (information and lending). Based on the evidence gathered during the Call Centre Pilot, it was demonstrable that less than 20% of enquiries required the expertise of a professional librarian.

The Acting Campus Librarian recommended that the salary savings could be met by implementing a single service desk, reducing the number of desk staff from 3 to 2 and allowing library assistants to contribute to information services. She also recommended that 'professional' staff be rostered only during 'busy' periods, usually mid morning to mid afternoon.

The concept of a 'single service desk' based on a 'whole of team' approach was strongly resisted by the professional librarians. However, this strategy easily achieved the required salary saving through a reduction in the casual budget; and had the full support of the University Librarian. The single desk was implemented by the simple removal of the information desk and some minor changes to the lending services desk. The decision to act quickly and implement a single Service Desk was based on 'confidence' in the evidence provided by the Call Centre Pilot and the 'multi-skilled, team approach so successful in the FDS. The resisters were assured that, if it did not work, it could be easily undone.

Quality Assurance (QA)

Between 2000 and 2002 QA was implemented across the FDS and Lending Services. Led by Acting Campus Librarian at Underdale, this project resulted in standard procedures and processes across all campuses and QA measures for all services in the FDS and Lending Services.[Cother, C. S. 2004]

Change at every level – a whole of Library restructure

"In 2000 the University of South Australia launched Blue Print 2000, a five year plan to improve its teaching and learning environment..." [Dokatsch, 2007]

The Blue Print project included the closure of the Underdale Campus and the devolvement of all activities across the remaining four (4) campuses. The impact of this decision on the Library was significant, as Underdale was the largest campus library and the location of the central units, including the Office of the University Librarian, Technical Services, Library IT and the FDS. The Central Store was also located at Underdale.

The choices were to limit the change to Underdale or change the Library. The Library Leadership Team (LLT) agreed that the closure of the campus provided the opportunity for a whole of library change. A managing change process was instigated and restructure was undertaken.

The closure was finally achieved after three year of exhaustive planning. During that time, the new Library structure was presented to staff. Reaction to the new structure ranged from excitement to despair, and in some instances, open resistance and resentment. The intention to establish a team

approach based on the operational activities of the Library; Academic Library Services (ALS), Access and Enquiry Services (A&E Services), Information Resource Management (IRM) and Library IT Services (LITS) was viewed by many as the kind of managerialism that failed to acknowledge individual skills and abilities.

As the newly appointed Manager Access and Enquiry Services, the former FDS Librarian was challenged with the task of proving that a team approach to lending and information services would streamline and improve services to the students and staff of the University. The internal library focus on the role of librarians compared to library technicians and library assistants, was of little interest to students.

An earlier attempt by the Library to introduce a co-located Lending and Information Desk at the Magill Campus had failed. A staff demarcation between the activities of each service created confusion, mostly due to movement between the desks as staff tried to decide who should respond to enquiries. This attitude was echoed during the transition to the new structure.

For example, focus groups established for the transition were reminded by LLT to:

Cease using the term co-located desk and start concentrating on reconceptualising this service as a single entity eg-‘Loans and Enquiry’, or just ‘Service’ as possible designations...all groups are encouraged to consider all issues in the context of a single service point. For example level 4 and 5 “loans” staff might well be expected to go beyond searching for known items in the future. All groups are reminded that the new structure will not result in a “GreenField” Library where all knowledge has been lost. UniSA will retain a large Library with lots of expertise that can be drawn upon.

One of the puzzling aspects of staff attitudes at this time was the view that the new structure somehow extinguished all knowledge and past experience. The library assistants in particular expressed a need for intensive training to attain the competencies required to work on the service desks. This was reinforced by the professional staff who believed they would be overloaded due to the perceived lack of information skills of the assistants. A hidden agenda in this discourse was the fears of many of the librarians that they did not have the necessary circulation system skills.

The Manager Access and Enquiry Services encouraged the team through this period by:

- Stating confidence in the skills and abilities of all members of the Team
- Reminding individuals of the transferability of their existing skills
- Providing opportunities for formal training and informal sharing of knowledge and mentoring
- Establishment of working groups to identify workflows and rewrite procedures
- Conducting a one day Team Building workshop

The Team Building Workshop provided the opportunity for the new Access and Enquiry Team to get together for the first time. Members of the FDS Team, renamed the Flexible Information Service (FIS) in the new structure, provided positive role models in the breakout sessions. They spoke about their experience of working in a ‘multi-skilled, team based’ environment. They shared their enthusiasm for working and learning together and problem solving as a team.

