Going with the Flow!

Implementing a workflow system to streamline acquisitions in a special library.

Yvonne Halland
Project Leader: Information Procurement
CSIR Information Services, PO Box 395, Pretoria 0001

1. **Introduction:**

   Managing requests for published information within an organisation can be a very cumbersome and difficult process particularly where costs have to be recouped from the client's own cost centre. Keeping track of the current status of each request, follow-ups with suppliers, feedback to clients as well as getting good management information from the system are other factors that play an important role in the acquisitions process.

   The CSIR Information Services (CSIRIS), being a medium-sized, special library, have a somewhat different approach to acquisitions from that of a large academic library which handles high volumes of requests every year. For example: we do not have a budget for books and other published information. It is very much a "just-in-time" approach rather than a "just-in-case" scenario. Every request originates with a knowledge worker in one of the business units in response to a very specific need. The business unit is also responsible for the cost of the item and this ensures that only those items which will fulfil a current, often urgent need, are ordered. All costs have to be debited back to a project through some interface with the CSIR financial system.
   The number of requests is therefore much lower but higher priority than in the average academic institution. A more personalised approach is needed to manage the acquisitions process, ensuring the cost effective and rapid supply of information. Interaction with clients is an important element of the process.

2. **Reasons for the introduction of a new system:**
   Since the early nineties, CSIRIS have had a custom designed, mainframe library request management system. Although this has, (and still) is working very well, several issues arose which caused us to look again at the way we were managing library requests:
   - The mainframe system was becoming outdated and very little technical support was still available.
   - The organisation was moving away from mainframe systems to an ERP which ideally would encompass all administrative systems within the CSIR.
   - Because the system was only accessible to CSIRIS workers a lot of unnecessary re-inputting of data into different systems was taking place.
   - Clients wanted more feedback/information on the status of their requests.
   - Better statistics on the services rendered to the business units were required.

   We started by looking at several options like proprietary software, the Sabinet pre-request and the Innopac (Millennium) request forms but none was suitable to our needs. The main drawback was that they could not accommodate the financial side of the process.

3. A workflow system:

After much investigation, weighing up the pros and cons of the various options, we finally decided on a workflow system. There were several reasons why this route was chosen:

- The drive towards an "e-CSIR" over the last few years had already resulted in many administrative functions e.g. submission of leave requests, S&T claims and training requests being "work-flowed". It was therefore a tool with which all CSIR staff was familiar.
- The skilled Computing Services staff that did the developing of the above processes were available to do the library request module as well.
- The workflow system was readily available to all CSIR staff including those at remote sites.
- It could be programmed to interface with the new financial system which is in the process of being implemented.

Once the decision was made, a period of intensive business process mapping started. The current processes were looked at critically with open minds and each step used or changed and new steps added as we thought would be most efficient. Flow charts were drawn to get an overview of the process before development started. Close cooperation between CSIRIS and Computing Services was necessary to ensure the system could handle every need. Some of the requirements were:

- Data capturing should be quick and easy, eliminating duplication of effort.
- The client interface should be intuitive as far as possible.
- Requests should be directed to the right dept (ILL, book orders etc) to avoid delays.
- It should facilitate direct, easy communication between CSIRIS staff and the requestors.
- It had to ensure equal distribution of requests to available staff.
- It should automatically remind patrons that ILL's are due and allow for electronic renewals
- It had to be compatible with the CSIR ERP including the financial module.
- It should allow for clients to see the status of their requests without having to call the library.
- It should provide patrons with a complete record of all their requests.
- It should be easy to see which items are unfilled to enable regular follow-ups.
- A wide range of management information (statistics) should be readily available e.g. requests handled for each BU, types of requests, costs per BU or client, supplier stats etc.

4. Implementation:

Development of the Oracle database took approximately 6 months (including the December/January holiday period which delayed the process somewhat). Half way through there was a staff change at CS which also necessitated some revisiting of the original specifications with the new developer.

Once the basic programming was completed, testing commenced. We first trained and used CSIRIS staff within the business units as “guinea pigs”. Some refinement was done on the basis of the feedback received from them before a few end-users were asked to test the system as well. The testing period was limited as CS had other deadlines to meet and it was felt that “bugs” could be ironed out as they occurred rather than trying to anticipate and test every possible scenario beforehand.
At the same time the CSIRIS acquisitions staff had to be trained to use the workflow system for processing requests. In this area too, some unexpected practical problems occurred but, with valuable input from staff, these problems were fixed.

