

Unlocking value in a reference library through the application of business process mapping and job analysis techniques

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Abstract: The State Library of New South Wales is a world leading library and centre for digital excellence committed to the continuing development of its collection of international renown. In 2012, it became evident that the Library's funding from government was reducing and that the Library needed to find new ways to deliver its services. This paper describes how the collection management function at the Library was reviewed and the specific research approach that was applied to not only identify areas where efficiencies might be found but also to position the Library for the future.

1. Introduction

The State Library of NSW (SLNSW) is the principal public library for the state of New South Wales (NSW) in Australia. The objective of the Library is to document the development of Australia from the time New South Wales *was* substantially Australia and to create a collection that reflects the cultural heritage of NSW in both the Australian and international contexts. At the heart of the Library's collections are the significant collections of its two great benefactors: David Scott Mitchell and Sir William Dixson. In 2010, the collection was valued at AUD\$2.14B and is a major asset for the state.

Like all libraries today, the State Library is facing new challenges. These challenges include:

- Adapting technology to expose its collections;
 - Meeting expectations of existing clients and engaging new audiences;
 - Collecting across a range of formats and preserving them for the future;
- and

- Reducing budgets.

In 2012, it became evident that the Library's funding from government was reducing and that it needed to consider how it would deliver services within a smaller budget envelope. The Library's budget forecasts indicated that by 2016/17, the cumulative impact of savings measures or budget cuts would be approximately \$3.2M. Some savings in operations were identified, such as a review of electricity use. However, these measures were not enough on their own. The key area where the Library had flexibility to save funds was in the staffing area. Modelling indicated that the Library needed to reduce its staffing from 398 equivalent full-time staff positions (EFT) in 2011/12 to 312 EFT in 2016/17 – a reduction in 86 EFT or 20%. At the same time, however, the Library wanted to have flexibility to introduce new services: it did not want to have its aspirations constrained by its budgets.

In this environment, the Library asked each of its branches to conduct a review of its activities to identify opportunities to make budget savings. The most extensive of these reviews focused on the Library's core function – the collection management function. At the State Library, the collection management function is understood as encompassing:

- Assessment, identification and selection;
- Acquisition;
- Archival and bibliographic description and physical arrangement;
- Contributing to client services in regard to access to the collection;
- Retention and disposal;
- Asset management of the collection.

To assist it with this review, the Library engaged a consulting firm, Fyusion Asia Pacific, to conduct detailed research into:

- How the function was currently organised and performed; and
- Where efficiencies and savings could be made without compromising either the Library's position as a major collecting institution and reference library or its strategic goal of being a centre of digital excellence.

This paper sets out the research approach that was employed to build an evidence base for the review. It also discusses the central review findings and how they supported the Library to achieve its budget savings. Finally, the paper

looks back over the past 18 months and reflects on the process of achieving the budget savings and, at the same time, managing a transformative change.

2. Research challenges

Two specific challenges faced the research team in designing a data collection strategy to inform the review. Firstly, the collection management function was dispersed across several units at the Library and was not managed as a single, interdependent set of tasks. A number of different branches contributed to the Library's overall performance of this core function. Within this arrangement, some branches were central to the performance of the function and some more peripheral. However, each branch involved in the collection management function was structured and staffed differently and operated quite independently. While there were governance mechanisms, such as committees and project teams, to coordinate the different aspects of the work, collection management work was not strongly integrated across the Library.

From a research perspective, this meant that it was necessary to understand the operation of each of these branches. This required the collection of information at the group or branch level as to how each branch was structured and staffed; its systems for work prioritisation and planning; how tasks were allocated across the branch; the work processes used to carry out core operational activities; work outputs; and how team members worked together on a day-to-day basis.

The second challenge in collecting data for the review was the nature of the work carried out by staff working within the collection management function. Professional work, such as that of librarians, involves complex tasks that call for autonomy and the use of judgment (Alvesson 2004). Professional work is distinguished by the fact that it is not routine and structured (Howard 1991) and is often quite individualised (Greenwood et al 1990). While elements of librarianship have undoubtedly been standardised or commodified (Abbott 1998), there remain areas of the profession where work is carried out with a high level of discretion and autonomy. For the purposes of the review, this meant that it was important to understand not only how the different teams operated across the collection management function but also how *individuals* within the function executed their roles.

In summary, information for the review had to be collected at both the team and individual level.

3. Research design

The research design was driven by the challenges outlined above and the necessity to collect information at a very granular level. Initial background

information was reviewed and interviews were conducted with key informants across the Library to gather a broad perspective of the function. However, to understand in detail how teams and individual staff were carrying out their work, the project adopted two business analysis techniques: business process mapping and job analysis.