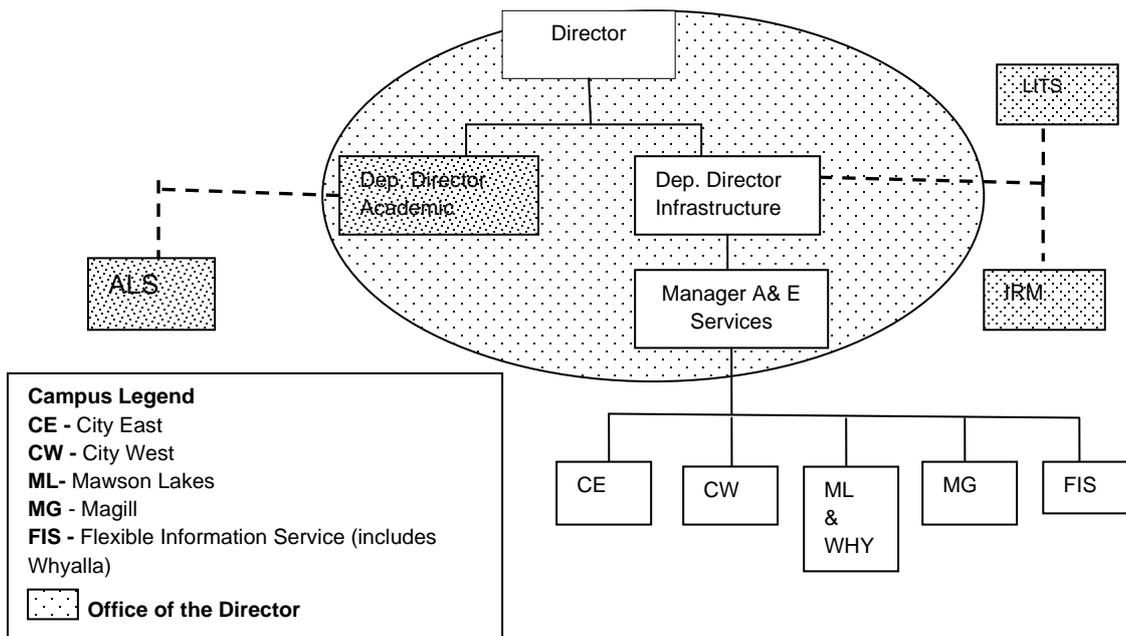


Figure 2 Access and Enquiry Team Structure 2005

The Manager Access and Enquiry Services, although based in the Office of the Director at Mawson Lakes, spent time at each campus every week and travelled to Whyalla on a number of occasions. At the end of the first year of operation (2005), she facilitated a series of team building workshops with each of the campus teams and the FIS. The workshops used storyboarding and brainstorming to identify and celebrate the Team's achievements and to discuss how, we as a team, could do better. It also provided the opportunity to present the Library's Action Plan for the following year.

The Storyboards clearly indicated that each Team felt they worked well as a team and that their ideas had been listened to. However, communication topped the list of 'things we could do better' along with a demand for more training. As a result the Manager implemented a 'Service Desk Bulletin' to improve communication across the Team and provide a platform for other Teams and Units to contribute information and updates on changes with a direct impact on services. This has been published up to twice a month since February 2006 and has become a valued communication tool for all Library staff.

More change to 'no change'

In 2007 a further restructure was instigated by the Director Library Services to further refine the 2005 structure. Better alignment of the activities of the LITS and IRM was sought via the merge of these teams to form the Information Resources and Technology (IR&T) Team. A&E Services was moved into the portfolio of Deputy Director Academic to reduce inconsistencies in the reporting structure and improve collaboration and communication across these teams (**See: Fig. 2**).

Morale was impacted in A&E Services as a number of positions had been lost and the FIS Team moved and merged with the Mawson Lakes Team. However the Team took up the challenge to investigate how they could reduce workload by re-examining workflows and processes. A number of major and minor projects and initiatives were put forward by the Director Library Services and the Manager Access and Enquiry Services. Team members also put forward ideas. Small project improvement teams were established to pilot and implement these initiatives. These included:

- Improved self service options for students and staff
 - Online study room bookings including self managed changover of rooms and key returns

- Self Service collection and of Hold Requests
- A Self Service borrower card for University staff
- Improved signage and information about printing, copying and scanning
- Diversion of all external telephone calls from the Service Desks to the FIS to establish the Ask the Library Telephone Service (a call centre).
- Removal of cash handling from the Service Desks by utilising Monitor Card as the mechanism for paying library fees – **change** (small coins or notes) is no longer required in the Library.

Conclusion

The Vision as created by the FDS Team in 1996, published for the first time in this paper, has become the reality and the underpinning philosophy of the Access and Enquiry Team. While it can now be said that '*no change is required in the Library*' continuous improvement will always be a requirement for the delivery of quality assured, client focussed services at the University of South Australia Library.

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