The workflow library request system went live at the end of June 2003. We announced and marketed the new system in several ways:

- A news item on the CSIR Intranet
- A CSIRIS newsletter (e-mail) to the entire CSIR.
- A “road show” - presentations and training sessions at every business unit.
- Information specialists at the business units giving on-on-one training.
- The requesting of documents became part of the regular monthly Information Competency workshops for current and new CSIR staff.
- Manuals for both clients and CSIRIS staff were compiled and made available on the CSIR document management system.
- “Brown Bag” training sessions.
- Patrons submitting requests via e-mail or paper were informed of the new process and directed to workflow. Where necessary, they were also guided through the process.

Currently 95% of all requests from CSIR staff are submitted via Workflow. The system is working well especially for CSIRIS staff as much better overall control of orders is possible. All outstanding orders remain in the “worklist” of every staff member until it is completed thus serving as continuous reminders that requests need follow-ups.
We have also been able to use the data in the system to get very specific statistics on requestors, the type of documents ordered, suppliers used, the services provided to the different business units and the expenditure by the BU’s on different types of material.

5. Problems:

1. There has been resistance from some CSIR staff to submitting requests themselves. In the past, especially they had merely sent e-mails or forwarded a literature search result to the library for ordering. They objected particularly when a number of items had to be ordered at any one

time e.g. after a literature search had been done. This does not occur very frequently but we provided an alternative by giving proxy rights to one information specialist in each unit. However, we do not encourage this route and try, tactfully, to convince patrons that it is not quite as difficult and time-consuming a task as they perceive it to be. Statistics of customer usage in the past indicated that most patrons ordered a relatively small number of items per year.

2. Although one of the initial reasons for implementing the system was to keep patrons in the loop, people started complaining they were getting too much information! We stopped confirmation of order letters as well as letters informing them that their request had been assigned to another member of CSIRIS staff.
3. Clients often do not reply to messages from CSIRIS.
4. Approval for books can cause delays. Book orders are directed to programme managers for approval before being sent to the library. Although they receive an e-mail informing them that a request is awaiting approval, they do not always respond immediately thus causing frustrating delays.
5. Technical problems – ongoing refinements, unexpected hitches like data on completed requests not available in user friendly format, the proxy option caused some confusion etc. The CS staff have, however been very helpful in dealing with problems as they occur and continue to assist whenever a problem arises.

6. The future:

- The interface with the financial system must still be done once we are on the new ERP. At present the data is still manually captured from Workflow to the financial system.
- An “Order this item” link from the catalogue and other databases (e.g. SACat, SwetsWise) directly to Workflow.
- Ensuring that every CSIR staff member who requests documents knows how the system works and uses it without any difficulty. Lots of marketing and promotion still needed!

Curriculum Vitae

Yvonne D Halland

After graduating with a degree in Library Science from the University of Pretoria in 1973, I started working in the Journals Acquisitions section of the CSIR's Information and Research Services (IRS). It was the heyday of the affordable scientific journal and the CSIR had more than 6000 subscriptions to various scientific and technical publications.

Three and a half years later London beckoned and cut short honours studies. An 18-month stint in a small theological library, where I did everything from ordering to cataloguing to issuing as well as being tea lady, was a very different experience from the cutting edge information services I had just left.

I returned to South Africa to take up the position of Head of Journal Acquisitions where the effects of the electronic age were being felt increasingly. Fax machines were making communication with agents fast, efficient, updated lists of subscriptions could be produced without punch cards, and catalogues could be updated without withdrawing and re-filing dozens of cards in the card catalogue.

Then followed a period of fifteen years during which I gained valuable experience in time management, human resource management and getting the most out of a small budget – being a mother to two young boys! However, during this time I kept the proverbial "finger in the pie" through regular contract work at the CSIR including acquisitions work, reference, lending services, a stint in a divisional library, editing the Waterlit database entries and, finally, working in the CSIR's DocDel service.

With major restructuring in 1997 came my return to full time employment as head of the DocDel service, which specialises in tracing and delivering published scientific and technical documents to both CSIR staff as well as external clients. The service also includes book acquisitions.

Since April 2001, I have been the project leader of the Information Procurement department, which incorporates journal acquisitions, book acquisitions, DocDel, and ILL services as well as leading the CI Initiative of CSIRIS