3.1. Business process mapping

Business process mapping was used as a research method to build a picture of the day-to-day operations of the teams and work units involved in the collection management function.

Five workshops were conducted with staff from different teams in order to understand and document the following issues:

- Roles and responsibilities of the Branches;
- Where work comes from, the inputs and outputs, and key stakeholders of the Branch;
- Workloads and priorities; and
- Workflow including hand over of work, bottlenecks and single points of risk.

This provided the information that was required at the level of team or branch. As this information was collected using a standard approach, it was possible to compare how work was managed across different work units.

3.2. Job analysis

To meet the second research requirement of understanding how individual staff members approached collection management work, an online job analysis survey was administered to all staff involved in the function. The survey had a strong job design focus and required staff to identify the specific tasks they undertook as part of their job role.

A significant amount of research was conducted to ensure that the survey was relevant to the activities undertaken within the function. Sources that were used in the development of the questionnaire included:

- Input from the Project Reference Group which oversaw the review;
- Review of the Library's formal position or job descriptions;
- The Australian and New Zealand Standard Classification of Occupations (Australian Bureau of Statistics, 2006); and

- The Occupational Information Network (or O*NET).

The response rate to the survey was 55%. The survey results provided detailed, quantitative data about the key areas of work activity within the collection management function and the skills and capabilities required by staff to carry out collection management work. The survey data was capable of analysis at the work unit level as well as at the level of specific roles.

4. Achieving budget savings: findings from the review

The data collection provided the basis for a comprehensive analysis of the performance of the function across the Library. The final report, delivered in July 2013, provided a total of 38 detailed recommendations for change relating to:

- Structure;
- Job roles;
- Work processes;
- Communication mechanisms; and
- Governance arrangements.

The key areas for change, particularly as they relate to the Library's need to find efficiencies and savings, are set out below.

4.1. Structure

Of the 38 recommendations, the set of recommendations relating to a new functional structure for the Library's collection management work was the most significant: it represented a fundamental change to the way that the Library organised this work. The review found that collection management work at the Library was split by format. Some teams worked only on published collections, including serials and newspapers, while other teams focused on unpublished collections, including manuscripts, pictures and oral history. Importantly, this split had led to duplication and inefficient processes. For example:

- Both areas were working with maps and rare books;
- There were separate governance processes around acquisitions and donations.

The review found that some work tasks were common to all teams but other work was more specialised. There were several collection management activities that were broadly common between teams. These included:

- Selection of items (either for purchase or acceptance as a donation);
- Rehousing;
- Creation of accession records;
- Cataloguing.

There was clearly scope to standardise and integrate these common tasks across teams and establish multi-skilled teams which were format agnostic in their work. However, the data collected for the review also indicated that there were tasks which needed to be recognised and retained as specialist activities.

To manage this tension between generalisation and specialisation, the review recommended a new structure with four branches:

- **Collection Strategy and Development:** responsible for planning and policy development across the Library's collections as a whole;
- **Research and Discovery:** focused on in-depth collection research and promoting the Library's collections, with a particular emphasis on its unique materials;
- **Collection Access and Description:** responsible for the arrangement, description and cataloguing of items so that they are ready for inclusion into the collection;
- **Data Quality, Systems and Standards:** the business owner for the Library's library management systems with responsibility for setting appropriate requirements for data standards across all materials.

This structure was based closely on the collection management life cycle and integrated collection management work across all formats. As a result, it provided the platform for the implementation of a number of other key changes and efficiencies.

4.2. Allocation of work 'appropriate to grade'

A clear finding from the data collection and the staff survey in particular was that, within their roles, some staff worked across almost all tasks within the collection management function. Teams had become quite 'thin', with an insufficient number of junior professional and support roles. This had resulted in senior staff spending a proportion of their time on simpler activities that were

not appropriate to their job grade and salary level. The review made a number of recommendations for reallocating work in a more cost-effective way.

4.3. Processes

Consistent feedback was received throughout the review that much more could be done to standardise procedures between the different work units within the collection management function. Broadly similar collection management tasks were carried out by different teams, yet different approaches were taken according to format. There was also an absence of strong processes in some areas, a factor nominated by staff as an important impediment to efficiency.

Building more formalised processes was therefore an important recommendation from the review. Standardisation of work processes had the potential to provide a number of efficiency benefits, including:

- A consistent standard of work; and
- ‘Process velocity’ and faster completion of tasks.

Clear processes and criteria for different tasks could also provide:

- Greater flexibility in resourcing and sharing of workload; and
- Opportunities to allocate less complex tasks to more junior staff.

This recommendation has been adopted by the Library and work is being undertaken to build more transparent processes.

4.4. Planning and prioritisation of work

The new structure included a work unit responsible for strategic planning in relation to the collection and the work required to manage the collection. This is a relatively small team with specialist positions dedicated to policy and strategy.

The establishment of this unit has been a significant part of the change for a number of reasons. Firstly, in an environment where there are fewer staff resources, strategic prioritisation of work becomes critical. This unit sets the strategic direction for the management of the collection so that resources can consistently be allocated to the most important projects or areas of activity. One impact of the greater focus on work planning has been the reduction in project backlogs.

Secondly, the establishment of this unit has strengthened the Library’s capacity to manage its collection as a whole. One team now has lead responsibility for this task, which has given the Library greater visibility of this important asset and greater assurance as to its management.

4.5. Digital collecting

A consistent theme throughout the review was concern that the Library had a significant gap in relation to management of digital resources. This has been a challenge for all large libraries and few in Australia could be regarded as having resolved the issue at this stage. However, it was important that the Library started to fill gaps in the management of digital resources, including developing a stronger approach to data standards and quality and building capability and capacity in digital collecting. For this reason, the review recommended the creation of a specialist unit to support this work.

This unit has consolidated some collection management activities that were previously performed across the Library's collection services areas and the Library's IT area. It is the 'business owner' of Library systems relating to the management of the collection and has recently led a large-scale renewal of those systems.

This unit is supporting the Library to bridge the gap in relation to digital collecting and to transition into a more digital future.

5. Reflections on the implementation journey: progress to date

It is now almost two years since the review was completed and the Library has made steady progress in implementing the recommendations. The necessary staff reductions have been achieved and budget savings made, with a new structure put in place in June 2014. In a recent staff survey about the change process, staff indicated that there were many positive aspects of this change. From their perspective, the review had helped to identify skills and capability needs and gaps; eliminate duplication of activity across the branches; create flatter structures; and increase collegiality and knowledge-sharing, particularly through the colocation of teams. At the same time, staff identified areas where continued focus was required.

From the perspective of the Library's leadership, a number of important lessons have been learnt about managing a change of this type.

5.1. The scale of change

It is important to recognise that the organisational change undertaken by the Library in relation to the collection management function was radical or transformative change rather than incremental change (Greenwood and Hinings 1996). The Library was seeking to make a fundamental break with its traditional pattern of organising (by format) and establish an alternative structure which would not only reduce budget but also enable it to succeed in a new

environment. An indicator of the extent of the change is that all staff had to move into new roles and different branches on the first day of the new structure (6 June 2014). Significant budget savings (20%) have been achieved but it has required fundamental organisational change.

5.2. Factors required to drive change

The Library had previously attempted to streamline its collection management function but without success. In looking back at the current change process, several factors can be identified as contributing to it greater success.

- The evidence base for the review was very strong because of the detailed research undertaken.
- The review was undertaken by an independent consultancy firm, giving the findings greater credibility and persuasive power with Library Executive and staff.
- The review process was constantly supported and championed by the most senior Library leaders.
- The Library's focus on change did not stop with delivery of the review findings but has continued throughout the implementation process. Senior leaders have continued to drive the change with ongoing staff consultation.

5.3. Limitations on the pace of change

While the change has delivered many benefits to the Library it has also taken time to implement. There have been two key factors influencing the pace of change:

- The Library has two separate library management systems for managing its collections. In December 2014 the Library announced that it will commence implementation of a state-of-the-art library management system in 2015/16. It is anticipated that the integrated solution will provide the Library with enhanced discovery of collections, but also achieve efficiencies in the collection management function.
- The implementation of the collection management function review recommendations coincided with a period of significant organisational change: similar reviews across the organisation (and changes to organisational structures); the implementation of new enterprise systems; and a new employment Act which has required new procedures for the recruitment of staff.

5.4. Resourcing the new structure

The Library has continued to review the new structure and adjust roles where required to ensure achievement of its objectives. Some roles have been redesigned slightly as experience with the new structure has revealed better ways to work. The Library has also recognised the need to bring in specialists on short term contracts to work on particular projects. The resourcing structure has therefore become more flexible and capable of responding to changes in workload.

5.5. Implementing more standardised processes

A key finding from the review was the need to build more formalised work processes. In the previous structure some key areas of the collection function were not documented. With the significant number of staff in new positions and the loss of knowledge and expertise due to staff leaving the organisation there is a critical need for documented procedures and consistency in practices. The Library continues to work with staff to design new processes and this remains an important focus during the implementation phase.

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